

# Loughborough University Institutional Repository

---

## *The impact of e-mail on work-life balance*

This item was submitted to Loughborough University's Institutional Repository by the/an author.

**Citation:** WALLER, A.D. and RAGSDELL, G., 2012. The impact of e-mail on work-life balance. *Aslib Proceedings*, 64 (2), pp. 154 - 177.

**Additional Information:**

- This article is © Emerald Group Publishing and permission has been granted for this version to appear here <https://dspace.lboro.ac.uk/dspace-jspui/handle/2134/14833>. Emerald does not grant permission for this article to be further copied/distributed or hosted elsewhere without the express permission from Emerald Group Publishing Limited. The definitive version is available at: <http://dx.doi.org/10.1108/00012531211215178>

**Metadata Record:** <https://dspace.lboro.ac.uk/2134/14833>

**Version:** Submitted for publication

**Publisher:** © Emerald Group Publishing Ltd

Please cite the published version.

This item was submitted to Loughborough's Institutional Repository (<https://dspace.lboro.ac.uk/>) by the author and is made available under the following Creative Commons Licence conditions.



CC creative commons  
COMMONS DEED

**Attribution-NonCommercial-NoDerivs 2.5**

**You are free:**

- to copy, distribute, display, and perform the work

**Under the following conditions:**

 **Attribution.** You must attribute the work in the manner specified by the author or licensor.

 **Noncommercial.** You may not use this work for commercial purposes.

 **No Derivative Works.** You may not alter, transform, or build upon this work.

- For any reuse or distribution, you must make clear to others the license terms of this work.
- Any of these conditions can be waived if you get permission from the copyright holder.

**Your fair use and other rights are in no way affected by the above.**

This is a human-readable summary of the [Legal Code \(the full license\)](#).

[Disclaimer](#) 

For the full text of this licence, please go to:  
<http://creativecommons.org/licenses/by-nc-nd/2.5/>

## THE IMPACT OF EMAIL ON WORK-LIFE BALANCE

Aaron David Waller  
Department of Information Science, Loughborough University  
Loughborough, Leicestershire, LE11 3TU  
United Kingdom  
[aaron\\_d\\_waller@hotmail.com](mailto:aaron_d_waller@hotmail.com)

Aaron graduated from Loughborough University in July 2009 with a 2:1 in Information Management and Business Studies. His final year project was based on the use of e-mail in a large service organisation and forms the basis of the paper. Aaron was supervised by his co-author during the project.

Gillian Ragsdell  
Department of Information Science,  
Loughborough University  
Loughborough, Leicestershire, LE11 3TU, United Kingdom  
[g.ragsdell@lboro.ac.uk](mailto:g.ragsdell@lboro.ac.uk)

Gillian is a Senior Lecturer and Director of Research Degree Programme in the Department of Information Science at Loughborough University. Her research and teaching focus on the relationship between the theoretical models of knowledge management and their practice. Gillian was recently Principal Investigator for a British Academy funded study that investigated the sharing of project knowledge in the voluntary sector.

## ABSTRACT

**Purpose:** This paper illustrates how a company's current 24-hour e-mail culture impacts on employees' lives outside of their contracted working hours. There were two objectives of the study – firstly, to calculate the average time spent on work e-mails by employees per day outside of working hours and, secondly, to identify what impact e-mail had on employees' work-life balance by addressing three research questions. These questions focussed on the relationships between (1) employees' thoughts about company culture and their belief that their work is dependent on them checking their e-mails outside of working hours; (2) employees' urges to check e-mails out of working hours and their belief that spending time on e-mails outside of work means they are neglecting their social life; and (3) employees sending e-mails out of office hours and their expectation of a quick reply or action.

**Design/methodology/approach:** A case study approach was taken. Employees from a multinational service organisation were invited to complete an on-line questionnaire and a 7-day diary so as to collect qualitative and quantitative data about their use of e-mail.

**Findings:** Data was analysed with respect to respondents' gender, role and length of service in the organisation and discussed with respect to the current literature.

**Research limitations/implications:** Although the limitations of exploring a single organisation are recognised, it is likely that some of the insights and lessons generated by the study will be transferable to other organisational settings.

**Practical implications:** This study identified some short term recommendations as to how a particular company could limit the negative impact that e-mails have on its employees' lives outside of contracted working hours. In addition, this study will also raise awareness of the pervasion of work-related communications into employees' personal lives and, hopefully, trigger further research into the long term psychological and sociological effects of a 24/7 communication culture.

**Originality/value:** There are two novel aspects to this study: the use of diaries as a method of data collection and the notion of exploring e-mail use 'out of hours'.

**Keywords:** E-mail; work-life balance; diaries.

**Type of paper:** Case study

## INTRODUCTION

Organisations' increased reliance on e-mail as a primary means of communication grew astronomically in the 1990s and an increase in the number of globally distributed companies helped to foster an e-mail culture whereby people in different geographical areas could communicate across time and space (Whittaker and Sidner, 1996, p276). Despite this being an important advantage of e-mail use, it brings consequences for employees of modern, multinational companies who may have to wait until late in the evening to receive e-mails from counterparts in other countries. This can have significant detrimental effects on employees' work-life balance. As MacDonald, (2002, p1) points out, "Employees in today's workplaces have the facility to communicate quickly with colleagues and outsiders, the advent of modern means of communication have brought many benefits but they have also created new problems for employees / employers".

Since Jackson et al's (2003, p80) observation that electronic mail (e-mail) has become an integral part of the communication infrastructure in every kind of organisation with employees having the ability to access their e-mail from a multitude of devices and mediums at anytime, there have been significant technological developments. The digital landscape has changed; nowadays, there is a wide range of digital social media available to individuals to communicate personally and professionally. Although e-mail may be perceived to have been overtaken by, for example, Facebook, Twitter and blogs, it still plays a fundamental role in the communication network of a large number of workplaces. The continuation of e-mail as a core communication vehicle in some organisations means that the problems mentioned above remain pertinent for employees and employers. Yet, there has been a lack of research into e-mail and the impact that it has on our lives (Weber, 2004, p.iii).

The notion of e-mail accessibility at all hours is at the heart of this study, with the proposal that the use of e-mails outside of contracted working hours has a negative impact on the personal lives of company employees. Investigation of this relationship underpins this paper and its presentation is organised as follows. In the next section, background literature emphasises the advantages and disadvantages of e-mail usage, and the challenges it brings to maintaining a healthy work-life balance through e-mail addiction, information overload and a related increase in stress. This is followed by an introduction to the case study organisation and the research methods employed therein. Presentation and analysis of the collected data precedes a discussion of the key findings. Recommendations for improvements in the case study organisation are offered in the concluding section.

## RELATED STUDIES

This section starts with a compilation of the advantages and disadvantages of e-mail as suggested by a range of authors before presenting three strands – e-mail addiction,

information overload and increase in stress - that intertwine to form the complex scenario that e-mail can bring for employees in contemporary organisations. This scenario must be managed to maintain a healthy work-life balance for 21<sup>st</sup> century employees.

#### Advantages and Disadvantages of E-Mail

The use of e-mail is perceived to be a double edged sword; examples of advantages and disadvantages of e-mail are summarised in Table 1. The 24/7 e-mail work culture has not been mentioned by authors – the advantage to companies of employees initiating and responding to e-mails in their own time, and often at no extra financial cost, does not feature. Nor does the converse – the disadvantage to employees, who tip their work-life balance adversely to join in out-of-hours e-mail exchanges.

