

“I check my emails on the toilet”:

Email Practices and Work-Home Boundary Management

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ABSTRACT

Email is widely used as a means of communication, a task management system and an archive and it often seems impossible to live without it. Our always-online society expects us to be available 24/7 at the cost of potentially blurring the boundaries between work and personal life. Furthermore, mobile and hand-held devices have made it even easier to be connected and therefore increased the sense of needing to be available to respond at any time. Whilst research to date has focused on identifying email practices on the desktop, little has been done to understand whether and how the introduction of mobile devices has changed our way of handling emails. In this paper, we describe preliminary results from an interview study that explored in particular the role of mobile devices in email management and work-home boundary management. We found that mobile technology impacts even on the most private of non-work moments. We provide examples of the ways in which technology supports frequent switching between work and non-work contexts, and demonstrate the strategies that people develop in order to manage these boundaries, by using what we call *micro-boundaries* (e.g. having two email apps on a phone).

Categories and Subject Descriptors

H.5.m. Information interfaces and presentation (e.g., HCI):
Miscellaneous.

Keywords

Mobile technology; email management; email overload; work-home boundaries.

1. INTRODUCTION

Email management has been studied for several decades, with a relatively constant focus on the concept of email overload for the past 15 years. Email overload has been described as the different ways in which email has been employed (as a communication tool, a task manager, and an archive) [22] and later explained as the stressful feeling resulting from the need to deal with a large number of emails. [5] Most research in this area has concentrated on defining email practices for specific devices, e.g. desktop computers [7, 22] or briefly outlining new uses of mobile phones with regards to emails [13, 17].

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With the increasing popularity of mobile computing, we now live in a society that increasingly expects us to be always connected and available, even engaging with emails on the move. Consequently, being always available has transformed the way we work, on one side making it more flexible in terms of where and when we work [8], on the other creating the expectation to being able to respond at any time or location [14]. This two-folded effect has potential to blur boundaries between personal and professional life. This can mean working longer hours [21], resulting in work-related stress. For this reason, there has been recent interest in understanding how email is used in both personal and work environments [1, 3, 9]. However, little research has compared email processing strategies on separate devices. In this paper we present preliminary results of an explorative study on how university employees handle their inboxes across smartphones, laptops and/or desktop computers. Our goal is to explore socio-technical practices in the use of email across work-home boundaries.

In the following section we give an overview of literature that has identified common strategies to deal with the problem of email overload. We then move onto presenting studies on mobile phone use, which to date have only marginally considered email management. Finally we discuss a study by Capra et al. [3] that tries to understand different uses of personal and work email now that email has become an artefact that can bridge the two work and home domains.

2. RELATED WORK

The seminal work by Whittaker and Sidner [22] found that users demonstrate three broad strategies for handling email overload: *frequent filers*; *spring cleaners*; *no filers*. Frequent filers are people who file or delete inbox items daily and have the lowest rate of ‘failed’ folders (i.e. contains less than three emails and therefore does not reduce the complexity of the inbox). Spring cleaners set aside time every 1-3 months to intermittently clean up their cluttered inboxes and make an extensive use of folders. Finally, no filers tend to not use folders and their inboxes appear overloaded. Similar results were found ten years later when this study was replicated: Fisher et al. [7] noted that inbox sizes from 1996 and 2006 were relatively similar; what had changed was the size of email archives, constituted by the number of folders and elements contained in them. Other studies have touched on how email is dealt with on mobile phones. Oulasvirta and Sumari [17] found in their interviews that smartphones were used selectively, especially to have a quick overview of the inbox, but occasionally also for briefly responding to specific messages. Similarly, Matthews, Pierce and Tang [13] found that people use mobile phones to triage emails with the intention of completing email tasks in more depth on a larger computer. These results lead to conclusions that different devices might facilitate boundary permeation, in particular from work to personal. In this paper we

present evidence that demonstrates that mobile phones are not always used as Matthews et al. [13] suggested.

Helping people manage their growing email archives and number of messages exchanged is still a core problem in the email management literature. Based on a critical review of work-life boundary theories [4, 15, 16] and email management [7, 12, 20, 22], Capra et al. [3] carried out survey-based research on how email is used by university employees in both work and personal contexts. Using a social and behavioural perspective, they aimed to understand the key differences in email management practices between personal and work accounts. They were also interested in investigating whether comparing personal and work email practices could shed more light on the role of email on the maintenance of work-home boundaries. For their particular subset of users, they found that work-home boundaries are blurred in a bidirectional but asymmetrical manner (with work interfering more in personal life than vice versa) and that email constitutes an important boundary management artefact. Just like Nippert-Eng [14] found that keys and calendars are used as physical artefacts used for both integrating and segmenting work and personal domains, so can email be considered a digital artefact of such sorts [3].

