DATACENTRE Talking Point

FREEFORM DYNAMICS

in association with

EATON

Datacentre power management

Does your approach need a rethink?

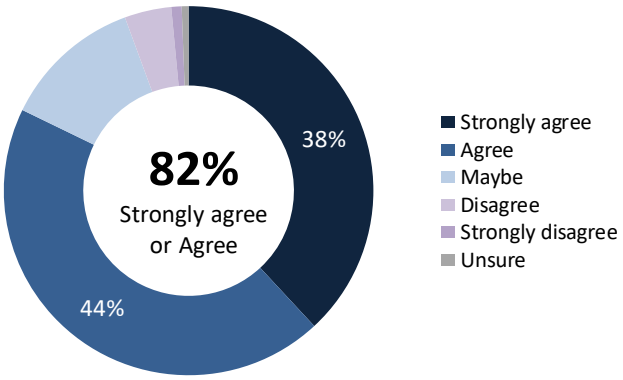
Effective and efficient management of power within the datacentre is essential to IT service delivery in a rapidly changing business environment. A recent survey of 320 datacentre professionals, however, illustrates that power management is an area in which many recognise they could do better. In operational terms, the shortfalls that exist potentially undermine the organisations' ability to meet energy efficiency needs, and to avoid power-related failures and outages.

On the positive side, the survey also reveals that the value of modern power management tools is broadly acknowledged, and that investments in this space can help to deliver the improvements many need to make. Indeed, those organisations currently using such tools seem to be already achieving better results.

Business demands on IT are ramping up, and in a majority of organisations this is increasing the pressure on the systems infrastructure, and in turn the underlying facilities that keep datacentres functioning effectively and efficiently. It is therefore not surprising that in a recent research study, effective management of datacentre facilities, e.g. power and cooling, was generally seen to be important to achieving an acceptable level of business continuity.

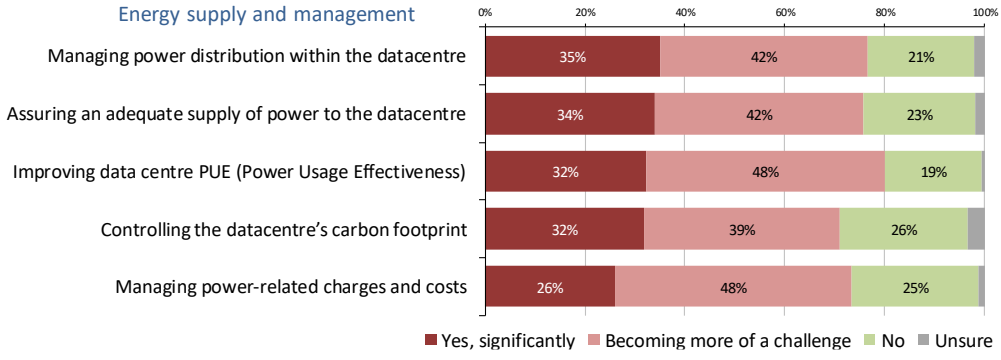
Business demands on IT are ramping up, and in a majority of organisations this is increasing the pressure on the systems infrastructure, and in turn the underlying facilities.

Effective management of datacentre facilities is important for business continuity



Turning to power specifically, the survey highlighted a broad range of challenges, from practical supply and distribution issues, to difficulties driving efficiency in order to save costs and reduce the datacentre's carbon footprint.

Have business pressures led to any of the following datacentre related challenges?

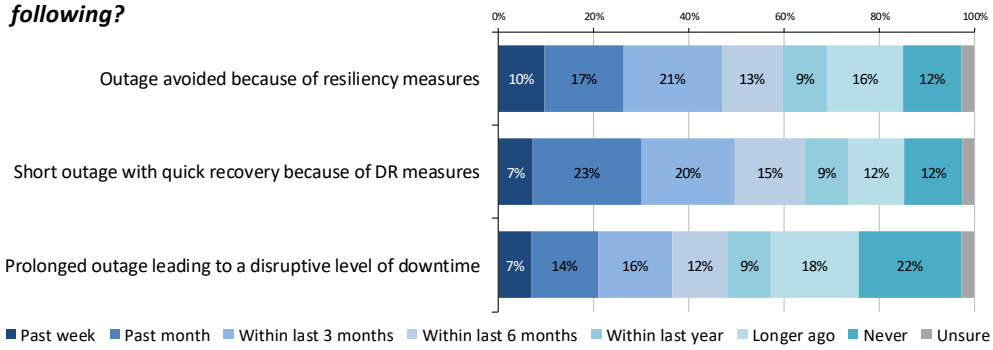


A broad range of power-related challenges exist.

Power-related outages are clearly a very real issue for many.

Coming back to the question of business continuity, power-related outages are clearly a very real issue for many.