Advantages	Disadvantages
<p>E-mails allow you to give and take information when you have time, easier to give precise factual information, equality between people increases as more people are allowed to have their say as there is less risk of one person being dominant (Palme 1995, p.31).</p> <p>Written communication in e-mails is more efficient than verbal communication when communicating to a group larger than 5 people (Palme1995, p.25).</p>	<p>It is more difficult to persuade others, thus more difficult to gain consensus over e-mail, more difficult to conduct a formal decision process through e-mail (Palme 1995, p.31).</p> <p>Communication via e-mail isn't as effective as other mediums when communicating with less than 5 people (Palme 1995, p.25).</p>
<p>The benefits of e-mail: cost savings, speed, time and place, convenience and the presence of a permanent record (MacDonald 2002, p.2).</p>	<p>Messages aren't confidential and may be intercepted, time wasting, loss of productive time, employee distractions, security and loss of data, system overload and information overload (MacDonald 2002, p.3).</p> <p>System Overload – if employees are given unfettered access to e-mail, frequent use of these facilities to transmit large files could cause the system to become quickly overloaded (MacDonald 2002, p.17).</p>
<p>Groups using e-mail tend to produce more diverse opinions and better decisions. E-mail increases access to new people; weakens partial, temporal and status barriers; and provides access to information that would otherwise be unavailable. When people communicate electronically groups become more fluid. People can participate actively more in groups, and those on the periphery get more involved. (Garton and Wellman 1993, p.2)</p>	<p>People are more uninhibited, nonconformist and conflictual when using e-mail; groups are more polarized and take longer to reach consensus. (Garton and Wellman 1993, p.2)</p>
<p>Allows people in different geographical areas to communicate across time and space (Whittaker and Sidner 1996, p.276). E-mail combines locational flexibility, rapid transmission to multiple others across time and space, and the ability to store and process information (Garton and Wellman 1993, p.2).</p>	<p>E-mail is often thought of as a quick efficient means of communicating with other people, although the volume of e-mails can have a detrimental effect on employee productivity, as well as the network infrastructure of a company (Burgess <i>et al.</i> 2006, p.3).</p>
<p>Reductions in telephone, photocopying, fax and other charges, savings on secretarial salaries and the productivity increases resulting from time shifts. Other benefits include the saving of paper, which results in bringing financial, environmental and other benefits through reduced transport and fuel costs (Adam 2002, p.86).</p>	<p>Users feel overwhelmed by the volume of e-mails received, the pressure to respond quickly and the difficulty of finding time to develop effective strategies for coping with full inboxes. There is also the concern of the use of e-mail as a medium for harassment or bullying (Adam 2002, p.92).</p>

Table 1. Advantages and Disadvantages of E-mail from Five Sources.

### E-mail and Work-Life Balance

Amongst the many definitions of work-life balance, the majority include the idea of 'satisfying roles' and striking equality between home and work roles. With this in mind, Clarke (2000, p.749) views work-life balance as the "satisfaction and good functioning at work and at home with a minimum of role conflict". Greenhaus *et al* (2003, p512) go a step further and propose the definition that work-life balance is "the extent to which an individual is equally engaged in - and equally satisfied with - his or her work role and family role". Sturges and Guest (2004) point to the growing aspiration amongst people to balance work with other aspects of their life, and that this is directly linked to the long hours that many individuals feel they have to devote to work. This is supported by Mullins (2005, p.719) who found that almost 60% of surveyed managers valued their work and home life equally.

There are few scholarly opinions on the impact of e-mails on employees' work-life balance. Reeves (2002) is an example whose negative view is evident from his article 'Reality Bites', which highlighted that information technology is "far from being liberating" and can feel enslaving. He refers to e-mail as "a daily tyranny" (Reeves 2002), giving the impression of a daily struggle for employees to cope with their e-mails, and reinforces the results from an Institute of Management's manager survey that found that nearly a quarter of 800 managers reported "coping with e-mail was causing them stress" (Hogg 2000, p.15).

As work practices have changed, e-mail has become the preferred media choice for sending and receiving documents, task management and task delegation for employees. However, making employees accessible to work at all hours does not satisfy definitions of work-life balance, as there is no equal engagement or satisfying of roles (Greenhaus *et al.* 2003, p.512). Reeves corroborated this by branding technology such as mobiles (which are now often used for e-mails) as "electronic tagging devices" (Reeves 2002, p.1) that you cannot get away from and in turn may result in employee stress.

### Increase in Stress

Ignoring the work-life balance may have deeper implications for companies and their employees; one of the most detrimental to employee performance being stress which in turn can cause high absenteeism rates and/or a high labour turnover. Stress is "a source of tension and frustration which tends to arise when an individual feels that a certain situation doesn't exist" (Mullins 2005, p.1063). This psychologically slanted definition describes a person not knowing or accepting that a stressful situation exists. Conversely, Geddes and Grisset (2003, p.236) defined stress with respect to a person being under "pressure, mental or physical tension". Various studies, including Wheatley's (2000), pinpointed poor work-life balance as a major source of stress; this is reinforced by the fact that over 70% of managers



considered work-related stress to have adverse effects on their home life enjoyment, health, and work effectiveness.

Connecting stress with e-mails, Hair *et al.* (2007, p.2791) argued that there is evidence that e-mail can exert a powerful hold over its users, causing users to experience stress as a direct result of e-mail-related pressure. It could also be argued that e-mail related stress stems from information/e-mail overload and the belief that e-mails need to be responded to immediately, as discussed by Thomas *et al.* (2006, p267-270). Despite being firmly stated as one of the top ten causes for employee stress (Hogg (2000, p.15) and Wheatley (2000)), Hair *et al.* (2007, p2791) acknowledged that “electronic mail has become an indispensable tool in business and academia”.

### Information Overload

A potential cause of stress and a hindrance to the work-life balance, information overload has been referred to as when “an individual’s efficiency in using information in their work is hampered by the amount of relevant, and potentially useful, information available to them” (Bawden *et al.*, 1999, p.1). A more clinical definition of information overload is “the drop-off of response rates due to the input surpassing the limits of capacity” (Chen *et al.*, 2008, p.2). In either case there is agreement that the “sheer increase in information available will seriously impair if not downright inhibit decision making abilities” (Herbig and Kramer 1994, p.46).

MacDonald (2002, p.6) argued that the ease and speed at which e-mails can be sent has led to large numbers of e-mails being sent without proper thought or consideration (for example the cc phenomenon), which in turn can cause information overload. This impact of e-mail led to the term ‘e-mail overload’ being created. Various scholars state that e-mail overload is more than just a matter of quantity received (Adam 2002, p.89). It is the complexity of a person’s e-mail management and user activities such as the use of folders, calendar and task functions that help contribute to ‘e-mail overload’.

According to Bellotti *et al.* (2005, p.3), the overload is caused by interdependent task demands, especially those with a delay factor (for example; receiving an e-mail with a task to be completed but being told the information needed will not be available until the weekend) and is, in turn, causing employee stress. Bellotti *et al.* (2005, p.3) are supported by Whittaker and Sidner (1996, p.276) who declared that users often have cluttered in-boxes containing hundreds of messages including outstanding tasks, partially read documents and conversational threads. The increased use of e-mail applications for other means adds to the need for people to open their e-mail applications, and thus can lead to an addictive compulsion to check e-mails even when not in office hours.

## E-mail Addiction

Goodman (1990, p1403) highlights the emotional, psychological and negative outcomes associated with addiction.

