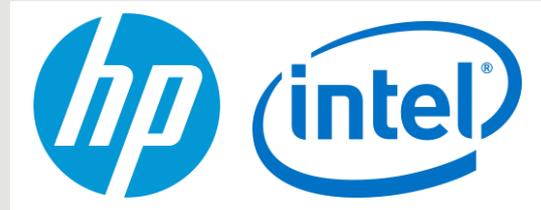




Inside Track Research Note

In association with

and



Infrastructure Readiness Temperature Check

How future proof are your
IT systems?

September 2015

In a nutshell

About this Inside Track

The research upon which this Inside Track is based was independently designed and analysed by Freeform Dynamics Ltd. Data was gathered via an online survey executed in collaboration with a mainstream IT news site. 117 responses were gathered from business and IT professionals across a range of industry sectors, geographies and organisation sizes. The study was sponsored by HP and Intel.

The chances are that you're doing well in some areas, and not so well in others.

Capability gaps have a tendency to open up over time without anyone noticing.

IT infrastructures are often coping pretty well with current business requirements, but many IT professionals are aware that new and changing needs will lead to future capability gaps, if they are not doing so already. They also know that doing more of the same is not the answer in many areas. New architectures and delivery models will be necessary to effectively keep pace with evolving demands.

Mind the gap

Marketing people and pundits like to tell tales about how IT teams are generally failing to deliver. If you took everything you read on face value, you could easily get the impression that IT systems and infrastructures in most businesses were totally unfit for purpose. It's a nice line for those trying to sell you stuff, but it doesn't really help you understand where you are and where it really makes sense to focus your improvement efforts.

The truth is that every organisation is different. Business requirements and pressures vary considerably, while the way in which your IT infrastructure has evolved over time will likely have put you in a different place to most of your peers and competitors. Given this, the chances are that you're doing well in some areas, and not so well in others.

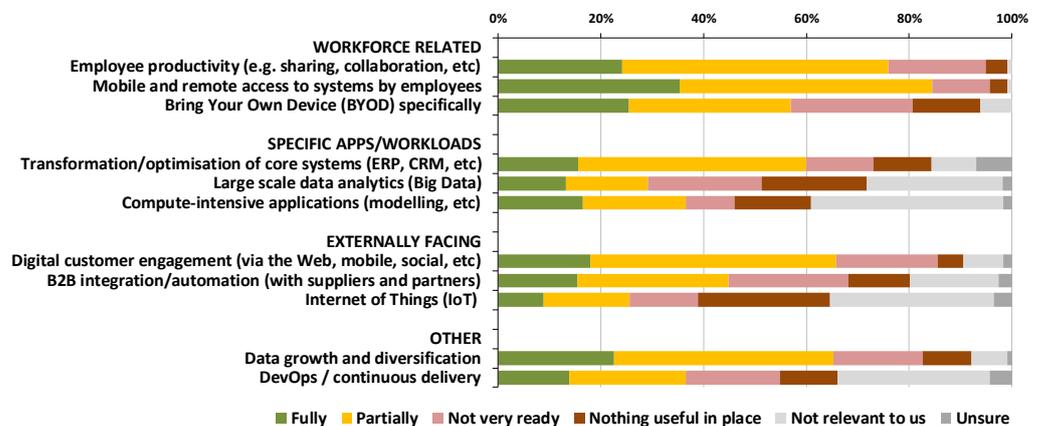
With this in mind, when you look at the results of our latest temperature check survey on infrastructure readiness for the future, just think of it as a high-level guide to some of the things you might want to review when assessing your own position. This kind of reminder is useful because capability gaps have a tendency to open up over time without anyone noticing. The same goes for creeping inefficiency.

Readiness for evolving demands

Some aspects of the business served by IT change faster than others. During the survey we focused on the more dynamic areas, as these are the ones in which your current infrastructure may suffer stress, or struggle to provide what's required, as requirements continue to evolve. Overall, the picture that emerged was pretty mixed from an infrastructure readiness perspective (Figure 1).

Figure 1

How ready are your existing IT systems to handle evolving requirements in the following areas over the next 3 years?



More gaps are evident in relation to fast-moving areas such as cloud, desktop, mobile and security.