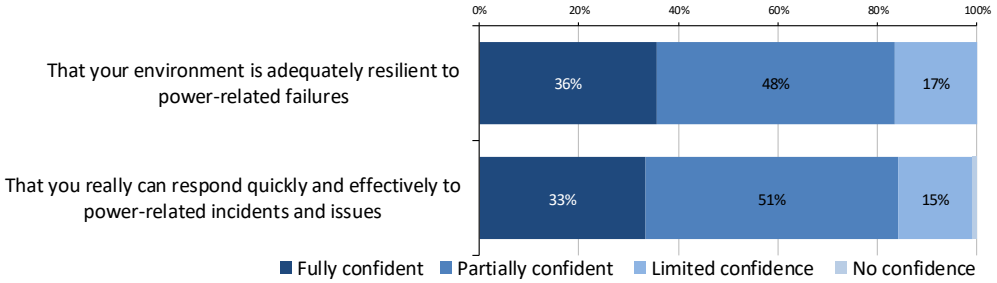
When was the last time you experienced a significant facilities event that resulted in the following?



Only a minority of organisations are fully confident that they have sufficient power resilience and can respond quickly and effectively to power-related incidents and issues.

This picture goes hand-in-hand with the finding that only a minority of organisations are fully confident that they have sufficient power resilience and can respond quickly and effectively to power-related incidents and issues.

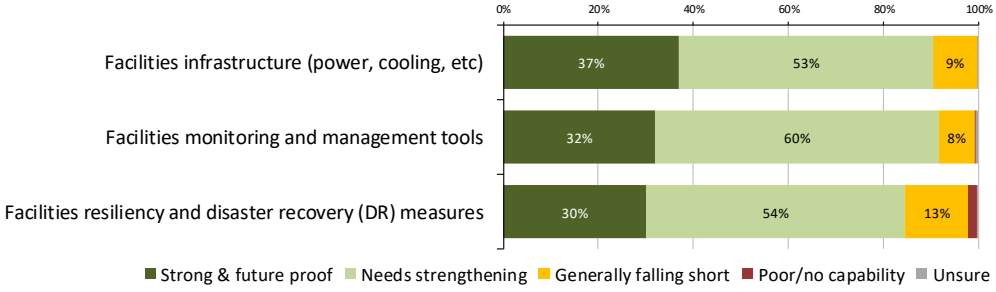
How confident are you in the following?



The widespread occurrence of service outages, together with the lack of confidence in existing capabilities, is undoubtedly why many organisations say the datacentre facilities they currently have in place are in need of strengthening.

Many say the datacentre facilities they have in place at the moment need strengthening.

How would you sum up the state of the following within your datacentre environment?



So, as demands for business service continuity escalate, are organisations taking active steps to improve matters? Working through the survey results we found that around a third overall have projects already underway to modernise datacentres generally, and the power infrastructure within this, with more telling us they are considering making such investments. But beyond these headline numbers, further investigation reveals something very interesting.

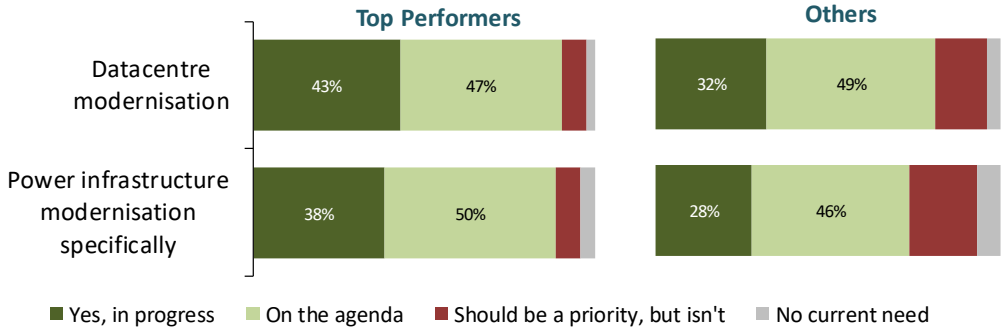
Around a third overall identify ongoing facilities investments, but Top Performers are more likely to be prioritising this.

During our analysis, we identified a group of respondents, some 30 percent of the survey base, who generally provide IT services more effectively than the rest of the research sample (see the 'About the Research' section for more details). The research showed that these 'Top Performers' are more likely to be investing or to be

The picture we see is consistent with the notion that continuous investment is a key success factor.

considering investments to modernise the power infrastructure in their datacentres compared to other organisations.

Do you have projects or initiatives related to datacentre modernisation?