*Addiction designates a process whereby a behaviour, that can function both to produce pleasure and to provide escape from internal discomfort, is employed in a pattern characterized by (1) recurrent failure to control the behaviour (powerlessness) and (2) continuation of the behaviour despite significant negative consequences (unmanageability).*

While there has been little research conducted on the e-mail addiction of employees, Hair *et al.* (2007, p.2792) commented that, whilst personal e-mail is “somewhat perturbing, the situation at work appears to be even more frantic”. After inviting people to diarise their daily tasks, Czerwinski *et al.* (2004) discovered that people considered e-mail to be something that had to be dealt with throughout the day (Hair *et al.* 2007, p.2792), thus prompting an addictive reaction. The participants in Czerwinski *et al.*'s (2004) research suffered from a “recurrent failure to control the behaviour” (Goodman 1990, p.1) and were continuously checking their e-mail. Jackson *et al.* (2003, p.82) corroborated this with detailed investigations into the cost of e-mail in the work place. They calculated that it took employees an average of just 1 minute 44 seconds to activate their e-mail application after receiving a new mail notification. Maybe more astonishing, 70% were checked within six seconds of arrival and 85% within two minutes of arrival (Jackson *et al.* 2003, p.82). Czerwinski *et al.*'s (2004) study further supported this by finding employees reported spending 23% of their working day dealing with e-mail.

Although the addictive use of e-mail can be seen as problematic, according to Young (1996, p.1), research among academics has not formally identified it as such. More recently though, Hair *et al.* (2007, p.2792) suggested that the compulsive use of e-mail is a form of self-imposed stress. It appears that the employees' behaviour is caused by “their perceptions, which drive them to monitor and deal with incoming e-mails continuously” (Hair *et al.* 2007, p.2792). This is evident by the increasing number of people compulsively checking their e-mails outside of office hours, while on the train, out with friends or at home. Supporting this, Adam (2002, p.85) reported that e-mail is so addictive that users feel incapacitated if the server goes down.

Having given a backdrop to the notion that employees' work-life balance is being put in jeopardy due to the potential for overspill of e-mail from their working day into their personal life, the paper moves on to introduce the research questions and the empirical studies that were undertaken.

## RESEARCH QUESTIONS

The design of the data collection was such that three research questions could be addressed:

Question 1: *What is the relationship between employees' thoughts about company culture and their belief that their work is dependent on them checking their e-mails outside of working hours?*

Question 2: *What is the relationship between employees' urges to check e-mails out of working hours and their belief that spending time on e-mails outside of work means they are neglecting their social life?*

Question 3. *What is the relationship between employees sending e-mails out of office hours and their expectation of a quick reply or action?*

## RESEARCH DESIGN

The organisation that was keen to explore the impact of e-mails on its employees is a multinational service company. It has been delivering public services for more than 40 years and works in extremely diverse markets, ranging from facilities management (prisons, hospitals, military and transport) to information technology (IT) systems. The geographical span and silo organisational structure of the company makes e-mail integral to its functioning. Therefore it was a perfect candidate for this research. The use of a case study organisation and diaries could be described as adopting an ideographic approach (trying to gain a thorough general understanding of the few, in order to allow assumptions about the average employees' use of emails to be made within this project) (Hayes 2000, p.17). There is also a nomothetic aspect to this project, "identifying general laws about human behaviour" (Hayes 2000, p.17). The use of a questionnaire and statistical analysis are common nomothetic practices. By using a mixed methods approach (both ideographic and nomothetic research methods) a complementary set of results have been obtained.

### Data Collection

In terms of types of primary research tools, Huberman & Miles (2002, p.14) argue that whilst qualitative research methods allow you to understand "the rationale or theory of underlying relationships revealed in the quantitative data", quantitative methods "identify relationships which may not have been salient already" (Huberman & Miles 2002, p.14). In line with the mixed methods approach, instead of restricting this project to one form of research, a quantitative and a qualitative research tool were both employed. Various mixed methods strategies may have been adopted, but for the purpose of this project a Concurrent Triangulation Strategy was adopted in an attempt to confirm, cross-validate or corroborate

findings within the project (Creswell 2003, p.217). This strategy included the use of separate quantitative and qualitative methods as a means to “off-set the weaknesses inherent within one method with the strengths of the other method” (Creswell 2003, p.217)

With regards to the questionnaire sampling the strategy below was applied:

**Define Population:** Case Study Organisation

**Sample Frame:** UK Organisation

**Employees Sample Size:** 100 employees

**Sampling Technique:** Non-random Quota Sampling – From the England head offices, three sub-groups were identified (divisional, functional and senior company operational employees) and questionnaires disseminated equally between them. Personal judgment was used to select the divisions / functions that were more likely to provide the most responses.

Numerous data collection methods were considered for this project including ethnographic research orientation, interviews and focus groups. These would have provided in-depth qualitative data but are very resource intensive. The most difficult decision concerning tool selection was whether to use diaries or interviews. Interviewing participants would have provided rich, detailed and important qualitative data. However, the reality is that their opinion may change day to day depending on for example, work load or deadlines. To avoid this, diaries provided naturalistic research in a way that gave insight into individual perceptions over a longer period. According to Alaszewski (2006, p.37), “diaries can be used to access those facets of social life which members of social groups take for granted and are therefore not easily articulated or accessed through research methods such as interviews”.

#### Pilot Study

It was vital for both the questionnaire and the diary to be piloted in order to ensure that they produced the results required for an effective and reliable analysis to be conducted. The pilot was carried out on a judgement basis to ensure the pilot respondents were willing to voice their opinions.

The questionnaire was piloted with 10 employees within the case study organisation, this made certain the questions were appropriately phrased and constructed for dissemination in the case study company. The pilot did in fact draw attention to certain factors: firstly, sentence construction used throughout the questionnaire (use of commas to break up questions etc). Secondly, one person recommended a boundary change to the answer ranges of one question.

Two company employees piloted the diary element of the research. They provided positive feedback, although identified two main points concerning the design. Firstly, the pilot diary asked employees two quantitative questions as well as qualitative, in order to identify the number of emails sent and received during out of office hours. However, the pilot study exposed problems with the indentifying of those numbers, i.e. the inclusion of spam / junk mail in email totals. While avoidable through manually counting emails, the pilot participants believed that the majority of participants would not have the time for this, resulting in these statistical questions being removed from the diaries.

So, amendments were made accordingly to overcome the questionnaire and diaries problems identified and then were disseminated to their target samples. Participation in the study was invited from 87 employees - 75 employees in the questionnaire phase and 12 employees in the diary phase. All employees were based at the UK head office.

### On-Line Questionnaire

The use of questionnaires and surveys can be seen in the work of scholars such as Palme (1995), Baron (1998), Jackson *et al* (2003) and Hair *et al.* (2007), providing good reason for one to be conducted in this project. However, the rationale to use an online questionnaire (shown in Appendix 1) was strong in this instance. Not only did it enable a wider sampling frame to be considered but it also saved time and costs associated with printing, travel to and from the company for distribution and collection, and is more environmentally-friendly than a paper version. This tool provided the nomothetic element of the research using an objective stance to present repeatable and reliable quantitative results. The questionnaire supported the process of “identifying general laws about human behaviour” (Hayes 2000, p.17). Data generated by the questionnaires was analysed using SPSS software in order to employ analysis techniques such as cross-tabulation to establish whether relationships existed between certain variables as defined earlier.

### Diaries

Using a mixed methods approach (both ideographic and nomothetic research methods) allowed for a complementary set of results to be obtained. Diaries were adopted as an ideographic approach i.e. in an attempt to gain a thorough general understanding of the few, and in order to allow assumptions about the average employees’ use of e-mails to be made for further research within this project (Hayes 2000, p.17). Other than Czerwinski *et al.*'s (2004) study there was no literature evidence to suggest scholars have used diaries in previous e-mail studies. However, diaries provided useful means of unobtrusively collecting qualitative data while employees were out of the office and generated rich insights into the honest feelings of participants over a 7-day period.

So, 7-day semi-structured diaries (as shown in Appendix 2) were distributed to 4 senior, 4 middle and 4 lower-management employees within the UK (of each set of 4, 2 were male and 2 were female). These participants were selected to allow insight into whether the level of seniority / gender of the employees had an effect on the impact emails had on their lives outside of working hours. This sampling was based on judgement. Their diaries were interpreted using content analysis and ATLAS ti software. Through coding, data was defined and categorised but, instead of using prescribed codes or categories, codes/categories were created by the lead author as the data was studied (Alaszewski, 2006, p.87). More detail of the analysis of the data is presented later.

