



# The Shape of Email

Research Report

June 2012

## Introduction



Many companies today are concerned with how information is exchanged both between their organization and others and also within the organization itself. In this context, email is the pervasive application that binds the majority of corporate information formats and channels together. Most of us use email as a file server, an increasing majority access it from multiple locations and almost all of us have invested countless hours sending, sorting, filtering, filing and responding to the inbox.

From a technology perspective, we are mostly concerned with the size of an email inbox and preserving the integrity of the information it holds. These two factors are the factors most likely to slow down the business and impact productivity, the latter also affecting information risk in its various forms. However, it is fair to say that these issues are not, in general, as significant as they once were.

In the pursuit of faster email delivery and secure information exchange, it seems that the ‘quality’ of email itself is a distant and secondary concern. However, this is something that will, over time, change. Whilst the implications of security breaches are significant, the actual risk is manageable for most businesses. Moreover, the burgeoning number of businesses opting for email to be delivered as a service results in performance and availability issues becoming less acute, or at least becoming the responsibility of the service provider. In the following research, these trends are evidenced in more detail.

### So what is the shape of email?



The shape of email is a starting point in helping us understand the quality of the information residing in the inboxes of organizations across the world. Businesses are, understandably, preoccupied with spam, its potential risks and its impact on both network and personal bandwidth. However, between spam and the critical emails needed to run a business sits a range of information, some of it very useful, some less so. Mimecast’s Shape of Email research attempts, for the first time, to describe the content of a typical corporate inbox in terms of its importance and relevance to the user, through the eyes of the professionals tasked with its management.

Through the research we can see indications of what influences the value of an inbox and how that value (or shape) impacts the organization. We also look at how email as a medium is changing, the impact social media has upon it and the strengths, weaknesses and challenges associated with email management. In our next quarterly report we will also include analysis of real corporate email traffic to add detail to the debate of what constitutes email best practice.

Nathaniel Borenstein, Chief Scientist, Mimecast

# Executive Summary



Research on email archiving and storage generally focuses on the ‘size’ of email and the impact that this can have on the productivity of a business. However, this research goes a step further, moving beyond just looking at the size of an inbox to focus on its ‘quality’ – that is, categorizing the contents of a typical inbox in terms of its value to the user, from spam to business-critical emails. Why is this important?

This research shows that a surprisingly small proportion of emails within our inboxes hold real, immediate value, casting a light on how much ‘baggage’ the average professional inbox holds. The research also looks at the changing nature of the inbox, remote access to emails and the use of social media, unearthing the concerns and obstacles faced by organizations in managing email today.

The research surveys 500 IT decision-makers in the UK, US and South Africa. IT decision-makers have an overview of the content of company inboxes that a typical employee does not have. This empowers them with a broad understanding of what the shape of email is and enables them to evaluate email best practice. The key findings from the data, which include some interesting disparities, are as follows:

## The Shape of Email

- Only 25% of emails are considered essential for work purposes, with an additional 14% of critical importance
- 13% of work email is personal, not related to work at all
- 40% of work email is either functional or of low level importance
- On average, 63% of email is internal, employee-to-employee communication
- Business that have higher levels of essential or critical emails are likely to be larger companies with smaller inboxes

## Email Management Issues

- Virus attacks (55%) and security breaches (55%) are noted the most significant security concerns for IT professionals
- 41% of respondents are also concerned with remote access, with 39% concerned specifically with access to email via a mobile device

## Security Sensitivities

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- 41% of respondents are also concerned with remote access, with 39% concerned specifically with access to email via a mobile device



## Social Media Influence

- There is a significant presence of social media in the workplace
  - 73% of organizations allow the use of social media in the workplace, with professional networking sites (55%) and social networking sites (47%) most prevalent
- However, this presents a real and perceived security risk, partly due to the lack of control over management
  - 59% think current levels of social activity increases the risk of information leaks (higher in the UK at 69%) and 55% believe the risk of security breaches is increased
- Organizations are therefore aware of the security risks that social media poses but the management of this risk is a challenge



## Archive Management

- There remains a lack of consensus on archiving strategy
  - 49% of organizations archive automatically
  - 45% of organizations archive manually - of those, 21% by auto prompt
  - 20% of organizations store archived emails on local disk drives
  - Only 30% of archived emails contain all deleted mail

### Research Methodology

In April 2012, 500 interviews were conducted online with IT decision-makers (specifically about email hardware, software and services) across a range of company sizes and industry sectors and regions.

