

Data Retention

Business requirements should drive IT capabilities

By Jon Collins and Martin Atherton, December 2008

In a nutshell:

The required tools exist, but business and IT lack mutual understanding to nail the storage requirements associated with data retention.

Key points:

- Even 'must do' information management obligations cause big headaches
- 'Keep everything' is not a desirable strategy or default position for most organisations
- IT can help: focus on 'infrastructure' and 'information management' capabilities
- Even the right tools are ineffective without understanding the businesses requirements

Earlier last year we conducted some research on the topic of information governance in medium and large organisations across the globe [1]. As part of the process we learned about attitudes to information retention, the findings of which we present here.

What retention requirements need to be followed, and how?

There are multiple kinds of information retention requirement: those which are industry specific, those dictated by local/national regulations and those which are commonly applied across international boundaries. There are of course multiple combinations of these, depending on where your organisation does business and with whom. A shared feature is that the information management obligations they drive cause real headaches for many organisations. (Figure 1)

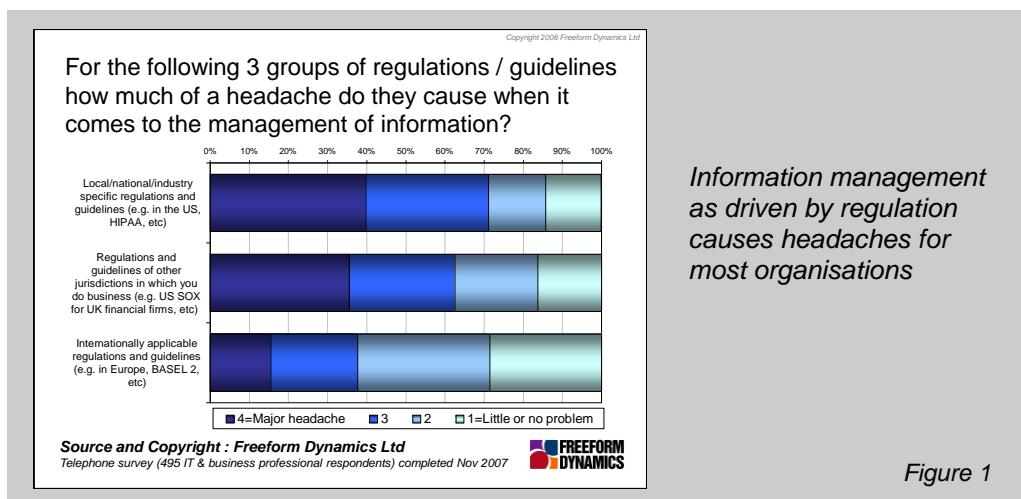


Figure 1

As regulations tend to be aimed at business and not IT, your organisation's lawyers would be a good starting place to help you understand what you should be retaining, and how. To give some examples however, in HR some personnel records need to be retained up to an age of 75; meanwhile, other data protection law such as PCI used in financial services, can stipulate "no longer than is absolutely necessary" for card-related information. You don't have to be a rocket scientist to think up scenarios where conflicts could arise, so it is no wonder that some of our respondents saw such regulations and guidelines as a challenge – particularly given the volumes of information that need to be retained (Figure 2).

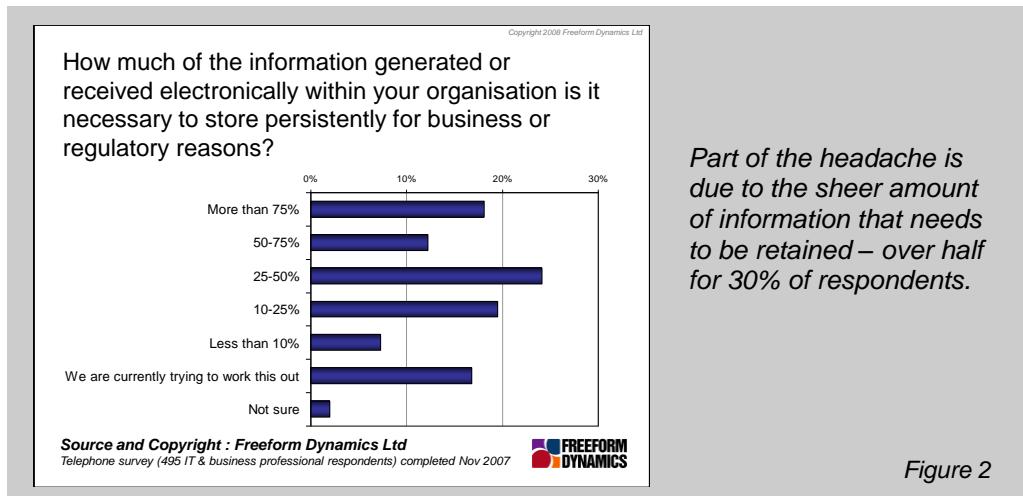


Figure 2

What is the impact on retention policy?