## RESULTS

As stated earlier, primary research was conducted using an online questionnaire and employee diaries. Summaries of the results from the questionnaire are presented and analysed first.

### Questionnaire Results

From the 75 questionnaires disseminated, 37 were completed. The range of data collected enabled general trends and interesting factors to be identified. Quantitative data collected from the questionnaires was collated and is presented and analysed within this section. First there is a focus on identifying the average time spent by employees on their e-mails outside of contracted working hours per day. Secondly, there is the presentation and analysis of questionnaire results related to the impact e-mail has on the participants' lives outside of working hours - this has been divided into general results presentation and analysis, and relationship testing using SPSS cross-tabulations.

### Average Time Spent on E-mails Outside of Working Hours

Calculations were made using the responses from questions regarding how often employees checked their e-mails outside of office hours and how long they spent on their e-mails each time they checked them. Figure 1 displays the final results not only for the overall average time spent on e-mails per day but also for gender, job role and years worked for the company.

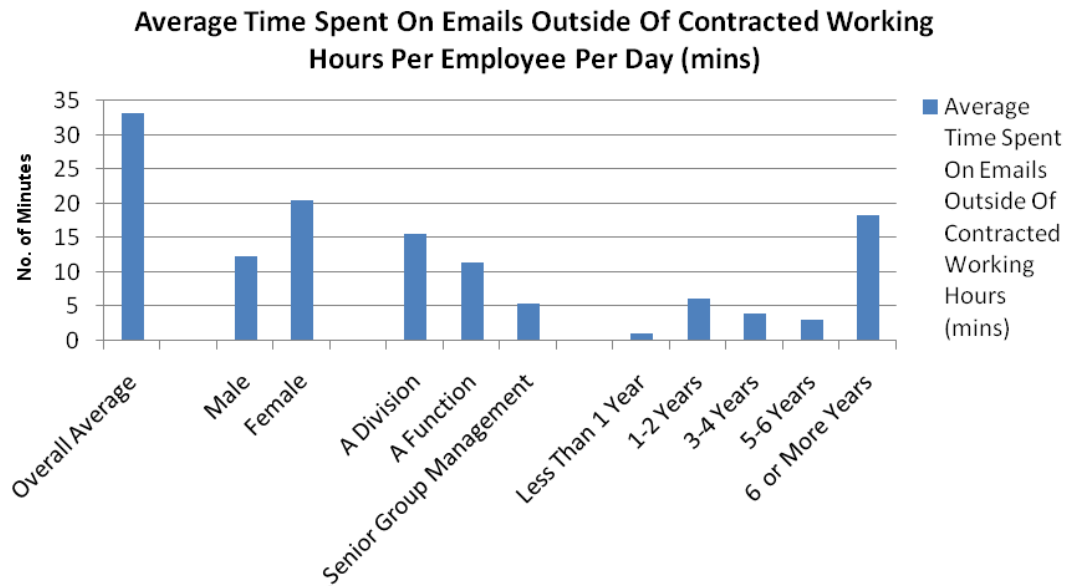


Figure 1 – Average Time Spent on E-mails Outside of Contracted Hours

The average time an employee spent on e-mails per day outside of contracted working hours was just over 33 minutes with female employees spending longer on their work e-mails than their male counterparts. Whilst this does not sound like a long time, over a whole week it amounts to almost 4 hours of work email use, without taking into consideration of any additional overtime resulting from those emails. Also, employees who had worked for the case study company for longer than 6 years spent significantly longer (more than 12 mins per day) on their e-mails than shorter serving employees. Variation was also seen between the roles of the employee with employees with Divisional responsibilities spending more time on e-mails outside of the working day than those with a Functional or Senior Group Management responsibility.

#### Impact of Email on Employees' Personal Lives

Results have been analysed from an overall view and similarities / differences between participant category (as determined by gender, role and length of service) have been examined. When asked which e-mail technologies employees used most to access their e-mails, laptops came out on top, followed by personal digital assistants (PDAs). With over 97% of participants being provided with a laptop, this is not too surprising. However, it was the PDA that participants believed had the biggest negative impact on their lives outside of work. Subsequently, nearly half of employees stated that they “often” checked their e-mails outside of contracted working hours. Interestingly, however, nearly 28% of respondents said they “always” checked their e-mail, as shown by Figure 2.

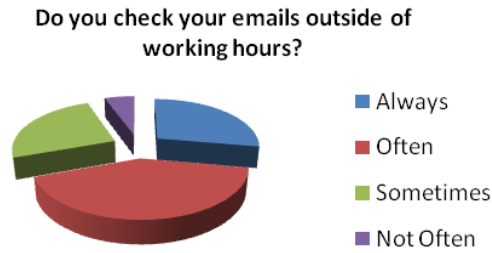


Figure 2 – Checking E-mails Outside of Work

In conjunction with the above, employees were asked whether they felt urges<sup>1</sup> to check their e-mails. Participants on the whole suggested that they “sometimes” felt urges to check e-mails while not at work. However, 100% of employees who had been with the company less than 1 year said they “often” felt the urge to check their e-mails; those employees who had been with the company for 1 to 2 years also put “often” top with 40%. Differences in the opinions of people in different job roles were also established, with Function and Divisional employees saying they “always” felt the urge to check e-mails, but Senior Group Management only saying “often”.

Employees were also asked: if they saw a new e-mail in their inbox, would they open it even though they were not meant to be working? Almost 39% of employees replied “always”. This response was the same for all the subcategories of employees (regardless of gender, roles and years of service) except for those employees who had been at the company for more than 6 years where “often” was the top result with a response rate of 43%, as shown in Figure 3.

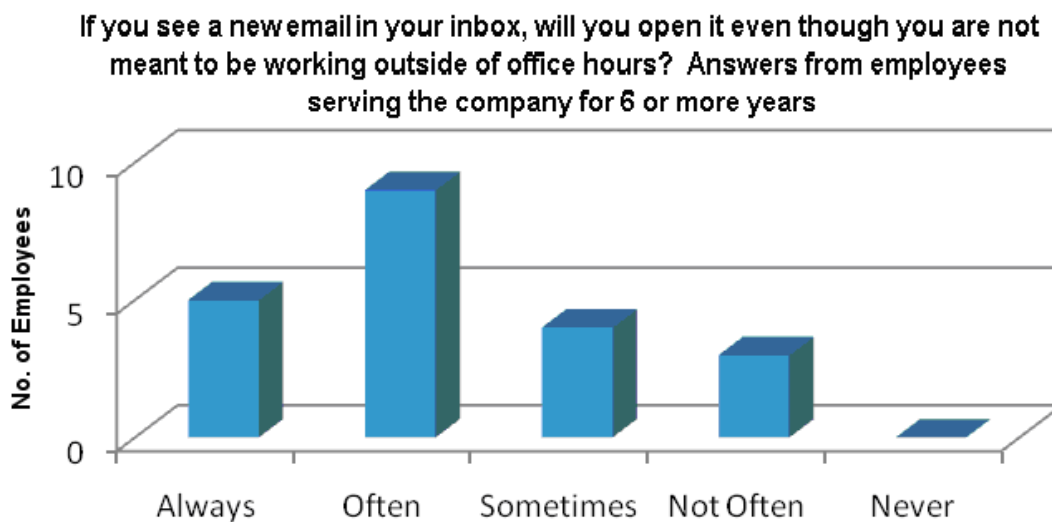


Figure 3 – Willingness to Open E-mails Outside of Working Hours

<sup>1</sup> Where the term ‘urge’ relates to a characteristic of addiction.