The analysis focuses predominantly on different regions within the sample: US (200) and UK (200), and SA (100). The research was conducted by Loudhouse Research, an independent consultancy based in the UK.

# The Shape of Email

The value of information found in an inbox varies considerably - 25% is considered essential for work purposes, whilst only 14% is of critical importance (see Fig 1). On average, 13% of email is personal, non-work related. The remaining content is functional at best, with 7% still consisting of spam and junk.

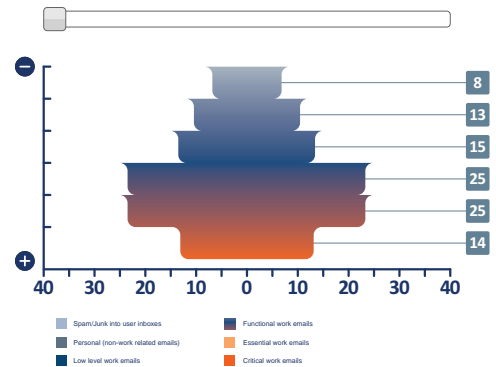
Almost two-thirds of emails contain more than just text; on average 27% contain attachments, 14% hyperlinks and 22% either embedded HTML or embedded images. In essence, the typical inbox is a complex place where the format and type of content change all the time.

By looking at email content on a spectrum of value from junk to critically important information, the attributes of a professional inbox can be defined. The immediate observation from Figure 1 is that the majority of emails received by an end user are non-essential. However, these emails will require time to read and manage and also create an archiving need. Whilst they lack value for the user, they equate to cost for the organization.

Looking at inboxes with higher instances of critical and essential email and lower instances of junk, personal email and email of low importance, shows some of the characteristics of inbox 'quality' (Fig 2).

It is interesting to observe that inboxes with higher volumes of critical and essential email and lower instances of junk, personal and low importance email share some similar characteristics. Higher quality inboxes are an average of 10% smaller than those of lower quality. They are also likely to contain a higher proportion of internal mail and, from an IT perspective, exist within businesses that set higher expectations on email uptime. In simple terms, there is a relationship between better managed email and the associated value of the information in the inbox. It is notable that these characteristics are more likely to be seen in larger businesses (over 500 employees) and in service industries, such as the public sector and IT/Telecoms.

Fig 1: The shape of email on a scale of quality



Q: Thinking about the total amount of emails sent and received by all users within your organization over the last 12 months, what percentage are...? (Base: 500)

Fig 2: Quality Inboxes

High Quality Inboxes



- Smaller size (MB)
- Present in larger businesses
- Higher percentage of internal email
- Higher instance in IT/Telco & Public Sector

# Security Sensitivities

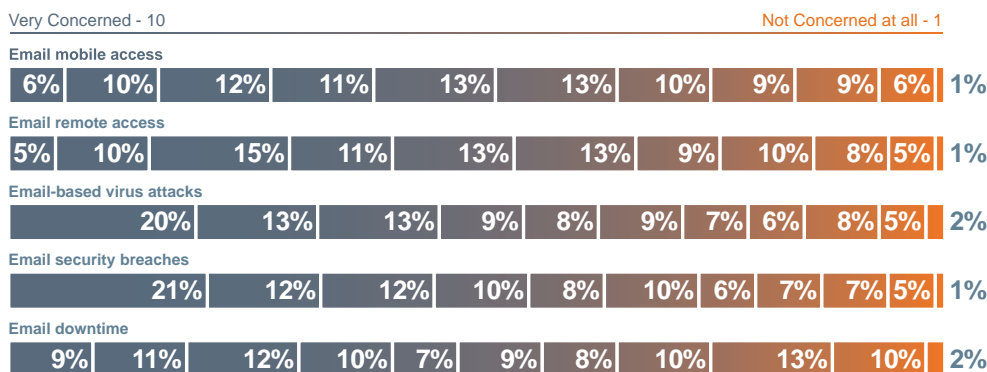


The changing nature of how employees use email systems has the potential to greatly impact the security of the information within an organizations. Email is no longer accessed only from the workplace. Flexible access is now commonplace. This means that there are many potential channels from which information can leak out or into which viruses can infiltrate.