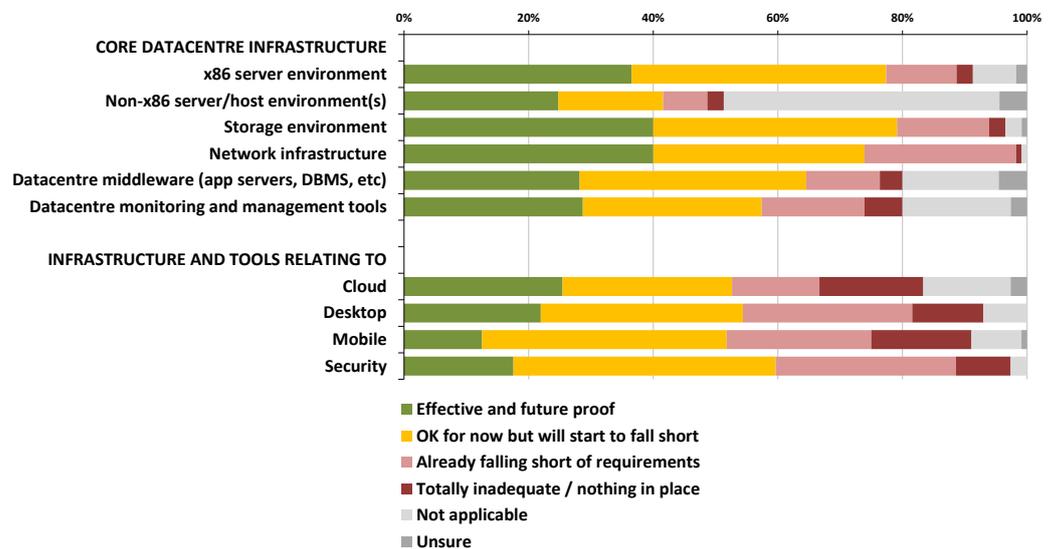
The above-mentioned variation comes through strongly as we can see. In each area, some report they are in good shape, others indicate they are partially ready but clearly have some work to do, and then we have those who are not very ready at all, or haven't even started to tackle the problem. Take note also of the light grey bars indicating where the area concerned is not considered relevant.

Where would you place your own organisation in the areas listed?

Building on the right foundation?

Another question to consider is which specific parts of your infrastructure you regard to be future proof or otherwise - i.e. where are the strongest and weakest links. When it comes to core data centre infrastructure - servers, storage, networking, and so on - survey responses are still a bit mixed, but the overall picture is not too bad. However, more gaps are evident in relation to fast-moving areas such as cloud, desktop, mobile and security (Figure 2).

Figure 2
How would you characterise the state of the following elements in your existing IT Infrastructure (thinking in terms of readiness to meet evolving requirements over the next 3 years)?



The data shown on the top part of this chart is consistent with a steady level of investment and modernisation to deal with ongoing requirements for more capacity and the desire to virtualise core resources as much as possible. Having said that, quite a few realise that the way they have been supporting demands for greater capacity, flexibility, responsiveness and efficiency to date are not sustainable going forwards.

The important point here is that continuing to extend systems based on traditional/familiar components and architectures only gets you so far. Older servers and storage devices, for example, tend to be more difficult to integrate, instrument, automate, scale and generally administer than more modern equivalents designed to work as good citizens in a dynamic infrastructure environment. In addition, older components tend to be less efficient from a price/performance, power efficiency and physical footprint perspective, which may or may not be an issue depending on your constraints with regard to budget, space, datacentre facilities, and so on.

If you are sitting on old kit, even though it's meeting your needs for now, consider introducing the latest generations of equipment sooner rather than later to start future proofing your environment. This doesn't mean rip and replace (apart from the