Employees' use of company e-mail accounts for non-work related e-mails outside of contracted working hours was also questioned. The logic behind this was that if the reply was high ("often" or "always") then employees would be more likely to check for work related e-mails if they were already logged on and expecting social e-mails. It was clear that, while the majority of people said "not often" or "never", female respondents used their work e-mail accounts for non-work related e-mails more than the male respondents. Outside of office hours, respondents with 1 to 2 years of service reported using their work e-mail accounts for non-work related e-mails more than work related.

Many employees stated they would "sometimes" check their e-mails whilst on holiday but, in contrast, older employees with 6 or more years' service said that they would "not often" check e-mails on holiday. Again the female respondents acknowledged that they would check e-mails on holiday more than their male counterparts, as represented by Figure 4.

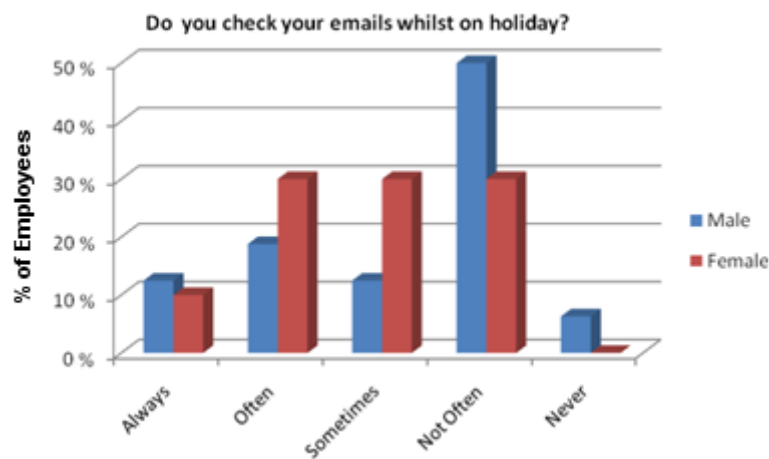


Figure 4. Male and Female Respondents Checking E-mail Whilst on Holiday

### Examining Relationships Using Cross-Tabulation

Three research questions were used to shape the examination of relationships between the answers of different questions, using SPSS software to support the analysis.

Question 1: What is the relationship between employees' thoughts about company culture and their belief that their work is dependent on them checking their e-mails outside of working hours?

The cross-tabulation of results for the above variables is displayed in Figure 5. Results show that, overall, there is no relationship between the variables. However, once the variables are cross-tabulated with gender, roles, and length of service, relationships between

the variables are evident. Hence, if respondents answered “agree” to their work being dependent on e-mail checking, they also answered “agree” to being accessible at anytime is part of company culture.

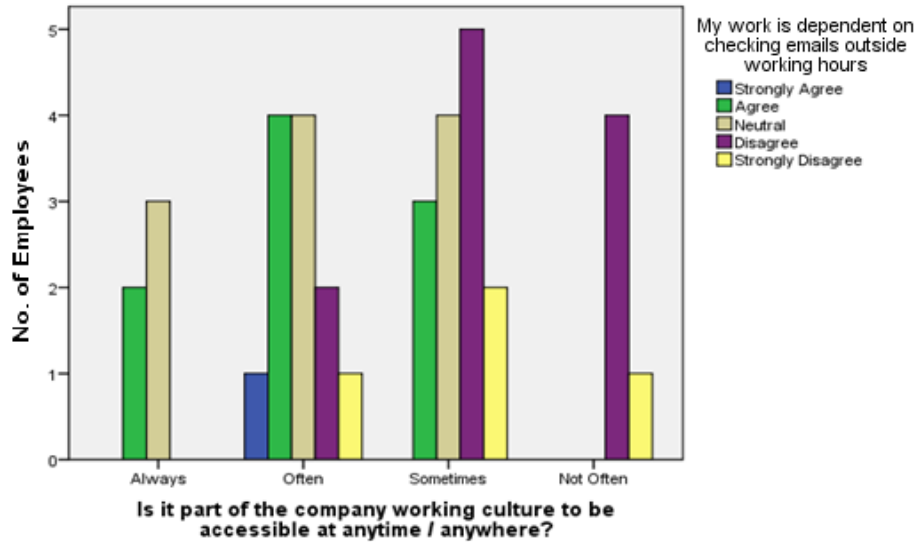


Figure 5. Cross-Tabulation between Company Culture & E-mail Dependency

Senior management and those employees who have served for 6 or more years are the only categories of employees that “agree” that their work is dependent on checking / replying / sending e-mails outside of contracted working hours.

Question 2: What is the relationship between employees’ urges to check e-mails out of working hours and their belief that spending time on e-mails outside of work means they are neglecting their social life?

Overall results indicate that there is a weak relationship between the two above variables. Respondents who answered “often” to missing out on other things due to spending time on their e-mails, also believed that they “often”, “always” or “sometimes” felt urges to check their e-mails during out of office hours (displayed in Figure 6). However, employees who responded “always” to feeling that they missed out on other things due to spending time on e-mails also said they “do not often” or “never” felt the urge to check their e-mails.

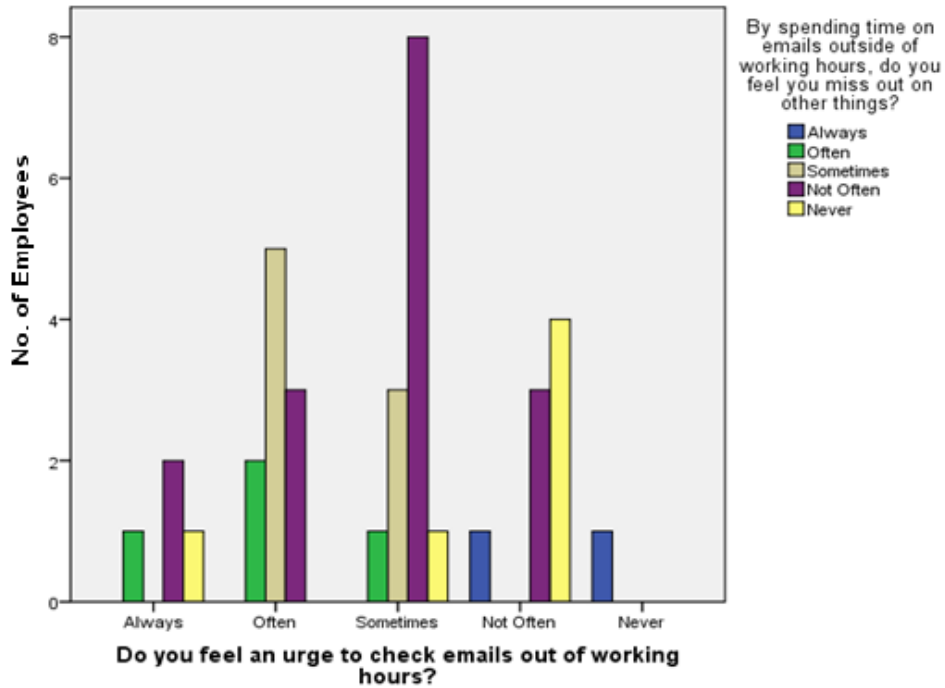


Figure 6. Cross-tabulation Between Urge to Check E-mails and Missing Out

On further exploration of cross-tabulation tables for gender, role and length of service, there is evidence of a relationship between gender and the relationship questioned in Question 2. Male employees, more than female employees, felt they miss out on other things because of work e-mails. In terms of employee roles, those from Senior Management felt they missed out on more than other roles within Functions or Divisions. There was no evidence of an apparent relationship between years of service and the above variables.

Question 3. What is the relationship between employees sending e-mails out of office hours and their expectation of a quick reply or action?