However, whilst the level of concern about mobile and remote access to emails is very real (39% and 41%, respectively), organizations are more concerned about email-based viruses (55%) and email security breaches in general (55%), as shown in Fig 3. The real threat of remote access vulnerabilities seems less of a concern, although companies with higher incidences of mobile access will feel these issues more acutely.

Email-based security issues posed by the various threats stated in Figure 5 seem to be under control. For example, under half of respondents assign an 8+ rating to either virus attacks or security breaches. The concern is tangible, but the majority of respondents believe that management of an actual 'event' is firmly in hand. Of course, one single security breach or virus attack can cause a business considerable damage, so vigilance is of paramount importance, but the prevention measures in place appear to provide peace of mind.

Fig 3: Levels of concern about security threats



Q: On the following scale, how concerned are you of the risk posed to your organization by the following. Please use a scale of 10 to 1 where 10 is "very concerned" and 1 is "Not concerned at all". (Base 500)

# Social Media Influence

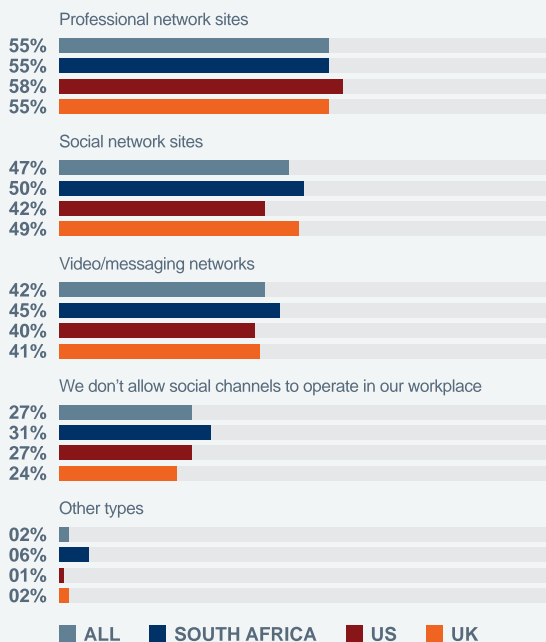


With the surge in the use of social media, and its ever-increasing presence in the workplace, what effect is this having on email?

The vast majority of organizations allow the use of social media in the workplace, with professional networking sites such as LinkedIn (55%) and social networking sites such as Facebook (47%) having a significant presence (see Fig 4). To this end, there are strong concerns associated with increased security risks – 59% of respondents believe that current levels of social media activity increase the risk of information leaks (UK shows the greatest concern at 69%) and 55% believe the risk of security breaches are also increased (see Fig 5).

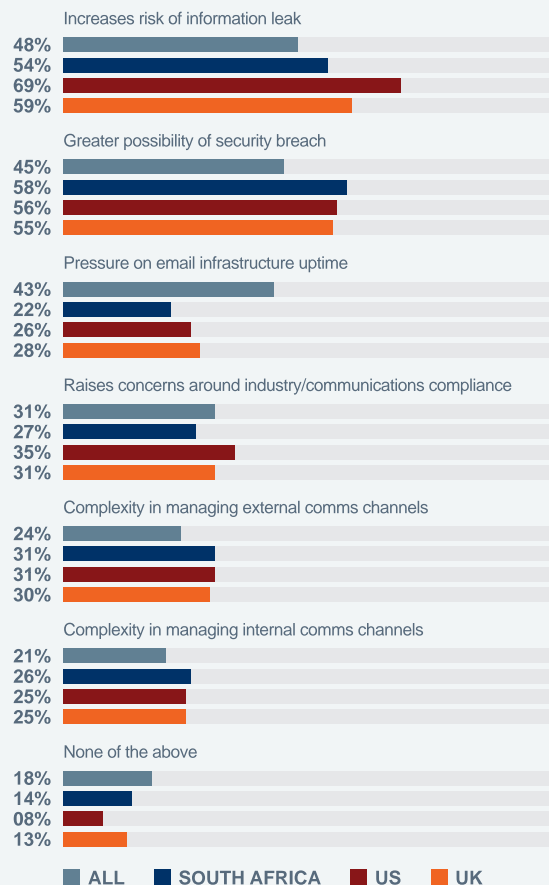
The use of social media has decreased the reliance on traditional email, according to 1 in 3 respondents. This has had an impact on correspondence with colleagues (32%), customers (30%) and friends/ family (29%). Email is still integral to business; however, social media is making a dent that is likely to increase further in future as the use of social media in the workplace is still not fully established. With existing concerns around social media already on the radar of IT professionals, there appears to be a combined risk between social media and email use that will pose questions for information management in future.