Building on this research, our study aims to fill the gap in understanding email management strategies across devices by addressing two main limitations from the Capra et al. [3] study: the lack of focus on mobile technology and their use of a survey methodology. Firstly, although their data was collected in 2010, when mobile technology was already popular and available, the authors did not appreciate the role mobile technology can have in email management practices. To the best of our knowledge there has been little research that has studied how people process email depending on the device used. For this reason in our study we were particularly interested in understanding users' processing strategies for work and personal emails on multiple devices (computers and mobile technologies). Secondly, whilst their use of a questionnaire enabled a large number of responses to be collated, one limitation is that there was limited opportunity to develop a rich understanding of why participants behaved as they did. This led us to use interviews in our own study, in order to investigate and appreciate motives behind particular email behaviours and differences in the way people use work and personal accounts. In the following section we will describe our interview study and the initial findings.

3. INTERVIEW STUDY

Sixteen semi-structured interviews were conducted with employees of the same university. Through opt-in mailing lists, flyers and word-of-mouth, we recruited 5 men and 11 women from both professional services and academic staff, with varying levels of seniority. Job titles included research associate and fellow, lecturer, department manager, human resources manager, library assistant, teaching fellow, assistant study coordinator, personal assistant and public relations administrator. All but one were employed full-time, and two participants had an additional part-time job or were involved in volunteering. Respondents received a voucher as appreciation for their participation.

3.1 Findings

In the on going analysis, data are being coded to identify themes [2]. Participants were generally aware of the problem of email

overload, and often reported the experiences of other colleagues, rather than personal ones. When asked about their feeling on email overload, some admitted that it might have been a problem for them in the past, but after changing jobs it currently is not an issue. The majority of participants did not feel that email overload was a problem that defined them.

The following results are divided in two groups: personal and work use of email; and computer and mobile use of email. We highlight differences and similarities between our findings and those of Capra et al. [3].

3.1.1 Personal Use vs. Work Use of Email

All of our participants had at least two main email accounts, one of which was considered personal and the other work-related (all interviewees had an Outlook account for their university job). Capra et al. [3] noted only 84% of their participants had both a personal and a work email account, and prior to that, Smith et al. [18] found that just over half (54%) of their participants owned separate accounts. These results suggest that there is growing trend of maintaining separate email identities. Moreover, almost 88% of our participants have a third personal account used for signing up to mailing lists and receiving promotion email that do not fall in the spam category but are still considered unwanted messages.

"I use those accounts if I want to get information about anything and I don't want to be then bombarded by emails [...] and I don't want my personal account uploaded with a lot of rubbish" [P14]

By dedicating one personal account to what participants often referred to as 'junk' mail, they tried to keep their inbox free of unwanted messages. This implies that they need less time to organise their inbox because they have already diverted most unnecessary messages to other accounts.

Capra et al. [3] identified a frequent use of work email for personal purposes and, although less frequently, personal email for work. Although our participants often described their accounts as being primarily for either work or non-work, further discussion showed that this was not as frequent as in previous findings.. When the distinction was not so clear between personal and work accounts this was mainly for reasons of convenience. Two participants, despite having separate accounts for work and personal email, did not exclusively dedicate each account to either domain. In these cases an inadvertent blurring of boundaries occurred.

"Ideally I would like my personal account for social things, friends and family, and my work account for work only. But that's not happening. I have people from work writing me to my personal account, and my friends write to my work email because they know that I see it more often" [P10]

Participants received personal emails on the work account because whomever sent it "*know[s] you are available*" [P10 and P11]. So despite trying to maintain clear boundaries between work and personal domains, it is a convenient choice for some people, dictated by the expectation of being always available.

In fact, at least half of participants had folders related to one social domain (work or personal life) in the email account dedicated to the other social domain. For example P11 has a dedicated folder for his partner in his work email account; P7 and P13 have folders for job related topics in their personal accounts.

They explain that that information can be useful in the future if they were to no longer have their current job, so saving it in their personal account is a way of archiving that information. This can be considered a way of managing the two social domains on the same account, and yet still keeping them separate by using dedicated folders. It indicates an attempt to create boundaries *within* rather than *between* domains, a practice we are calling *micro-boundary* maintenance.

