



# Stemming the Email Tide

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## **ABSTRACT**

*It is hard to imagine any business managing without the use of email these days. Technology has made it easier for all of us to read and send email at anytime and from anywhere. This fuels our need to be connected to our email system and drives our behaviour to read email as soon as it arrives. Email is fast becoming an addiction.*

*This white paper details the drivers behind email, explains individual behaviours to both reading and sending email, and describes the impact these behaviours have on a business's productivity. We will then examine the best strategies and technologies to combat email addiction so that individual emailers can use email to its full potential without the added stress, strain and productivity issues that go with it.*

## **INTRODUCTION**

It is hard to imagine any business managing without the use of email these days. It is probably used so much because it is reliable and delivery is almost immediate. Email is almost immediate, but will wait in the inbox until the recipient is able to read it. Since email is electronic it is stored on an email server and this can effortlessly provide an audit trail, something which, in the days of letters, required manual duplication and storage of paper copies. Many people use their inbox to manage and orchestrate their day's activities – it provides a very convenient record of communications (and work done) and a reminder of tasks yet to be dealt with. I don't think any of us can imagine a workplace without email and with technology such as the iPhone and wifi making email available to read anytime and anywhere, it is becoming increasingly easy to fuel the email addiction.

## **EMAIL PRESSURE**

There is a downside, however. Email users become accustomed to email arriving throughout their day and they start monitoring it, much like an anaesthetist monitors his machines during surgery. Whereas the anaesthetist's core task is to monitor the machines, most email users have tasks other than email monitoring in their job description. With the introduction of anti-spam software to reduce the amount of 'bad' email that is delivered into emailers inboxes, today most people are dealing with 'good' email – emails that are relevant to either their work or their personal life. Where email is supposed to be used as a communication tool this semi-continuous monitoring seems to "take over". What they find themselves doing is switching between email and other tasks throughout the day. Humans are quite good at switching tasks, but this switching tends to interfere with the way we carry out our core tasks because we never concentrate on one thing long enough to be effective.

Recent research we carried out and published in the International Journal of Human-Computer Interaction determined how individuals think about their e-mail usage. Many users feel a pressure to read and act upon received emails immediately or within a short timeframe. Although this may be particularly relevant to a specific emailer's job such as customer services, where their customers can seek advice, report a problem or ask a billing question and want an immediate response, other users do not work in such time-sensitive areas. And this is just for emails that relate to a user's job. What about all the personal emails, such as shopping and lifestyle magazine newsletters, that are received and acted upon immediately or within a short timeframe?

## **IMPACT ON PRODUCTIVITY**

There is no employment contract that says "No one person should ever send or receive more than X number of emails in any 24 hour period". New research evidence suggests there might very well be a case for there being such a provision or a requirement to address the delivery of personal email to users' and to either stop or limit delivery. Some email users are becoming stressed by email which can have an adverse impact on the health of these employees, and a resulting effect on the organisation. Companies are legally obliged to deal with any problem that affects employee health.

Email users tend to underestimate how much email they receive – both professional and personal – and how it interrupts them during their working day. They are less productive because of it, but they don't seem to be aware of this. A three-month research observation of the activities of a small group of emailers revealed that a large proportion of respondents use email for both personal and work use, often at the same time, with 70% sending both personal and work-related emails on a daily basis while at work. They spent nearly one quarter of their computing time on email. On average, two and a half minutes were spent on non-emailing tasks, with an emailing session lasting 47 seconds; half of those were briefer than 15 seconds in length. Emailers were switching between email and other applications 36 times an hour, on average, and seemingly often interrupting their other activities merely to check whether there was any new mail. This new email could relate to that emailer's work but equally could be personal.

## **EMAILING BEHAVIOURS**

What happened when during our research we asked the emailers themselves to tell us about their emailing behaviours? We found that 84% had their e-mail client on in the background. 55% also did this from home! One third imagined that they checked email every 15 minutes and just under half thought they checked more than once per hour – this is clearly at odds with the observed behaviour of our participants which showed the median was closer to five minutes, and it is reasonable to assume that these behaviour patterns are fairly wide-spread. Even more concerning is that a quarter of our respondents reported that they preferred to send rather than to receive email, with a mere 3% preferring to receive email. This is indicative of employees feeling a pressure to respond to incoming emails.

Emailers engage with their email much more than they realise: some struggle to keep up with it, whilst others actively seek it out. Many email users contemplate receiving emails with a sense of eager anticipation. It is almost as if they are engaged in gambling. What will the next email contain? Will it be a boring work email, requiring action, or will it be the big payoff? Perhaps an email will arrive from a friend or family member, and the emailer contemplates reading and savouring it. Perhaps it is this optimism that compels email readers to monitor their inbox so assiduously.

On the other hand, and especially in the workplace, constant checking of emails drains the employee, reducing concentration time that should be spent on essential work tasks. In particular, recipients are under siege by email, which can significantly impact staff productivity and could ultimately affect a company's bottom line. It is quite unrealistic to expect employees, who are already multitasking, to be able to process the tsunami of emails that floods their inbox throughout the day.

## **SURVIVING THE EMAIL TSUNAMI**

What is to be done to ensure that email remains a tool and does not morph into a tyrant? There are several potential solutions on the table. One lies with the individual employee learning to think very carefully about whether each email is truly necessary. This can be encouraged by appropriately worded acceptable use policies. Of course, that doesn't stop anyone from sending anyone else an email. If you think an email is important as a sender, then you send one. Researchers have found that the wording of emails can have negative effects on the blood pressure of the recipient ... incoming email not only impacts our thinking, it impacts our very biology.