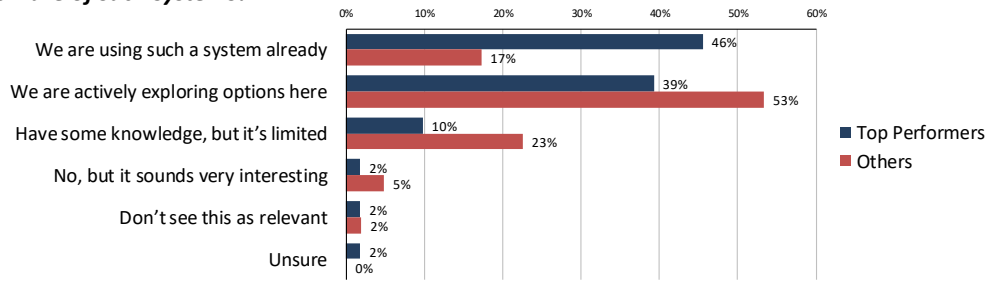
While we always need to be careful about inferring cause and effect from correlations in surveys, the picture we see is consistent with the notion that continuous investment in datacentre facilities really is key to effective IT service delivery.

Top Performers are much more likely to be investing in advanced power management tools.

So what else can we learn from the Top Performer group?

Well, the survey highlights another important correlation, this time between the use of modern power management tools and the successful delivery of IT services.

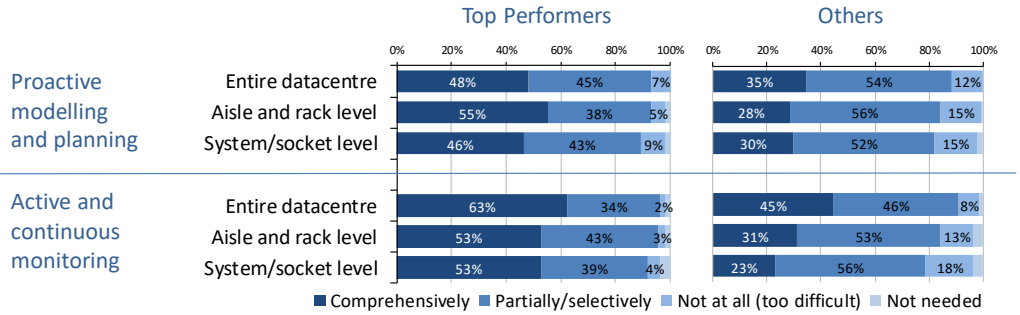
Recent developments in power management software allow continuous monitoring, analytics and the orchestration of incident response on a datacentre-wide basis. Are you aware of such systems?



The propensity of Top Performers to exploit such tools undoubtedly plays a role in their ability to better plan and monitor.

Advanced software has the potential to play an important role in improving power management within datacentres of all sizes, and a couple of key aspects of this are modelling and planning, followed by active and continuous monitoring. The propensity of Top Performers to exploit such tools undoubtedly plays a role in their ability to achieve more in both of these areas.

How much do you model and plan power requirements, and/or actively and continuously monitor power consumption/incidents in relation to the following?



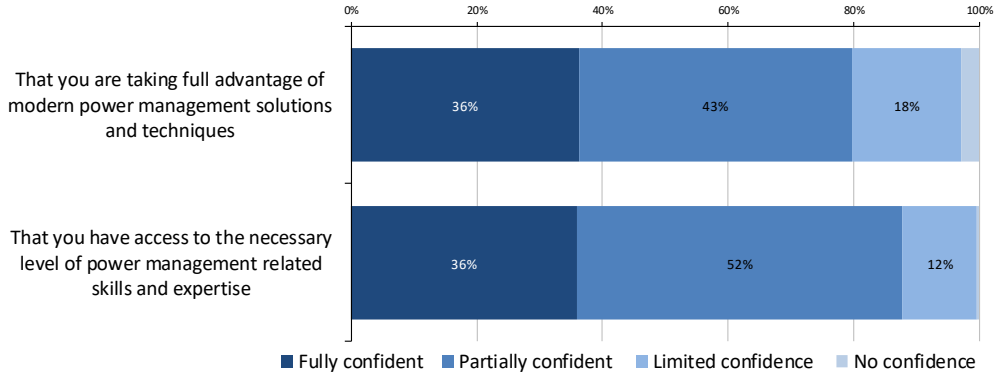
The importance of advanced, sophisticated power management tools will grow over time.

Based on these findings it seems reasonable to assume that the importance of advanced, sophisticated management tools will grow over time given some of the

When it comes to key enablers, the confidence shortfall extends beyond tools and techniques to the related question of skills and expertise.

challenges and confidence gaps previously highlighted. But when it comes to key enablers, the confidence shortfall extends beyond tools and techniques, to the related question of skills and expertise.

How confident are you in the following?



Software to automate power management represents a major opportunity.

Pulling these two threads together, with systems infrastructure growing in complexity and skilled resources increasingly becoming difficult to obtain and expensive to use, software to automate power management represents a major opportunity to elevate service quality. It can also assist in keeping a hold on the costs of power usage, and improving the organisations posture in relation to corporate social responsibility (CSR), now actively on many executive agendas, even if it's not yet a prime driver for change.