**Fig 4: Usage of social media at work by region**



Q: Which of the following types of social channels are currently being used within your organization? Base (500)

**Fig 5: Implications of social media within the work place by region**



Q What are the implications of the presence of social media within your organization? Base: (500)

# Email Challenges?

Figure 6 shows that there are many challenges experienced in email management, although no single issue stated seems to cause wholesale concern – even the most cited instance of ‘staff often exceeding storage limits’ affects just over half the sample (56%). However, Figure 3 does provide an overall picture of the issues causing concern with email management, offering some surprising insights on where email problems reside.

Data storage is becoming considerably cheaper as time passes, meaning that staff exceeding storage limits is as much a compliance issue as one of cost management. Whilst less prevalent, it is more interesting to note the degree to which maintaining uptime (20%) and delivery speed and downtime (33% - 47% in South Africa) affect organizations today. These issues are immediate challenges for one in five and one in three businesses, respectively.

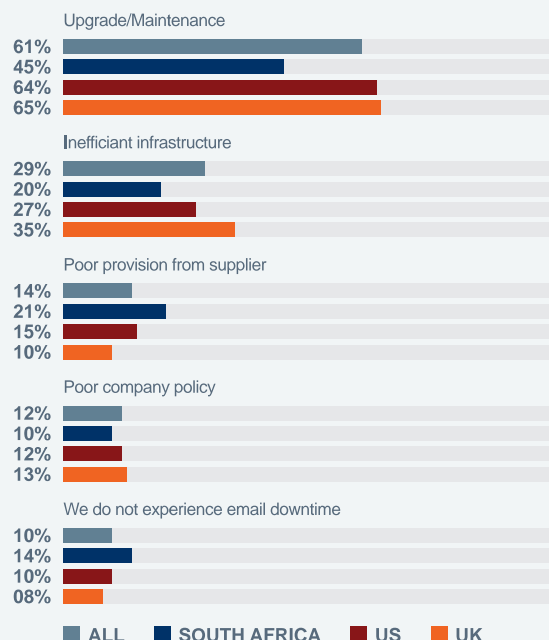
Figure 7 shows that downtime can be mostly attributed to the IT department – i.e. it is managed as part of upgrade and maintenance needs. There are still instances of unplanned downtime caused by infrastructure or supplier issues, but the majority of downtime experienced occurs within a controlled environment.

Ultimately, email challenges appear to be aligned to resource and compliance issues, such as maintenance and administration, as much as they are to infrastructure or technology challenges. With outsourcing commonly aligned to addressing resource pressures, it is not surprising that the trend towards email hosting and cloud provision endures. In the sample, 33% of respondents have email delivered by a third party provider, 30% in UK and US regions, 40% in South Africa.

