

PLATFORM CHANGE?

In a recession, companies need to make sure their IT infrastructure remains cost-effective and up-to-date. Cliff Mills reports on research into how well they're doing.

The current economic climate is challenging most organisations, and this in turn has an impact on the IT department and its budgets. The pressure is on to do more with less, cut costs, become greener and deliver more flexible and agile services to the business.

Against this backdrop, companies are looking to IT to help them cut unnecessary costs and make the business as efficient and effective as possible to meet any downturn in their market.

It is more imperative than ever, therefore, that organisations continually re-evaluate their IT infrastructure so that it provides the right foundation to deliver the necessary services required by the business.

Our latest survey shows that the majority of companies (77%) appreciate the need to have a comprehensive management strategy for developing their IT infrastructure – though this still leaves 21% who are working on a less formal basis.

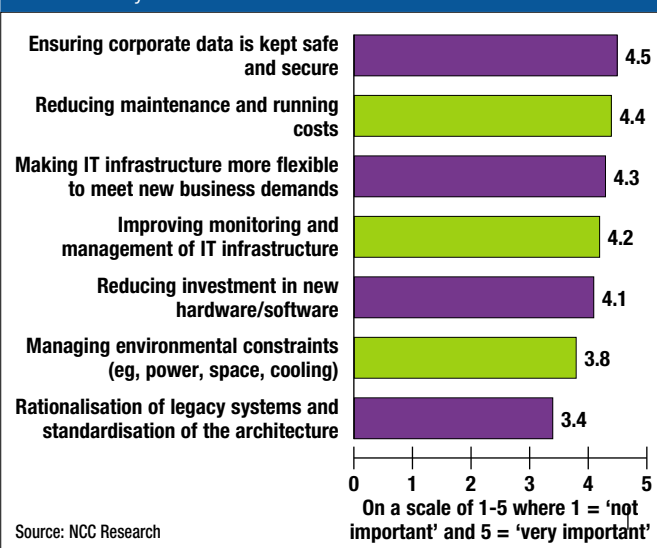
We asked respondents to rank the key concerns they face with their IT infrastructure on a scale of 1 to 5, where 1 equals 'not important' and 5 equals 'very important'. As Figure 1 shows, the leading concern is to ensure that corporate data is kept safe and secure (4.5), followed closely by the constant need to reduce IT infrastructure maintenance and running costs (4.4). This is seen as a more pressing issue than reducing investment in new hardware or software (rated at 4.1).

From a business perspective, making the infrastructure more flexible and responsive to meet changing business requirements is a key aim (4.3). From a more technical viewpoint, simplifying and improving the management of the IT environment (4.2) and coping with environmental constraints (3.8) are key issues. But the rationalisation of legacy systems and the standardisation of the IT architecture is a slightly lower concern at 3.4.

Uncertainty in the economy is causing companies to re-think their overall IT expenditure, with a significant number either postponing hardware (23%) or software (23%) upgrades and 2% delaying a network upgrade. More positively, slightly over half the companies (52%) confirm they are not delaying any infrastructure investment at present.

Outsourcing is one route that a number of organisations have chosen to reduce the burden of managing their IT infrastructure. The most prevalent areas to outsource are website & e-business (25%) and applications support (25%), with 9% planning growth in both areas.

FIGURE 1: Key concerns around IT infrastructure

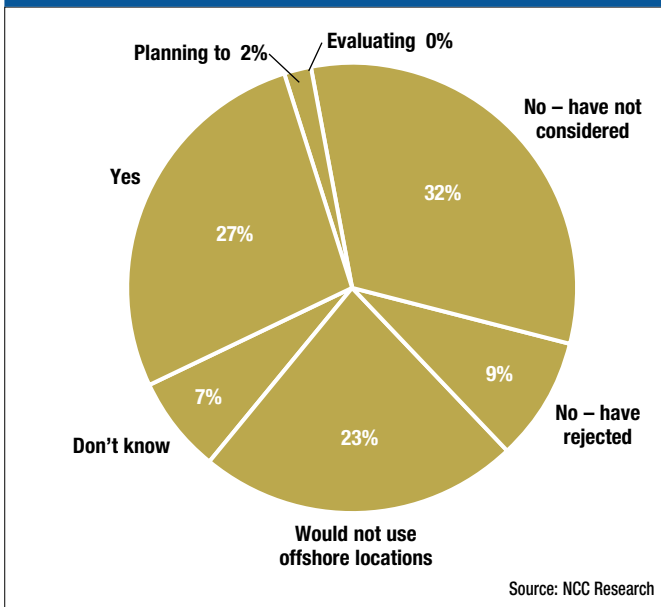


Outsourcing the IT helpdesk is also popular, with 23% having gone down this route and 2% planning to. Network infrastructure has been outsourced by 16% of organisations, with the entire data centre also moved to a third party by 16% of companies. Desktop systems have been outsourced by 14% with a further 5% planning to, while server infrastructure has been outsourced by 11% with 7% planning to.