Even those organisations that have clear business strategies, acceptable use policies for email, anti-bullying and harassment policies and the like, ultimately rely upon their employees to a) be actively aware of the policies, b) interpret the letter of the policies appropriately, and c) reflect this understanding through their behaviour. Even if the first step (awareness) is achieved, employees need support in the ensuing two.

The organisational and individual cost of being on the receiving end of an avalanche of email is prohibitive. We suggest that acceptable use policies might work to greatest effect when they are complemented with an appropriate software solution.

## **PROTECTING EMAILERS FROM THEMSELVES**

The other approach is to incorporate email filtering software to better manage – those potentially pleasurable, but unfortunately also perhaps demanding and intrusive – emails that are passed as 'good' email by the spam filter and delivered to the inbox. Interestingly, most organisations only use spam filters – the most rudimentary form of software-based email management. Keyword filtering is, in itself, a good first line defence. But the problem here is not so much protecting employees from receiving x-rated email content of dubious origin (although that is important) – the problem is protecting emailers from themselves!

In particular, email filtering is needed that will allow organisations to understand and then proactively manage their email. Part of the problem lies in email users being unaware of their own emailing behaviours, as we showed previously. The Utopian solution, naturally, would be that all emailers

operated within the boundaries of their organisation's acceptable use policies. Maybe capturing the emailing behaviour patterns of each emailer and highlighting those behaviours up to each user as a form of looking-glass would be good. Self-knowledge is a wonderful thing when addressing what is fast becoming email addiction! Did you know that you sent out 565 emails last week, received 1354, and left 324 unanswered? Did you know 30% of received emails were classified as personal and not work related? Did you know that your average response time is 20 seconds? Is it really appropriate that your average response time is 20 seconds? Did you know you are one of the fastest responders in the organisation? Did you know that you checked email 71 times today? That you checked 71 times, but only saw new emails 15 of those times? Armed with this very persuasive personal information, the emailer might pause to reflect on whether all this emailing or email monitoring is really so necessary.

Software that can determine, apply different policies and report on personal email sent to a business emailer is one part of addressing the productivity of each employee. Sophisticated email filtering could also allow email to be scheduled until such a time that the email reader has the leisure to deal with them – hold my email until 12 noon, in the same way that a secretary might hold all calls – so you don't even see them in your inbox. If you know they are not appearing in your inbox, then there is no temptation to check. Surely a good thing?

As we mentioned previously, our research has clearly shown that the negative effects of constantly interrupting ongoing work to check and answer emails is seriously underestimated by emailers, especially the recipient. What we haven't mentioned, however, is that emailers might also use email as a form of displacement activity: a way of legitimately engaging with their work, whilst avoiding writing up that dreaded report that is due by the end of the day. Crucially, shifting one's attention over to email may take some much needed pressure off the employee, allowing a little bit of distance to be placed between them and their primary work task, granting them valuable new perspectives on it. A little down time can pay dividends. So, whilst being stressed out by the deluge of incoming emails on the one hand, people nevertheless like to play with it when alternative tasks look less attractive. It is the prerogative of the email user to be contrary!

## **SUMMARY**

So, what does all of this mean for an email filtering solution? Firstly, flexibility around setting and maintaining policies and user groups is a key component. In addition passing control to the individual email recipient so they can shield themselves from the tide of incoming messages. One size will not fit all as emailers vary in their orientations.

Understanding email patterns, structure and language to help determine whether the 'good' email that is delivered to an inbox is business related or of a personal nature. Applying policies or the staff themselves imposing rules on when to view different types of email will go some way towards addressing the immediate pressure and interruption emailers feel and productivity of staff in general.

Also emailers vary in their orientations. We found that emailers come in three general "types": relaxed, driven, or stressed. Which type you are will determine what you require personally from an email filter. Crucially, we found that those who have lower self-esteem are the ones who are most driven to check their email. Those who fell into the stressed category found email most distracting. So, it is quite clear that how an individual relates to their inbox will determine what they require from an email filter. The paradox of course, is that emailers don't generally know whether they are relaxed, driven, or stressed! One way of giving them insight into this, would be to share their emailing patterns with them in the way we discussed before, as a form of "looking-glass".

Only by becoming aware of email, its content and how each individual views email will the emailer and employer be able to take full advantage of email filtering software.

## **ABOUT THE AUTHORS**

Dr Karen Renaud is a Computer Scientist based at the University of Glasgow, with an interest in the use of technologies in context. This includes the use of email in organisations, and how it impacts on employee productivity as well as overall business efficiency. She also does research into the interface between humans and security systems. Her web address is [www.dcs.gla.ac.uk/~karen](http://www.dcs.gla.ac.uk/~karen)

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## **ABOUT BLOXX**

Bloxx is a privately held company with offices in the U.S., U.K., The Netherlands, and Australia and offers web and email filtering appliance-based solutions for medium and large organizations in both the business and public sectors. In 2007, it was recognized by Deloitte as one of the U.K.'s Top 50 Fastest Growing Technology Companies in its prestigious "Fast 50."

For more information please visit: [www.bloxx.com](http://www.bloxx.com).

## **ABOUT BLOXX EMAIL FILTER**

Bloxx Email Filter contains best-of-breed anti-spam and anti-virus technologies that detect and eliminate unsolicited spam, phishing and malware delivering multi-layer protection for your network and users. In addition, the Bloxx Email Filter provides a level of control over received and sent email that enables IT managers to introduce and manage an email Acceptable Use Policy that allows staff to focus on their work, change their behaviour over email and increase productivity.

For more information please visit: [www.bloxx.com/emailfilter](http://www.bloxx.com/emailfilter)

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