**Fig 6: Immediate email challenges by region**



**Fig 7: Causes of downtime**



Q: What immediate email challenges does your organization currently face?  
Base: (500)

Q: What do you feel are the main causes of email downtime within your organization? (Base: 500)

# Archive Management

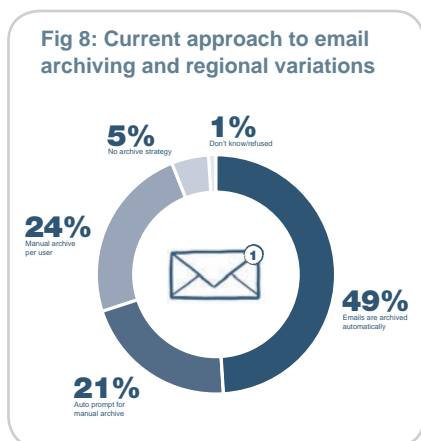
Most businesses deal with high volumes of email constantly flowing across the organization. Thinking about archiving in a strategic way helps to manage email volume and recognises the value of the data that the archive holds. To archive rather than destroy emails is also vital for businesses in order to keep an audit trail of communication that is easily accessible.

Archiving emails automatically is the preferred choice for almost half of the organizations surveyed (49%) which can be more time-efficient than a manual, user-based archive (Fig 8). However, the manual archiving of emails is practiced by 45% of organizations (24% manually archive, with 21% using manual archiving with an auto prompt).

Fig 9 shows that whilst the majority of organizations archive their email in-house, or on centralised servers (58%), nearly 1 in 5 do so off-site (18%), rising to almost a quarter among UK companies (24%). As many as 20% of organizations store their archived emails on local disk drives, which can present an audit risk.

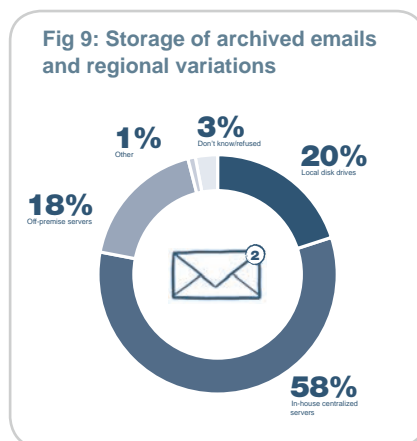
It is certainly ideal to archive all emails in order to preserve an audit trail. However, Fig 10 shows that just 30% of organizations archive all of their deleted emails, whilst 28% archive some and 39% do not archive any at all. The UK is most vulnerable to losing a data audit trail, with the lowest incidence of archiving deleted email (53%, versus 62% in the US and 60% in South Africa).

The archive picture is, therefore, somewhat mixed. Whilst archiving in a rudimentary sense is prevalent, the durability of archive management is questionable. As a worst case scenario a significant number of businesses are saving pst files to local drives when it suits them.



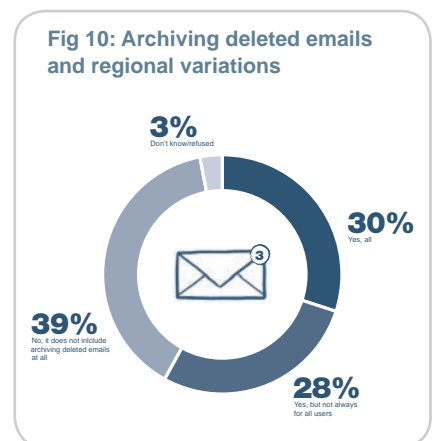
Country	Automatically
UK	42%
US	53%
SA	53%

Q: What is your current approach to email archiving? Base: 500



Country	Off-premise
UK	24%
US	14%
SA	16%

Q: Where are auto-archived emails stored? Base: companies with an archiving strategy (475)



Country	'Yes'
UK	53%
US	62%
SA	60%

Q: Does this include archiving all deleted emails? (Base: 500)