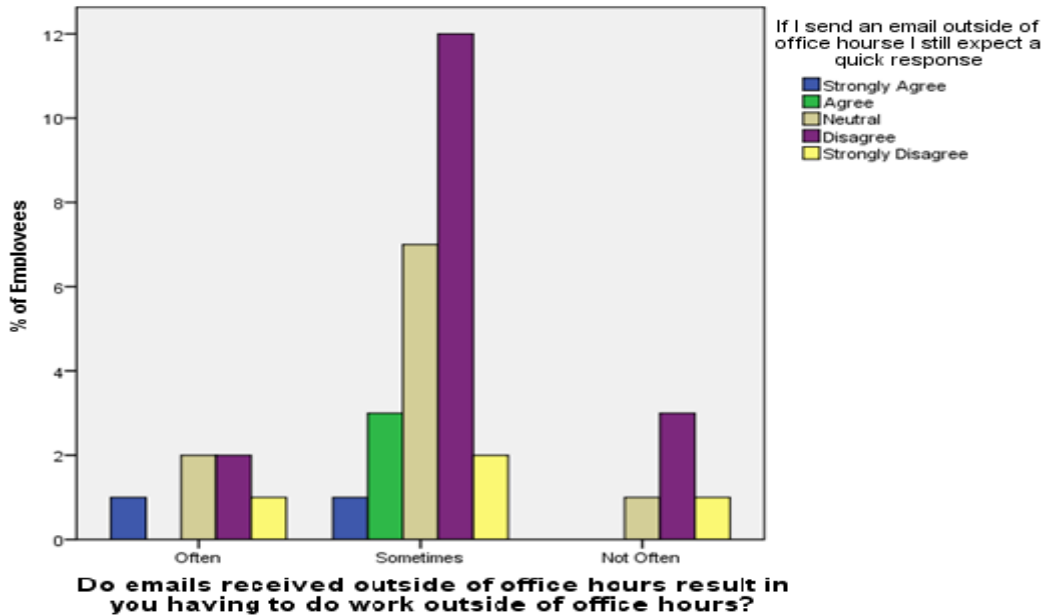


Figure 7. Cross-tabulation Between Expecting a Reply and Having To Do Work

It is evident from the cross-tabulation that, overall, there is no relationship between employees' reply expectations and having to do work during out of office hours because of e-mails received. However, the above figure does indicate that respondents who chose the middle range in one question also selected the middle range in the other (the respondents who said "neutral" also indicated "sometimes"). Almost all categories of respondents disagreed that e-mails received outside of work, resulted in work needing to be done out of contracted hours. The one category of respondents who believed e-mails "often" resulted in work needing to be done was the Senior Group Management. These managers were also the only category of employee that expected a reply to e-mails they had sent during out of office hours / over the weekend.

#### Additional Comments

The questionnaire provided a significant amount of crucial quantitative data. Aside from this, a few of the respondents provided some comments and recommendations for minimising the impact of e-mails on employees' personal and family lives. Interestingly a couple of employees from divisional roles stated that they did not see a problem with checking e-mails when not at work, seeing it as something to do when bored. This could be seen as an addictive tendency.

One employee took a different view. She believed that, to alleviate managers' problems of having to check e-mails outside of contracted working hours, the company should provide managers' Personal Assistants (PAs) with PDAs to help control the flow of e-

mails to the managers (although this could be a double-edged sword, as it would result in increasing the PAs' workload during out of office hours).

### Diary Results

Diaries were completed by 12 employees (3 levels of employees - 4 senior management employees, 4 middle management employees and 4 lower / general employees) of an equal number of male and female employees. The diaries were completed and first analysed line-by-line highlighting key words, phrases, and sentences using open coding. Main themes were then drawn out from these points and used as categories (known as 'coding families') in ATLAS ti. The four categories/families of code relating to e-mail are shown in Table 3, together with the number of times its comprising codes have been associated with participants' diaries.

<u>Category</u>	<u>Number of Associations</u>
Work Essential (codes: Necessary, Project, Program, Product, Meeting Preparation)	27
Impact (codes: Nuisance, Frustration, Disturbed, Missing Out, Weekend)	24
Addiction (codes: Anxious, Urge, Anticipation, Addiction and Conscious Decision)	18
E-mail Technology (codes: Laptop and PDA)	9

Table 3. Number of Category and Code Associations

“Work Essential” was the category with the most hits out of all the categories, with its codes receiving 27 hits in total. Participants often saw the checking of e-mail as a necessity (a code within the Work Essential Category) in order to complete work, receive information needed for a meeting the next day or to finish work that the employee did not have time to do during office hours. From the content analysis, “Necessity” was identified as a key theme (receiving 19 counts in the coding analysis). In terms of the impact e-mails have on the participants' lives outside of work, the code most mentioned by the diarists was having to working over the “Weekend” (with 11 counts).

Drawing from the diaries, many statements and words could have been associated with addictive symptoms. One prominent example was a female middle manager who described the expectation of e-mails over the weekend as giving her an anxious feeling. A male middle manager described being driven to check his e-mails by the anticipation of receiving something. The “Addiction” code with the highest count present was the

unprompted “Conscious Decision” made by participants to check their e-mails (with 8 counts).

The more senior the employee, the more they checked their e-mails and worked outside of hours, although some diarists reported checking but ignoring some e-mails received. Middle manager diarists had very similar diaries to the senior managers. Despite this, there was a slight difference in that some of the middle managers described the checking of e-mails and working outside office hours as necessary to “get on” in the company. This is epitomised by the following quote from one of the female middle managers:

*“I think if I had a family my feelings towards working unsociable hours or checking e-mails would be different. However, as I'm young and wanting to get on in my career I think it is necessary to put in the additional time and effort.”*

Differences between male and female diarists at all levels were relatively minor, with the only notable variation being the reference to the use of PDAs. More diarists from the middle and senior management bands, particularly the male diarists, mentioned that they checked their e-mails using their PDAs rather than laptops during out of working hours.

### Summary of Results

A significant amount of data was collected and analysed during this study, with the key results having been summarised and presented in the previous section. The results of the quantitative questionnaire and the qualitative diaries are now combined in this sub-section, with the key themes that are consistent across both sets of results being highlighted. Consistently, PDA e-mail technology was mentioned as having the most negative effect on employees’ lives outside of working hours (male respondents complained of this more than the female respondents). However, even though employees felt negatively about e-mailing outside of contracted working hours, many participants thought checking e-mail at home or over the weekend was a necessity for their job.

Senior management and employees who had been with the company for 6 or more years agreed that their work was dependent on their ability to check e-mails outside of contracted working hours. The diary findings corroborated this and also showed that middle management employees who were trying to make a good impression within the company felt the same. Interestingly senior managers were also the only category of employee that expected a reply to e-mails they had sent during out of office hours or over the weekend. One plausible reason for all the above is that the employees who have been with the company the longest are generally going to be the more senior, and with that seniority

comes more responsibility and a greater dependence on the use of communication tools such as email.

Although the majority of respondents complained that they were missing out on other things due to work e-mails (men more than women), many middle management employees implied they did not mind spending their own time on work e-mails, because it gave them something to do and stopped them from being bored.

## DISCUSSION

Employees of the case study organisation appear to suffer from a 'long-hours' company culture, which impacts on their work-life balance and hence their e-mail use whilst out of contracted hours. According to Wheatley (2000, p.1) "90% of managers report working longer hours than their contracted week, with 37% reporting working more than 48 hours per week", with most taking work home and working at weekends. Hence, if employees are taking working home then it is likely that they are going to checking e-mails as well.

The lack of literature on e-mail research, in particular on e-mail overload, guided this discussion towards the literature rich addiction and work-life balance themes. The rest of this sub-section therefore examines these two major themes – characteristics of addiction and the blur between work-life and home life.