For existing data it can be difficult to retrofit regulations to what has already past. "Keep everything" has all-too-frequently been adopted as a policy (Figure 3), and although this may not be strategically or legally sound it can be operationally difficult to consider alternatives. We know from our research that this approach is still prevalent in a good 40% of organisations. We also found that another 25% don't have an information retention policy in place at all. While we suspect this picture may have improved somewhat in the light of the HMRC data breach and other such news, we doubt there has been much of a sea change.

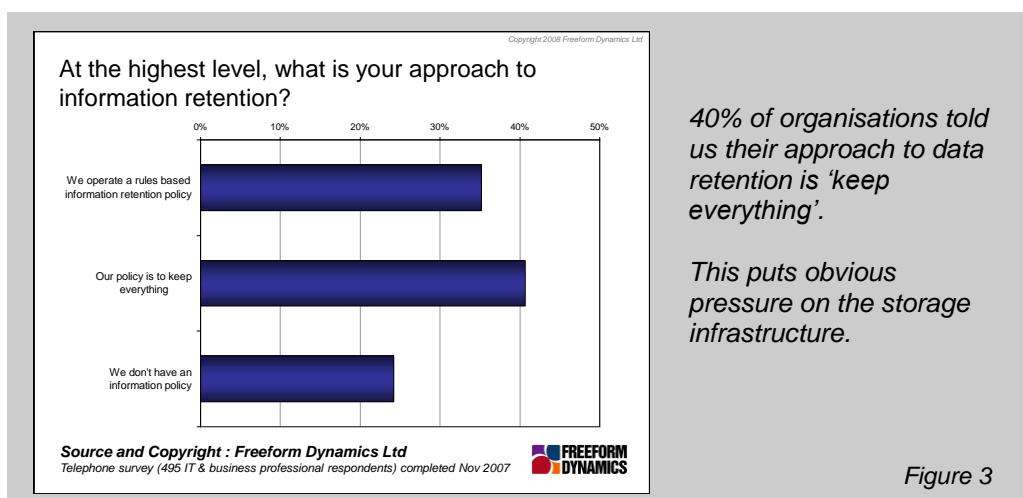
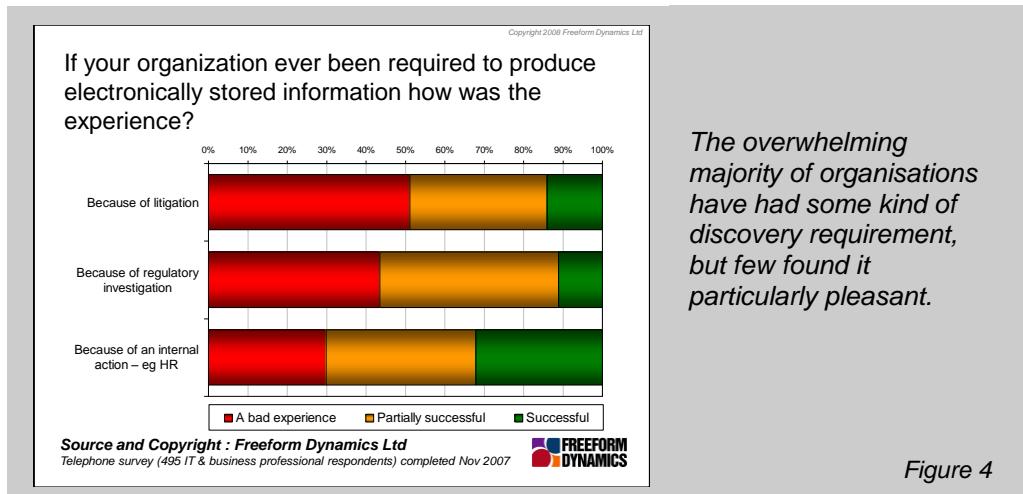


Figure 3

Whatever policies or 'non policies' are in place, they are not working too well. It is worth introducing the concept of discovery - that is, to respond to a legal information request. Discovery is a term that's front of mind for many US organisations, for which litigation is a frequent concern. Outside of

the US the problem doesn't go away and just as common is the need to find and report on information for internal purposes, e.g. requests from Human Resources or elsewhere in the business.

