



# The power management skills gap

Do you have the knowledge and expertise to keep energy flowing around your datacentre environment?

A recent survey by Freeform Dynamics of 320 senior data centre professionals reveals that datacentre facilities-related outages, e.g. to do with power and cooling, happen more frequently than you might think. Part of the problem stems from shortcomings in the facilities infrastructure itself, and the resiliency and DR measures associated with it; the study also suggests that skills gaps frequently exist.



in association with



Skills shortfalls in relation to power management in particular undermine the ability to react quickly and effectively to incidents in this area. Inadequate knowledge and expertise are also undoubtedly contributing factors to suboptimal design of datacentre power infrastructure. Modern tools that provide visibility, monitoring, management and automated response capability potentially have a key role to play in improving service levels to the business.

*Assuring availability of facilities associated with power and cooling is critical to meeting service level expectations.*

Business operations today are heavily reliant on IT systems, so the resiliency and recoverability of your datacentre infrastructure is critical to meet service level expectations. When considering this, it is natural to think initially about servers, storage, networking and business applications. However, assuring availability of facilities associated with power and cooling is equally important.

But how well do organisations deliver against this imperative?

Well, the recent research based on input from 320 datacentre professionals tells us facilities-related incidents and failures happen frequently enough to suggest that many organisations don't have requirements fully covered in this area.

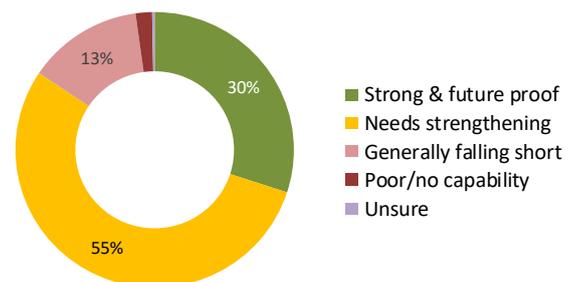
### When did you last experience a significant facilities event that resulted in the following?



One possible explanation for this is the fact that many report a need to strengthen their facilities-related resiliency and DR measures.

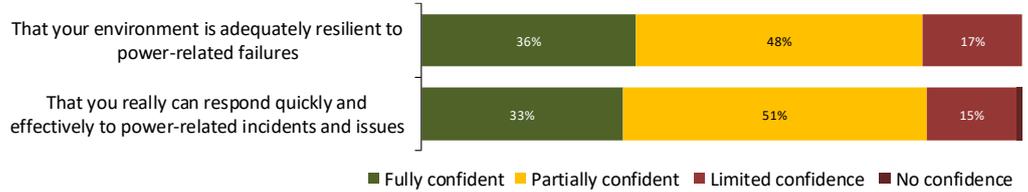
*Many report a need to strengthen their facilities-related resiliency and DR measures.*

### How would you sum up the state of facilities resiliency and DR measures?



And the picture we see above goes hand-in-hand with a lack of confidence in this power resiliency and response area.

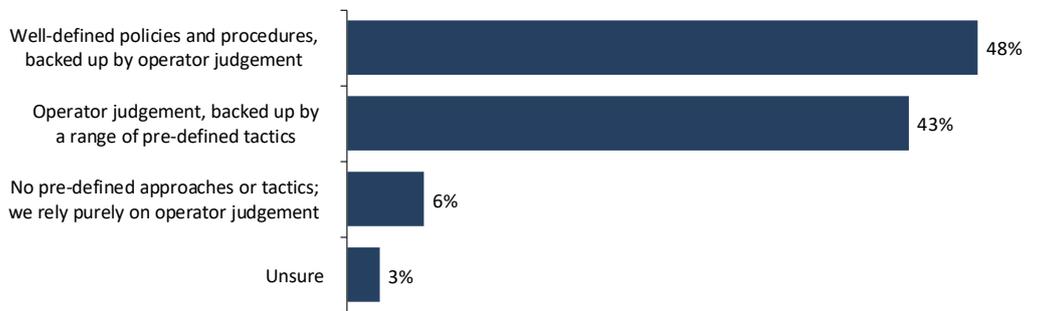
**How confident are you in the following?**



*Power incident management is heavily reliant on operator judgement.*

Delving deeper into the second of the imperatives we see listed here, it's interesting to look at exactly how power incident management takes place. This reveals a heavy reliance on operator judgement.