The other choice facing companies is whether to move any of their IT functions to a lower-cost offshore location (see Figure 2, next page). This may be done directly through an offshore services provider or as a result of an outsourcing agreement with a local company.

Currently, 27% of organisations are using offshore locations, with another 2% in the planning stage. The option has not been considered by 32% of companies while 9% have

FIGURE 2: Have you moved any IT functions offshore?



rejected it and 23% would not use offshore providers.

Virtualisation technology is currently attracting the most interest and having the greatest impact on infrastructure design. While it can be deployed in a number of areas, the biggest impact so far is in reducing the number of servers required to support the IT environment. It therefore addresses the two key requirements of cost reduction and lowering the IT carbon footprint.

From the survey, 42% of organisations have implemented server virtualisation, a further 28% are in the planning stage and 2% are evaluating the option. Only 21% of companies have no plans to move in this direction.

Desktop virtualisation is the next area that is beginning to gain momentum. Potentially this is a more complex task, not so much because of the technology but because it has a direct impact on end users.

Whereas server virtualisation is in the back room and invisible to the end user, with desktop virtualisation they will expect and demand the same capabilities as they have had with their traditional desktop.

So far, 7% of companies have implemented desktop virtualisation across the whole organisation (see Figure 3), 14% in some parts of the company and 14% are planning to in the future. A further 14% are evaluating the technology but a third (33%) have no plans to go down this route, with 7% saying they are not familiar enough yet to make a decision.

The attraction of desktop virtualisation is that it provides much easier support and management of the desktop environment and also allows desktop processing power to be reduced by using thin clients or older PCs.

This latter requirement is a direction organisations are moving in – 7% say they are already reducing desktop processing

power, with 26% planning to do so and a further 12% evaluating the option. This compares to 36% who currently have no plans to reduce processing power.

Optimising the management and use of storage capacity is another key area for virtualisation, as companies seek to improve their storage efficiency and reduce costs. Over a third (35%) have deployed storage virtualisation, with 18% planning to and a further 11% evaluating this option. A quarter of the companies interviewed (25%) have no plans to do this.

We asked organisations to rate what they see as the main benefits of virtualisation technology, on a scale of 1 to 5, where 1 equals 'not important' and 5 equals 'very important'.

The main advantage is in providing server consolidation (4.5) which emphasises the initial start point for the use of virtualisation software. It is also viewed as allowing more flexibility in the deployment of IT resources (4.3) and providing higher system availability and redundancy (4.1).

FIGURE 3: Are you using desktop virtualisation?

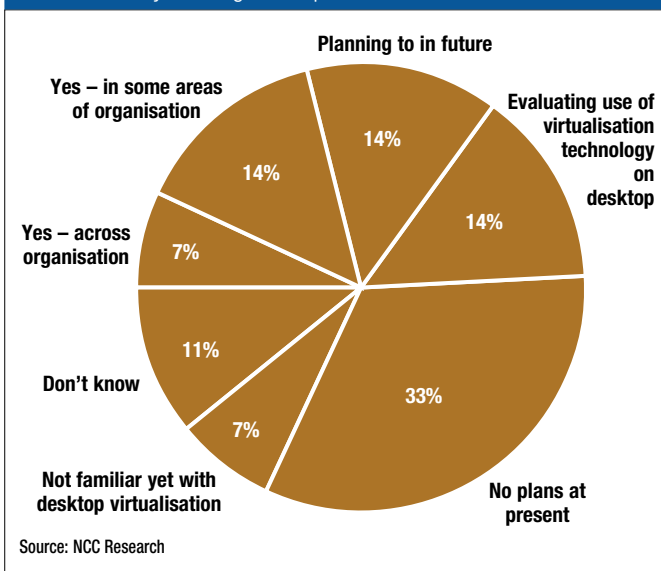
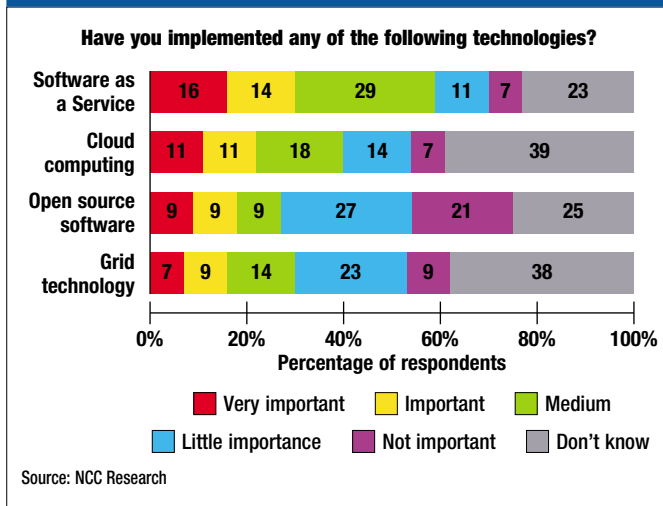