So how can we sum up the importance of the findings we have been discussing here?

Well, as business expectations continue to place greater pressure on IT systems to be available 24x7, service downtime is now a luxury few can afford. While the IT infrastructure generally gets a lot of attention here, it's important not to forget the facilities part of the equation. Power resilience, for example, is now an absolute, and the complexity inherent in the architectures of modern datacentres makes automating this aspect of operations a key imperative. Indeed, investment in modern tooling and techniques in this area is arguably the only way overstretched staff will be able to maintain service quality and continuity.

Does the way you are approaching power management in your datacentre environment need a rethink?

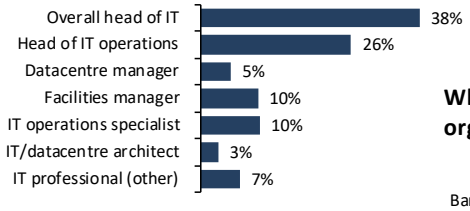
The big question to ask yourself therefore, is whether the way you are approaching power management in your datacentre environment needs a rethink.

About the research

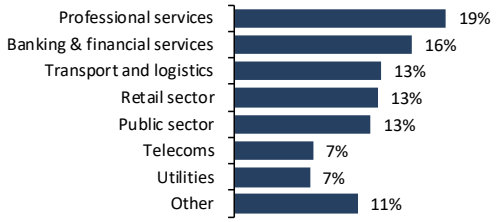
The research referenced in this document was designed and executed by Freeform Dynamics with sponsorship from Eaton. Input was gathered via an online survey of 320 datacentre professionals during September 2016.

RESEARCH SAMPLE

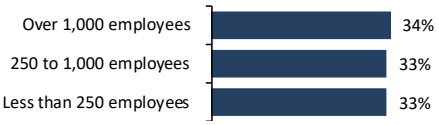
Which of the following best describes your role?



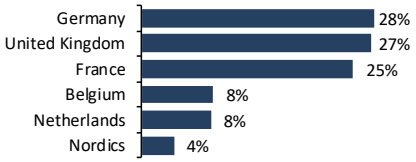
Which of the following best describes your organisation's core business?



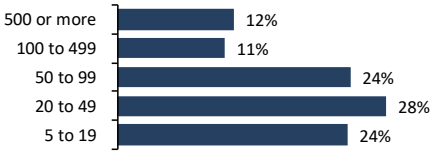
How many full-time employees work for your organisation worldwide?



Which country/region are you based in?



Approximately how many racks of equipment are installed in your datacentre(s) overall?



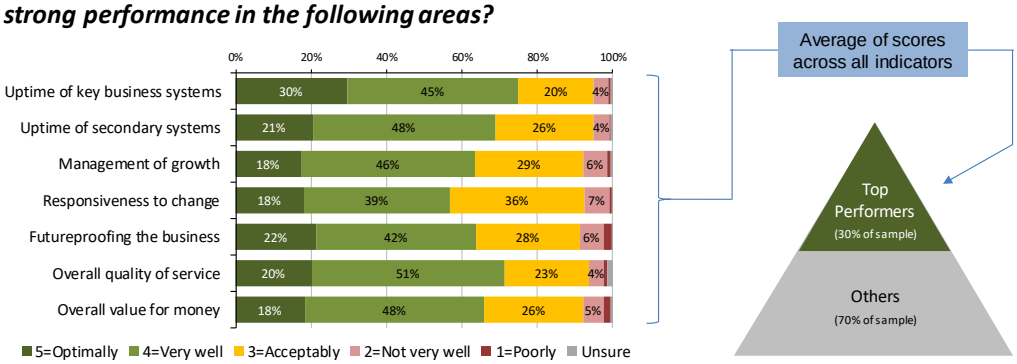
320 total respondents

Please note that the online methodology used tends to attract respondents who are more knowledgeable and/or interested in the subject matter being investigated. While every effort has been made to minimise this effect, the possibility of some degree of bias in the sample must be acknowledged. However, such limitations have been borne in mind when interpreting the research and are unlikely to have significantly impacted the observations and conclusions outlined.

'Top Performers'

Performance indicators were scored and analysed to identify 'Top Performers', i.e. the 30 percent with the best scores in the index created.

How well does your datacentre environment enable strong performance in the following areas?



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.

For more information, and access to our library of free research, please visit www.freeformdynamics.com.

About Eaton

Eaton is a power management company with 2015 sales of $20.9 billion. Eaton provides energy-efficient solutions that help our customers effectively manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. Eaton has approximately 95,000 employees and sells products to customers in more than 175 countries. For more information, visit www.eaton.eu.

Terms of use