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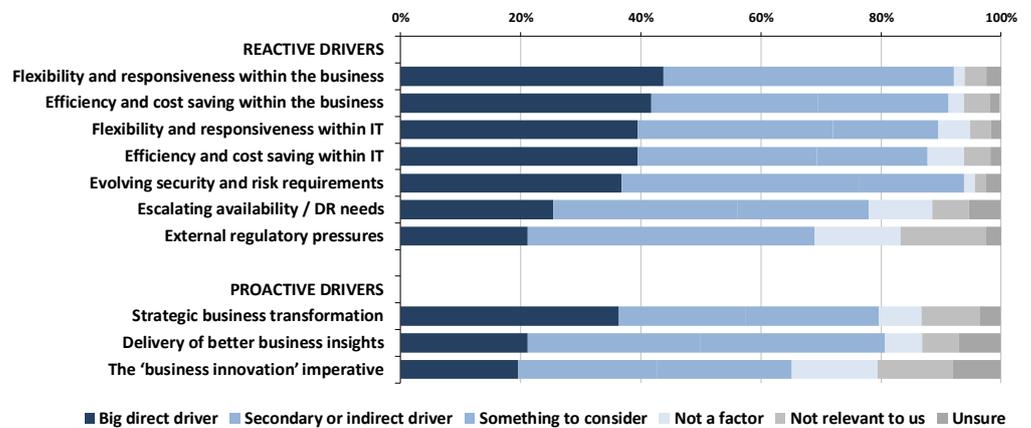
stuff that's already constraining you or becoming a liability), it's about making sure that new investments are made with tomorrow's needs in mind rather than yesterday's.

And if your response to this is that you don't have a crystal ball to predict what business stakeholders and users are going to ask for in the future, you may need to adjust your mind-set.

It's all about change friendliness

For some businesses, the motivation to modernise and strengthen the infrastructure is associated with some kind of strategic business transformation imperative or other proactive driver. However, the desire for greater flexibility and responsiveness comes through very strongly from the survey – i.e. an ability to react quickly when the need arises (Figure 3).

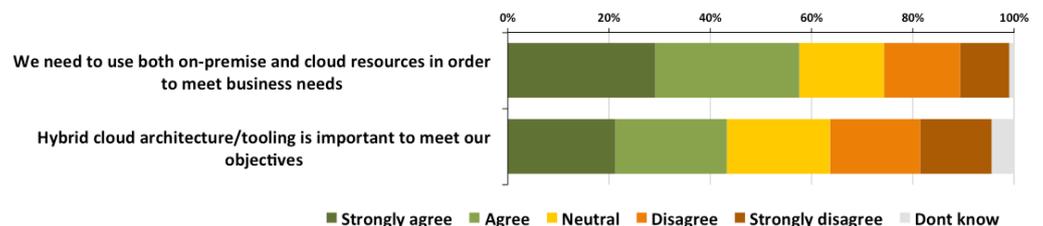
Figure 3
How much are the following driving the modernisation or strengthening of your IT structure?



This drive for greater agility sometimes stems from within the business, and sometimes from within IT. Either way, in an increasingly fast moving and rapidly shifting world, the need for a change friendly environment is clear, though obviously not at the expense of efficiency and effective risk management.

This reinforces the logic described above of replacing older, more rigid core infrastructure where necessary, but also highlights the need for some new ways of doing things. The hybrid cloud approach is an obvious example here (Figure 4).

Figure 4
The need to blend internal and external resources leads to a requirement for hybrid cloud architecture/tooling



One of the other imperatives called out in a similar way (by just over 40% of survey respondents) is adoption of DevOps, which from a software development and deployment prospective can enable more continuous, efficient and robust delivery.

In recognition of the fact that we are all now working in a hyper connected world, in which many threats exist, over half also say that evolving security requirements are more directly driving investments within their organisation. As ever, security remains a high priority.