FIGURE 4: Importance of latest delivery technologies



Given the ease with which applications and resources can be redeployed among servers, then business continuity and disaster recovery processes can be implemented more easily (4.1) and transparently. In addition, processor workloads can be managed and balanced more effectively across the server infrastructure (4.1).

Being able to rapidly reconfigure the IT environment allows organisations to be more reactive to changing business needs and quickly address new requirements (4.0). Virtualisation can also reduce the level of helpdesk enquiries and provide an overall reduction in IT support costs (3.3).

The options available for deploying infrastructure solutions are more varied than they have ever been. But while this abundance of choice is a good thing, it also makes it more

difficult for any company to decide the optimum direction to go in.

The delivery of applications from a hosted environment – usually called Software as a Service (SaaS) – is growing in popularity and 30% of companies see it as either a very important (16%) or important (14%) technology for them (see Figure 4). A further 29% see it as of medium importance with only 11% viewing it as of little importance and 7% as of no importance.

The provision of infrastructure services over the internet, known as ‘Cloud computing’, is now available from a number of different suppliers. While this is still a relatively new concept, 11% of companies see this technology as very important and 11% as important to their future infrastructure, with a further 18% viewing it as of medium importance. On the other side, 14% see it as of little importance and 7% of no importance.

However, the number of companies yet to decide on the relevance of this technology is shown by the high number of don’t knows (39%).

Although Grid technology has been available for some time, its importance to the majority of companies is relatively low with only 7% citing it as very important, 9% as important and 14% as of medium importance.

Similarly, open source software has made little penetration into mainstream computing with only 9% viewing it as very important, 9% as important and a further 9% as of medium importance.

Effectively managing the IT infrastructure is a complex task and there is now a whole range of software tools available to aid in this process. As both wide area and local area networks are ubiquitous in most organisations, the ability to manage their performance and quickly diagnose and rectify bottlenecks or failures is critical – and 64% of companies use network management and analysis tools to achieve this.

SURVEY STATISTICS

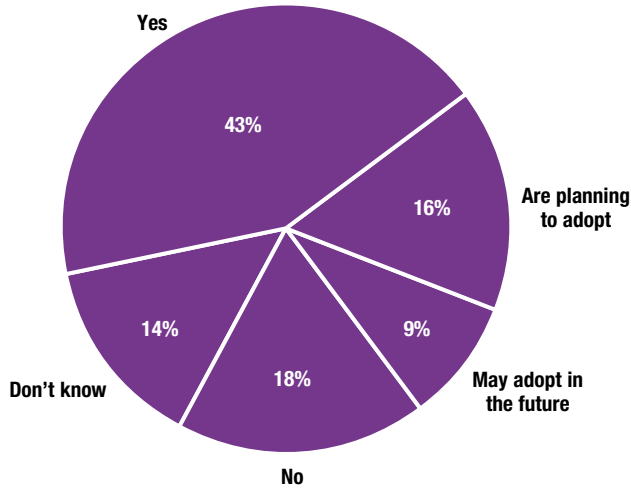
For this survey, we asked a wide range of companies for their opinions on a number of issues relating to the development of their IT infrastructure. A substantial proportion (24%) were from the public sector, followed by IT & telecoms (15%), banking & finance (12%), business services (12%), manufacturing (10%), construction (8%) and distribution & logistics (8%).