# Conclusion



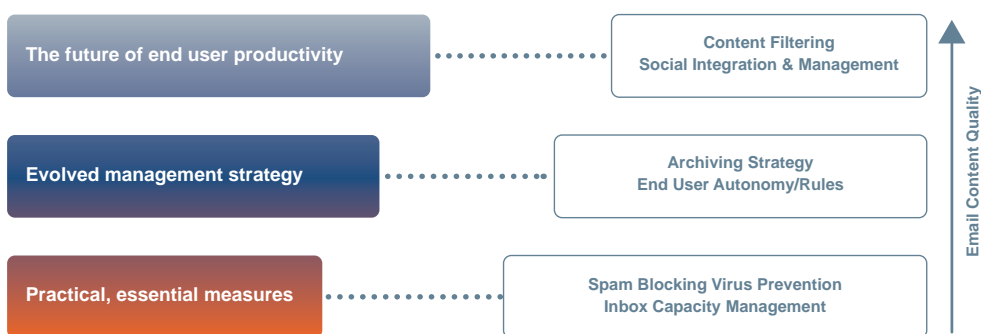
Email is a continually changing entity within the organization. For those responsible for managing email and devising strategies to improve its value to the business, there are several factors to consider. Surprisingly, the research suggests that email security is not a wholesale preoccupation for IT professionals. There is a professional level of concern about the preservation of email integrity and sensitivity to risk, but, the response to security risk, like the risk itself, seems mostly under control.

Greater levels of concerns should be levelled at the holes apparent in email archiving strategies and the expansion of email-type communication into less familiar social media channels. Whilst there is a 'belt and braces' approach to email security, manual processes and local storage plague archiving practices. Furthermore, IT professionals associate considerable risk with the corporate evolution into the social sphere.

Away from security, there is a clear view that only a small percentage of the email received by end users is considered truly valuable. Of course, a lot of what appears in a typical inbox will represent the 'day-to-day' of information exchange, which by its nature will include a high level of perfunctory data. However, the shape of email described in the research points towards important issues regarding email management and quality.

Defining email best practice in terms of spam prevention, uptime and inbox size management is common sense for IT professionals. Managing archiving in an automated, resource-efficient and compliant way is the next step in email management strategy, one that many companies in the survey need to address. Beyond this, the future of information exchange is being significantly influenced by the integration of 'socialized' communication and sophisticated management of content filtering, search and data capture to increase user information quality. Managing these factors over time will improve the 'shape' of email, whilst ignoring them will be detrimental to user productivity and information quality. Defining that strategy is a work in progress for most businesses, but the following recommendations form a starting point for a content, social and archive framework that IT professionals should consider.

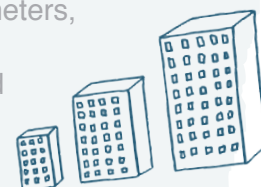
## Email strategy in progress



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> **Size is everything**

Management of the corporate inbox is hampered by unpopular user limits and storage capacity. These are clearly stated challenges that should be addressed immediately. Storage capacity is a symptom of poor email strategy and planning. Clearly defined data and usage parameters, combined with policy and user management options should be the norm, not an unreachable goal. A simple evaluation of user needs and capacity requirements should reduce inbox management challenges considerably.



**Get to grips with Junk 2.0**



Stopping spam at the gateway is a necessity, but junk is not defined by spam alone. Many other forms of permissible email create capacity and productivity issues. Understanding the sources of unsolicited mail, the volume of personal email and necessity of other email content is an important step in defining how email management strategy can support end user productivity further.

**Automatic Archive Imperative**

Investment in automated archiving is invaluable. Whilst the storage of all information that passes through the email gateway may seem extreme, it is a route to audit trail lockdown that businesses are starting to see as a necessity. At the other end of the spectrum, unmanaged manual archiving and local storage of corporate content pose risks to the business.



**Understand Social Shifts**



If social media is changing the dynamics of email use, it is important to ensure that the impact of this change is managed by the IT organization. In a positive sense, the transition to social media may provide a conversation channel alternative to email chatter. However, there are information security risks posed by social media. As email is unlikely to be replaced by social media, IT professionals need to consider how the email / social media mix can co-exist in a secure and productive framework.

**Maximize Information Value**

Paying closer attention to the processes surrounding email creates efficiency. Putting a price on email is difficult when it is only really accounted for in terms of cost to the business. However, there is an innate value to the information exchanged via email and seeing email content as constituent parts of differing quality paves the way for removing inbox waste, increasing accountability and creating a more valuable information resource.





2-8 Balfe Street  
Kings Cross  
London  
N1 9EG  
United Kingdom

> [www.mimecast.com](http://www.mimecast.com)