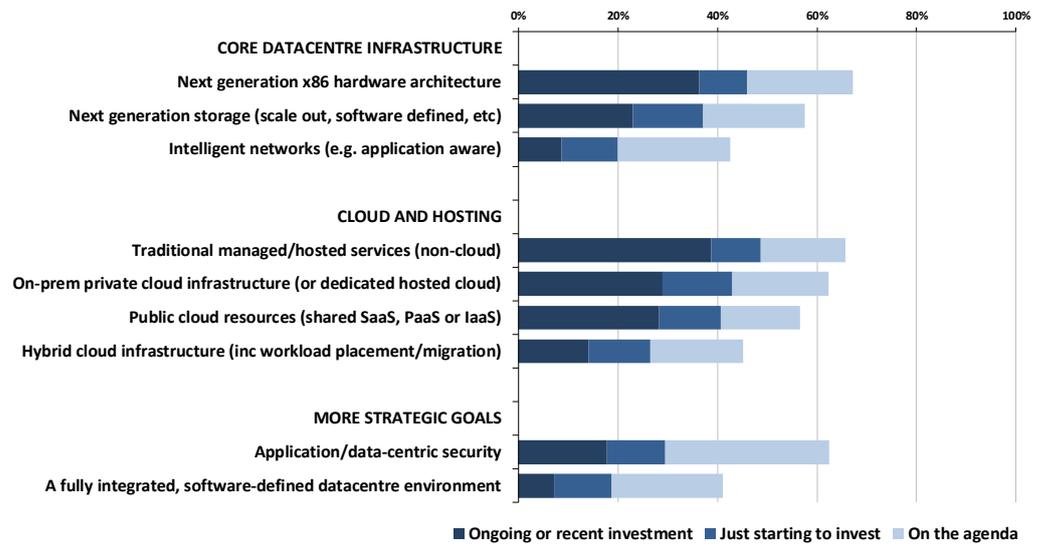
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The new investment agenda

Many are already making or planning investments that will naturally introduce a greater level of agility and efficiency into their infrastructure, though relatively few are consciously aiming to create the nirvana of a fully integrated, software-defined datacentre environment. For the majority this is more of a general direction of travel than an explicit objective (Figure 5).

Figure 5
How would sum up your investment activity and plans in relation to the following?



The chart we see here doesn't cover all of the options, and there are certainly other types of investment that you might already be considering as you look to future-proof your own infrastructure. Converged and hyper-converged infrastructure solutions are examples here, as are software environments to deal with evolving desktop and mobile needs in the end user computing context.

The way demands on the IT infrastructure are evolving mean you need to think carefully about the investments you are making.

The bottom line

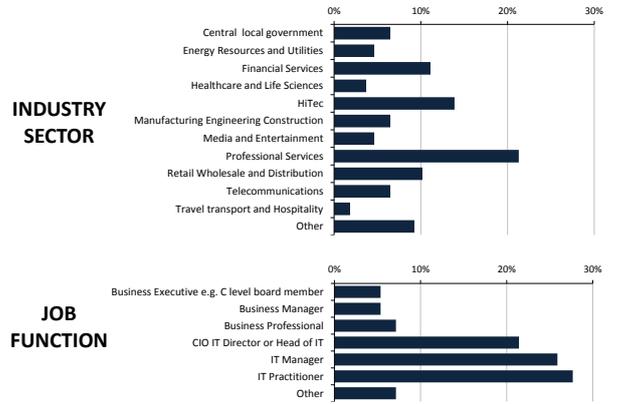
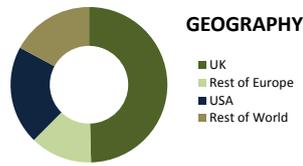
The main takeaway from this latest temperature check survey is that the way demands on the IT infrastructure are evolving mean you need to think carefully about the investments you are making. It's not just about routine expansion of compute, storage and network capacity, but introducing more change-friendly and therefore future proof architectures, solutions and delivery models. But the survey also tells us that beyond the need for efficiency, flexibility and responsiveness, every organisation has a unique set of requirements and constraints.

Coexistence of the traditional with the modern will remain a requirement, no matter how much emerging ideas yet again promise to change everything.

As ever, it remains critical to develop and follow your own agenda and maintain an open and inclusive mind-set, ignoring vendors who try to tell you that there is a single answer to every challenge. The metaphorical conveyor belt with the new coming in at one end and the old dropping off at the other is a long one. Coexistence of the traditional with the modern will remain a requirement, no matter how much emerging ideas yet again promise to change everything. But that, of course, is one of the things that makes IT so interesting and keeps all of us in our jobs.

RESEARCH DEMOGRAPHICS

Figure 6
Online survey conducted in collaboration with a mainstream news and analysis website



About Freeform Dynamics

Freeform Dynamics is an IT industry analyst firm. Through our research and insights, we aim to help busy IT and business professionals get up to speed on the latest technology developments, and make better informed investment decisions.

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