It is disappointing to note that over 50% of those having experience of legal discovery reported that it was "a bad experience" (Figure 4). This number drops to 30% for internal actions, which is more positive but cannot be claimed as being healthy.



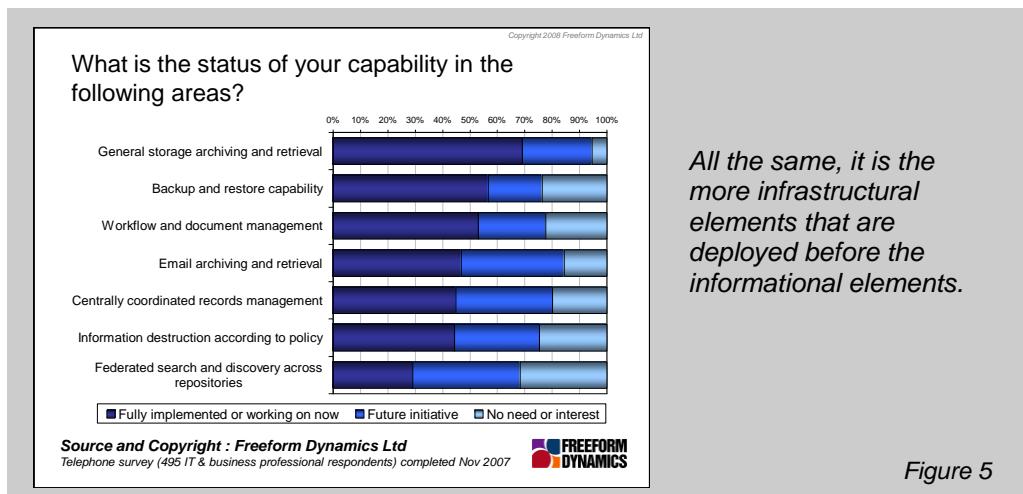
The overwhelming majority of organisations have had some kind of discovery requirement, but few found it particularly pleasant.

Figure 4

How can technology help with data retention?

We can consider this in terms of two kinds of technology, infrastructure and information management. From an infrastructure perspective, questions are more around whether the platform can be compromised, who has access to what and so on, as well as ensuring business continuity through, for example, replication. Information management solutions are more about how to get around the data, finding information that is needed for the job, or responding to requests.

We know (Figure 4) that the kinds of technologies that may be useful are in place to a greater or lesser extent – while general storage archiving may be reasonably well served, the same cannot be said for federated search and discovery (Figure 5).



All the same, it is the more infrastructural elements that are deployed before the informational elements.

Figure 5

The choice of storage media depends on retention requirements and can boil down to striking the balance between the cost of media and the need for access to data. For situations that demand speed for example, virtual tape libraries may well be seen as appropriate: 'Cost' can have other implications too, beyond the cost of the enabling IT. Lawyers are never cheap, so having one spend hours searching for information is an expense worth avoiding where possible. Other situations will

be dictated by the nature of the information. Some records (e.g. patient records) need to be quickly accessible at all times, which precludes an offline storage solution. Where offline access is acceptable, tape can be a cost-effective medium. In some cases, a good halfway house can be reached using optical disk. Different regulations may specify certain media, for example the WORM ('write once, read many') nature of optical disk makes it appropriate when records are not to be altered.

While there are technologies designed to prevent against tampering, it's not always possible to prevent against destruction – throwing a bucket of water onto a storage array might have an untoward effect for example! Business continuity technologies such as replication and failover help here – but clearly, they need to be taken into account as part of the compliance architecture. Lessons can be drawn from information management and from security, in terms of keeping accurate records of what is stored (which are harder to tamper with, without destroying the whole thing), and security protections such as encryption and digital signatures for enterprise DRM.

Conclusion

Data retention may sound like a one-dimensional issue. However, it directly drives a number of requirements relating to information management and storage capabilities. Freeform Dynamics' research has shown that while organisations may have already invested in the 'right' tools, many do not allow higher level business requirements and obligations to drive their investments in technology, the associated processes used and the training relating to each.