### Characteristics of Addiction Exposed

The findings indicated that employees constantly checked e-mails outside of working hours even though many reported, as a consequence, detrimental effects on their personal lives. Many employees described feelings of anticipation, anxiousness or urges which resulted in a conscious decision to check e-mails despite the negative implications associated with doing so during out of office hours. These feelings may be described as addictive characteristics and may hold implications both for the individuals and the company. For the employees, this continued desire to check e-mails may cause stress or e-mail overload and could, for example, result in the complete ignoring of e-mails. The implications for the company are two-fold: to a point it benefits from having committed employees who are willing to work unpaid overtime but, there could also be resentment and discontentment with certain adverse affects resulting in high labour turnover.

Taking the notion of addictive characteristics further and linking to Goodman's (1990) work, participants in the questionnaire and diaries indicated not only a powerlessness and recurrent failure to avoid checking e-mails whilst out of contracted hours but the "continuation of the behaviour despite negative consequences (unmanageability)" (Goodman 1990, p.1403). Addictive traits such as the urge to continuously check e-mails despite the negative impact on their work-life balance were found mostly in employees who had been

with the company between 1 and 2 years. This may be a result of a younger generation of employees that have been brought up with e-mails, instant messaging and social networking websites.

Associated with this, many employees stated they would sometimes check their e-mails whilst on holiday; although older employees with 6 or more years' service appeared to be better at switching off from work and not feeling a need to check their e-mails. Results of an American survey of 425 Blackberry owners found that in response to a question about checking work e-mails during family vacations, 37% of people claimed that they never logged in, but 19% admitted that they checked e-mails for work constantly during vacations and often dismissed themselves from family engagements (Pogue 2006, p.1), providing evidence of a negative impact on their work-life balance.

#### Work-Life Balance Blur

Work-life balance issues presented themselves as a major theme in the findings of this project. In particular, employees believed that they were missing out on other things in their personal and family lives due to e-mails and the subsequent work generated. The results indicated that, while this was apparent for all employees, it was mostly felt by the male employees, senior managers and those who had been with the company for longer than 6 years. This may have been caused by employees in those categories having reached a stage in their careers where their priorities in life had changed (e.g. they have children or retirement ahead) and are therefore more susceptible to feelings of missing out on things. In contrast, younger employees with no children or family obligations felt happy to work and to check e-mails outside of office hours as they did not have as many other commitments and wanted to be seen to be working hard.

Consequently this blur is not aided by the mobile nature of e-mail technology, which has caused a negative impact on employees' free time, especially for those middle and senior managers who appear to be the victims (and culprits) of a 24/7 culture of accessibility. This theme of accessibility is supported by the fact that the majority of employees within the case study organisation have been supplied with laptops and PDAs / Blackberrys. Increasing the accessibility and mobility of its employees, provides great flexibility for company activities and locations. However, the findings indicated a significant 86% of employees believed PDA and Blackberry e-technologies had a negative impact on their lives outside of contracted working hours. Bunting (2004, pp.301-325) corroborates this, having described these modern employees as 'willing slaves' (willing to work at anytime and do what the company demands of them) and that, instead of a work ethic, we need to focus on developing a care ethic.



As the globalisation of companies continues to transverse across the world, email will persist to form an ever integral component of business operations. In turn, employees will be dealing with employees in different time zones more frequently, resulting in the necessity of emailing during out of office hours. Subsequently employees' work and home life will continue to merge into one blur, as exhibited by this study's findings.

It is clear from the findings that employees' lives have started to blur; there no longer appears to be a definitive division between personal and working lives. This was especially apparent with middle and senior management employees. Habermas (1984) described this in his bifurcation conception of society; consisting of a system (the state, the company etc) and lifeworld (lives outside the system). He emphasised the fact the lifeworld is becoming increasingly colonized by the system world, driven by the pursuit of money and power (Habermas 1984). This was evident throughout the project and acknowledged by some of the diarists who commented that, in order to progress within the company they had to be seen to be committed / hard working, and this involved having to check e-mails and work outside of office hours.

### Limitations

Undertaking research in one case study organisation is undoubtedly a limitation for the transferability and generalisation of the results; similarly for the establishment of reliability. Criticism may also be levied at the involvement of a modest sample of participants. Nonetheless, this study has afforded the opportunity to delve into a particular aspect of an organisation in a live context and, as a result, has highlighted certain key relationships that will inform the case study organisation and, in turn, draw attention to lessons that are relevant for other organisations.

### Summary

It is evident from the findings that e-mail has a negative impact on employees' lives outside of working hours. Controversially, despite the negative impact, employees of middle / senior management levels expressed a necessity and dependency of their jobs on having to check e-mails and to do work outside of contracted working hours. This exposed company employees' feelings of missing out on other things during out of office hours.

Leading on from the discussion, the following section concludes the paper by providing recommendations to the case study organisation.

## CONCLUSIONS AND FURTHER RESEARCH

The case study organisation could consider introducing the following short term changes to the way that employees use e-mail.

- Employees could refrain from copying others into e-mails (by not using the bcc or cc e-mail facility) or 'replying to all', or forwarding nonessential e-mails.
- Take more care and time over e-mails sent, ensuring that what they send is accurate and meaningful.
- Provide new (and possibly existing) employees with training on e-mail file management, e-mail policies and expectations.

From a longer term perspective, changing behaviours is crucial, particularly those of employees who are regarded as having authority, who work all hours and expect others to do the same. They could lead by setting a good example. Re-evaluating one's own priorities in life is a positive way for this to be done.

In a wider context the problems identified within the project are synonymous with those of the majority of companies around the developed world. Availability of technologies that have created a 24/7 communication culture (using e-mail or approaches from the wide range of digital social media) have, undoubtedly brought about a culture change in organisations with new expectations about working practices and speed of communication. While the above recommendations might offer some short term solutions, undoubtedly more significant changes will be brought about by understanding the current culture and how to modify it so as to change e-mail behaviour for the better.

## REFERENCES

- Adam, R. (2002), "Is e-mail addictive?", *Aslib Proceedings*, Vol. 54 No. 2, pp. 85-94.
- Alaszewski, A. (2006), *Using Diaries for Social Research*, Sage Publications, London.
- Baron, N.S. (1998), Letters by phone or speech by other means: the linguistics of e-mail. *Language & Communication*, Vol. 18, No. 2, pp. 133-170.
- Bawden, D.C., Courtney, N. and Holtham, C. (1999), "Perspectives on information overload", *Aslib Proceedings*, Vol. 1, No. 8, pp.
- Bellotti, V., Ducheneaut, N., Howard, M.A., Smith, I.E. and Grinter, R.E. (2005), "Quality versus quantity: e-mail-centric task management and its relation to overload", *Human-Computer Interaction*, Vol. 20, No. 1-2, pp. 89-138.
- Bunting, M. (2004), *Willing Slaves: How the Overwork Culture is Ruling Our Lives*, London, Harper Collins.
- Burgess, A.K., Edwards, J. and Jackson, T.W. (2006), "A simple approach to improving e-mail communication", *Communications of the ACM*, Vol. 49, No. 6, pp.107-09.
- Chen, Y., Shang, R.A. and Kao, C.Y. (2008), "The effects of information overload on consumers' subjective state towards buying decision in the internet shopping