As far as the number of folders used to manage email, in our study we noticed that participants had more folders and subfolders (typically ranging from 10 to 35 and 400 in one case) in their work accounts than in personal accounts, in an attempt to keep their inbox more organised. Folders created in personal accounts were not used as frequently as work ones because in general participants reported that they do not feel the urge to be so methodical for personal stuff. This finding suggests that people use different email management strategies for work and personal accounts.

3.1.2 Computer vs. Mobile Device for Email

All participants owned a smartphone with a data package, only three interviewees owned a tablet and they all had access to a laptop or desktop computer to check email at work and at home.

The perceived frequency with which email was checked varied widely from 10-20 times an hour to 1-2 times a day, depending on whether it was a personal or a work account, with personal account checked less or as much as the work one. Moreover, people admitted checking email frequently, but when they were asked how often was ‘frequently’ they gave very different responses:

“I get up, check my email in bed, I check my emails on the toilet, check my emails downstairs, maybe while I’m having breakfast. I generally don’t check my email when I’m actually walking to work, but I do when I’m waiting for the train, on the train, maybe in the lift getting up to work, then at work, on the train on the way home, in front of the TV during dinner [...] I check it all the time.” [P5]

“I check email quite constant, maybe 5 times a day, mostly out of curiosity rather than need.” [P12]

Whilst some interviewees made a conscious decision to use mobile devices (smartphones and tablets) to access only personal accounts, others had both personal and work accounts synched to their phone, but made a deliberate decision to use separate applications to access the different accounts. Previous research [6] has shown how in just five years people have moved from using only one mobile device in 2001, typically a Blackberry, which is primarily a work-related device and thus only receives work related emails, to having two separate smartphones synched to either a work or personal email account in 2006. Our findings suggest there is a further shift in how mobiles are being used for emails. Having two separate applications on the same device indicates that people are again creating *micro-boundaries* within a bigger domain (in this example, within the same device). We can infer that their motivation for doing this was to increase the barrier between work and personal emails so as to avoid the easy trap of checking work-based email immediately after checking non-work email accounts. This was especially true for tablet users. As in Stawarz et al. [9], we found that all three interviewees who owned a tablet considered a personal device. As a result, two of them synched only their personal email to it, “so that I need to

make an effort to check my work email” [P10]. The third participant admitted it was “*an awkward space*” [P15] compared to smartphones and computers and preferred using it only as a leisure device.

3.2 Discussion

In this paper we address one of the workshop’s goals by exploring how boundaries between work and home are constituted through the everyday socio-technical practices of email management. We have discussed how the practice of using different devices, apps and accounts for email shapes the way people constitute everyday work-home boundaries.

Our findings demonstrate that mobile technology is enabling interaction with email in even the most private and personal moments. Participants report moving between work and non-work contexts frequently via email, checking both personal and work related email accounts demonstrating new practices in terms of integrating work and non-work activities than ever possible before. Although, Capra et al. [3] argued that there was a tendency for work email to impinge more often on personal time, than the other way round, our initial findings suggest that this asymmetry is not clearly marked. Further analysis might show there is in fact more of a symmetrical interference between the two domains. As a result of this frequent cycling between work and non-work contexts, users’ email socio-technical practices are evolving and they have found new ways to manage this integration by developing micro-boundaries that help maintain some degree of separation.

4. CONCLUSIONS

In this paper we have described the collection and initial analysis of an explorative interview study on the role of email management on different devices in order to better understand its implications for work and personal boundaries. Our study has found a trend of attempting to create separate work and personal email accounts in order to better create boundaries between work and home domains. Nevertheless, despite the tendency for distinct accounts, the use of mobile technology can still interfere and blur these boundaries.

We acknowledge that the participants involved did not cover a wide range of professions within the category of university employees. Despite this, our results still confirm in part what has been found in previous studies [3] as well as extending them. A further limitation of our study is that people are not always aware of their habits [23] therefore self-reported data may not be accurate and adding an objective measures would give more reliable data. However, the main goal of this study was to have a deeper understanding of why people had particular email behaviours and this kind of insight is better gained by using qualitative methods. Further analysis of this data will yield guidelines on how to manage emails across devices in order to maintain boundaries between work and home domains.

5. ACKNOWLEDGMENTS

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