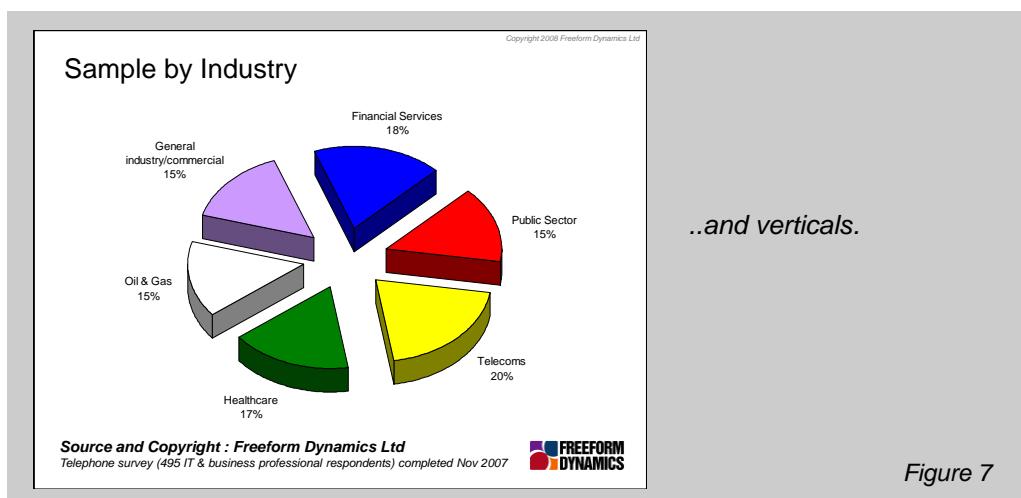
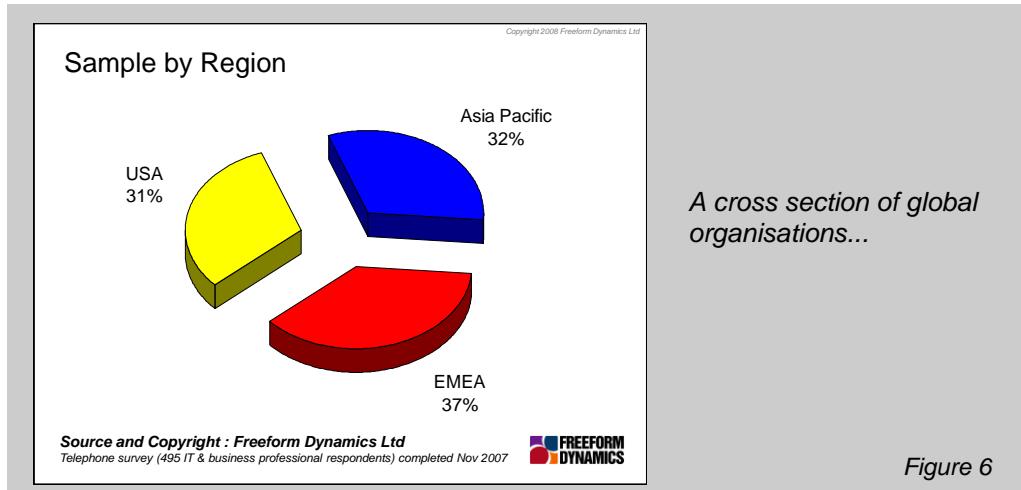
As with any IT related challenge, the higher up the technology stack you go, the more it is necessary to involve the business in the decision making process. We've seen this need manifest itself previously in the data classification requirements required to help Information Lifecycle Management (ILM) work and in the data architecture required to support the master data models used in Business Intelligence (BI).

This brings us back to where we started. Retention is a business requirement, not an IT requirement, and it therefore requires a level of business involvement to get right. Otherwise, as our research has shown, organisations will continue to make investments in IT without reaping the benefits they can achieve.

Appendix A

RESEARCH SAMPLE

The research sample was 240 respondents, distributed as shown in the figures below.



Appendix B

REFERENCED WORK

- [1] "Information Governance: The keystone of a sustainable business and IT strategy", Martin Atherton and Jon Collins, February 2008

About Freeform Dynamics



Freeform Dynamics is a research and analysis firm. We track and report on the business impact of developments in the IT and communications sectors.

As part of this, we use an innovative research methodology to gather feedback directly from those involved in IT strategy, planning, procurement and implementation. Our output is therefore grounded in real-world practicality for use by mainstream business and IT professionals.

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