- environment”, *Electronic Commerce and Research Applications*, Vol. 8 No. 1, pp. 48-58.
- Clarke, S.C. (2000), “Work/family border theory: a new theory of work/family balance”, *Human Relations*, Vol. 53, No. 6, pp. 747–70.
- Czerwinski, M., Horvitz, E. and Wilhite, S., (2004), A diary study of task switching and interruptions, CHI '04: *Proceedings of the SIGCHI conference on human factors in computing systems*. ACM Press, pp. 175–182.
- Garton, L.E. and Wellman, B., (1993), *Social impacts of electronic mail in organizations: a review of the research literature*. Toronto: Ontario Telepresence Project.
- Geddes & Grisset Publishing, 2003. *Dictionary & Thesaurus*. Poland.
- Goodman, A., (1990), Addiction: definition and implications. *British Journal of Addiction*, Vol. 85, No. 11, pp. 1403-1408.
- Greenhaus, J.H., Collins, K.M. and Shaw, J.D., (2003), The relation between work–family balance and quality of life. *Journal of Vocational Behaviour*, Vol. 63, No. 3, pp 510-31.
- Habermas, J., (1984), *The Theory of Communicative Action, Volume One: Reason and Rationalisation of Society*. Cambridge: Polity.
- Hair, M., Ramsey, J. and Renaud, K.V., (2007), The Influence of Self-Esteem and Locus of Control on Perceived E-mail-Related Stress. *Computers in Human Behaviour*, Vol. 23, No. 6, pp. 2791-2803.
- Hayes, N., (2000), *Doing Psychological Research, Gathering and Analyzing Data*. Open University Press: Buckingham.
- Herbig, P.A. and Kramer, H., (1994),. The Effect of Information Overload on the Innovation Choice Process: Innovation Overload. *Journal of Consumer Marketing*, Vol. 11, No. 2, pp. 45–54.
- Hogg. C., (2000), *Internet and E-mail, Use and Abuse*. London: Chartered Institute of Personnel and Development.
- Jackson, T.W., Dawson, R. and Wilson, D., (2003), Understanding E-mail Interaction Increases Organizational Productivity. *Communications of the ACM*, Vol. 46, No. 8, pp. 80-5.
- MacDonald, L., (2002), *Managing E-mail & Internet Use*. Croydon, Surrey: Tolly.
- Mullins, L., (2005), *Management and Organisational Behaviour*. Edinburgh: Pearson Education Ltd.
- Palme, J., (1995), *Electronic Mail*. London: Artech House Publishers.
- Pogue, D., (2006), The Blackberry and the Work-Family Battle, *The New York Times*. <http://pogue.blogs.nytimes.com/2006/06/15/15pogue-e-mail>.
- Reeves, R., (2002), Reality Bites. *Management Today*.

- Sturges, J. and Guest, D., (2004), Working to live or living to work? Work-life balance early in the career. *Human Resource Management Journal*, Vol. 14, No. 4, pp. 5-20.
- Thomas, G.F., King, C.L., Baroni, B., Cook, L., Keitelman, M., Miller, S. and Wardle, A., (2006), Reconceptualizing E-Mail Overload, *Journal of Business and Technical Communication*, Vol. 20, pp. 252-87.
- Weber, R., (2004), Editor's Comments, *MIS Quarterly*, 28, pp iii-xiii cited in Thomas *et al* (2006, p253).
- Wheatley, R., (2000),. *Taking the strain: a survey of managers and workplace stress*. London: Institute of Management.
- Whittaker, S. and Sidner, C., (1996), E-mail overload: exploring personal information management of e-mail. *Proceedings of SIGCHI conference on Human Factors in computing systems: common ground*, pp. 276-83.
- Young, K.S., (1996), Internet Addiction: The Emergence of a New Clinical Disorder. *CyberPsychology and Behavior*, Vol. 1, No. 3, pp. 237-44.

## Appendix 1 – On-Line Questionnaire

### The Impact of Email on Employees' Lives Outside of Contracted Working Hours

[Exit Survey](#)

#### 1. Default Section

1 / 2

##### 1. Gender

- Male  
 Female

##### 2. How long have you been working for your current employer?

- Less Than 1 Year     1-2 Years     3-4 Years     5-6 Years     More Than 6 Years

##### 4. Please answer the following questions regarding the use of email technologies: (Multiple answers are permitted for each of the following questions)

	Blackberry	Smartphone / PDA	Laptop	Access Through Portals	Instant Messengers	Others Not Stated
Which of the following email technologies do you use to check your email outside of contracted office hours?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Which email technologies have you been provided with by your company?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Please indicate which technology you use to check your emails on most, outside of contracted office hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Please indicate any of the following technologies that you believe have a negative impact on your life outside of contracted office hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

##### 5. How often do you check your emails outside of office working hours?

- Never     Less Than 5 Times A Day     5-10 Times A Day     11 Or More Times A Day

##### 6. Each time you check your emails outside of office hours, how long do spend reading, replying or sending emails on average?

- 5 Minutes or Less  
 6-10 Minutes  
 11-15 Minutes  
 More Than 15 Minutes

Next

2.

2 / 2

7. Please use the scales provided to answer the following questions:

	Always	Often	Sometimes	Not Often	Never
Do you check your emails outside of working hours?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If you see a new email in your inbox, will you open it even though you're not meant to be working outside of office hours?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you use your company email account to receive and send non-work related emails outside of office hours?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you use your company email account for non-work related emails more than work related emails outside of office hours?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is it part of the company working culture to be accessible at anytime / anywhere?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you feel an urge to check emails out of working hours?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you check your emails whilst on holiday?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you ever ignore emails received outside of working hours after reading them?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do emails received outside of office hours; result in you having to do work outside of office hours?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
By spending time on emails outside of working hours, do you feel you miss out on other things?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**8. Please examine potential email related issues below and select to what extent you agree with the statement:**

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
If I send an email outside of office hours, I still expect a quick reply	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I send an email during out of office hours on a Friday evening, I expect a reply before Monday morning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My work is dependent on checking my emails outside of working hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe email technology intrudes into my personal / family life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**9. To what extent do you believe the following would have a positive effect on the use of email outside of office hours?**

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Change email settings to increase the software default time between searches for new incoming mail	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Make it policy for employees not to be sent emails whilst on holiday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Introduce a pay / reward scheme for work outside of office hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**10. Any other suggestions or recommendations?**

## Appendix 2 – Example of Diary Guidance and a Diary Day

### Guidance

Thank you for agreeing to help me with this study. This diary is a qualitative research tool that is being used to capture your in-depth thoughts, feelings and reactions regarding your use of e-mail outside of contracted office hours and more importantly the impact e-mails may have on your personal / family lives outside of working hours. Here are some guidelines for filling in your Excel diary:

1. Please fill in the day and date in the space provided on each of the diary pages.
2. Please do not worry about spelling or grammar.
3. Try to fill in the diary every evening. If you cannot make an entry for a particular day, then you may fill it in the following day. However, do not try to fill the diary in any later than one day after the entry was due - e.g. do not try to fill in Monday's entry on Wednesday.
4. If you find that you have missed out several days, please do not give up the whole week's diary. Just start again the next day you are able to fill it in.
5. Remember this is your diary. I am interested in finding out as much as possible about your work e-mailing habits outside of working hours (outside of working hours considered to be any time outside of contracted hours e.g. 09.00-17.30) and what effects (if any) this has on your work-life balance. So please tell me as much as you can - no matter how unimportant it seems. I would much rather have too much information than too little. Everything you write within this diary is **completely confidential and anonymous**.

Thank you for your time.

Aaron Waller



## E-mail Diary – Day 1

Date  Day of the Week   
dd/mm/yy

How many years have you worked for your current employer?  yr/months

If you have trouble thinking of something to write, please consider some of the following points:

1. Why did you decide to check your company e-mail account after work?
2. Did you reply to or send any new e-mails outside of office hours?
3. Did any of the received e-mails result in you having to do work outside of office hours?
4. How long did you spend on your e-mails outside of working hours?
5. By spending time on work e-mails, did you miss out on doing anything else?

Please include your thoughts, feelings or reactions, no matter how small or irrelevant you think they may be. I remind you that everything you write within this diary is completely confidential and anonymous.

**Please use the space below for your entry:**