The respondents represent a spread of different-sized companies with 13% having in excess of £5 billion turnover, 6% in the £1 billion to £5 billion bracket and 13% in the £500 million to £1 billion range.

In the mid-range, 27% have between £100 million and £500 million turnover and 15% are in the £50 million to £100 million range. At the smaller end 10% have a turnover of between £10 million and £50 million and 17% £5 million to £10 million.

FIGURE 5: Use of ITIL

Has your organisation adopted ITIL (IT Infrastructure Library) for providing a framework of best-practice guidelines for IT service management?



Source: NCC Research

Configuration management and performance management tools are also essential to ensure the efficient running of systems and to provide consistent response times to end users. These are both being used by 43% of companies.

Given that data storage requirements are escalating in most organisations, it is a little surprising that only 36% of companies are deploying analysis tools to manage and control their storage needs.

Organisations globally are looking to improve their IT service management – and the IT Infrastructure Library (ITIL) has been gaining in popularity around the world by providing a best-practice framework to achieve this (see Figure 5).

Its acceptance is demonstrated by the fact that 43% of the sample have already adopted ITIL, with 16% in the planning stage and 9% evaluating its future adoption. Only 18% have no plans to move to it.

Ensuring that corporate data is protected from external attack and is inaccessible to unauthorised individuals is high on the priority list of most organisations (as discussed in the accompanying Expert Opinion article).

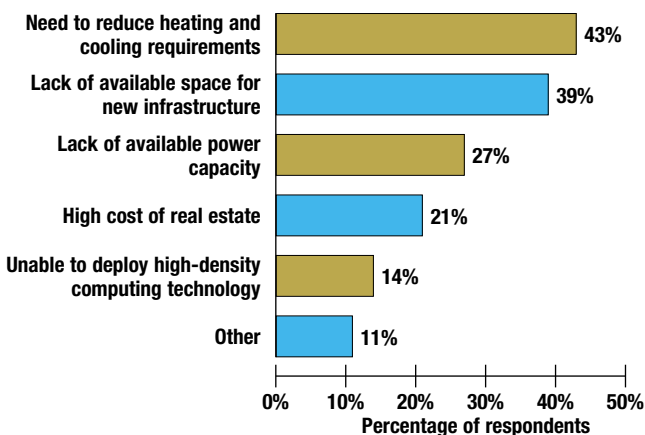
But with the range of security threats increasing, it is becoming more time-consuming, costly and requires highly trained staff to handle this complex task.

The majority of companies, 64%, still manage all their security inhouse, while 23% now use a third party to manage some aspects. But only 2% have outsourced all their security management to a third party with a further 2% investigating this option.

With nearly all organisations dependent on their IT systems to keep their daily operations running, it is essential that effective business continuity and disaster recovery strategies are in place to maintain the operation of critical applications.

The main business continuity strategies used in our sample are split between companies providing their own 'hot stand-by' facilities (36%) and using offsite facilities that can be activated in a few hours (19%).

FIGURE 6: Key issues with data centre



Note: respondents could choose more than one option

Source: NCC Research

Other options used are operating a degraded service from another location until the systems can be fixed (19%) and having 'hot stand-by' facilities provided by a third party (9%).

Organisations are still experiencing problems with the physical environment of their data centres. The need to reduce heating and cooling requirements is the major issue for 43% of respondents while a lack of space for new infrastructure is cited by 39% (see Figure 6).

A shortage of power capacity is mentioned by 27%, and in 14% of cases this is preventing companies deploying high-density computing technology. The high cost of real estate is mentioned by 21% as a limiting factor. This is occurring at a time when making IT operations more environmentally friendly and cutting carbon emissions is gaining an increasingly high profile.

From the survey, 23% of respondents view their organisation as 'very active' in pursuing environmentally friendly IT policies with 18% feeling they are doing so 'actively'. The largest proportion (31%) are 'moderately active' but a significant number (23%) are showing little or no activity in this area.

In summary, more than ever a business depends on its IT function to keep its operations running. The IT department therefore needs to provide a secure, resilient and adaptable IT infrastructure that is responsive to the needs of the business.

The challenge will be doing this in a difficult economic environment where expediency, cost saving and rapid responsiveness are the order of the day.

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