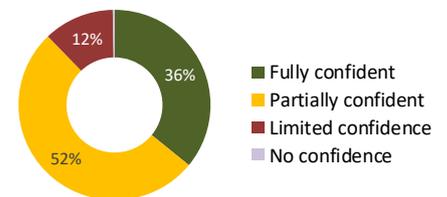
**How is your response to different power incident scenarios generally determined?**



*Frequent uncertainty exists in relation to the skills and expertise required for effective power management.*

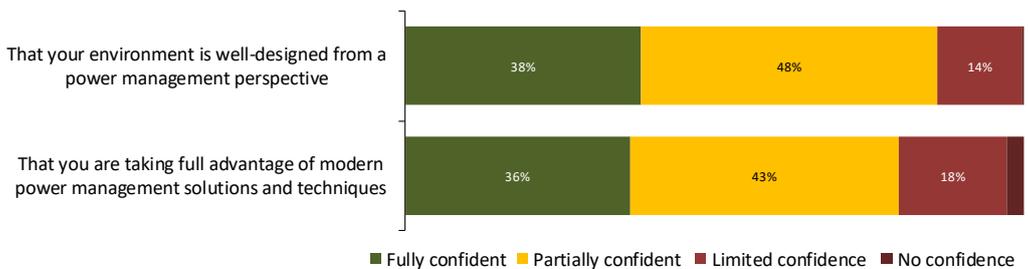
So why is this significant? The reason becomes clear when we look at how confident study respondents are about whether they have the necessary level of power management related skills and expertise.

**How confident are you that you have the necessary level of power management related skills and expertise?**



But the frequent skills-related uncertainty we see here also has implications in other ways, not least the ability to ensure that the datacentre environment is well-designed from a power management perspective.

**How confident are you in the following?**



*Many are not sure they are taking full advantage of modern power management solutions.*

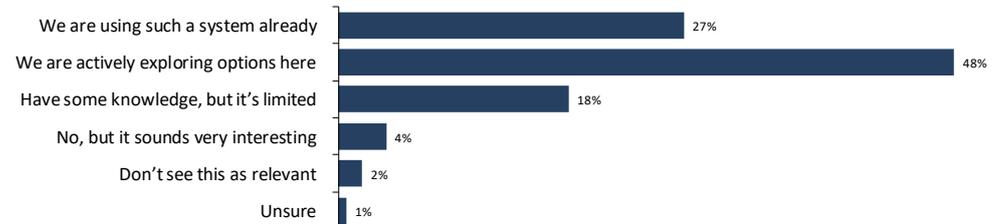
The second item listed on this chart suggests a related issue. Many are clearly not sure they are taking full advantage of modern power management solutions and techniques. This isn't surprising when you consider how quickly software based tools have been developing in this space. With the pace of change, it can be very hard to

*The good news is that many teams are exploring advanced power management options.*

stay up-to-date, let alone find the time to acquire and implement new functionality as it comes onto the market.

Having said this, it is encouraging to see so many facilities operations teams exploring options in this space, with some already taking on board advanced solutions that allow advanced, centralised power management.

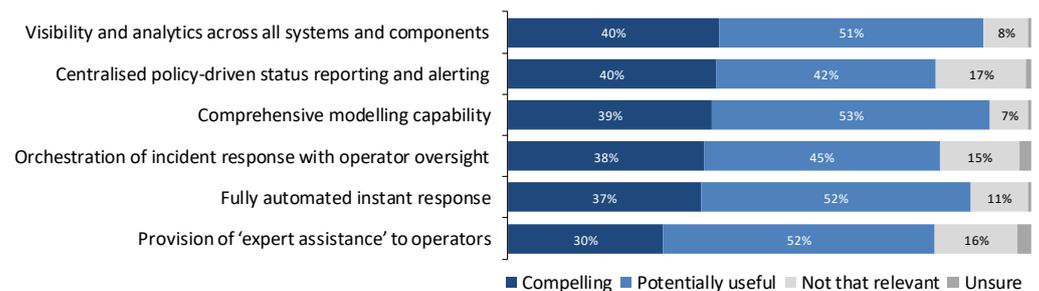
**Recent developments in power management software allow continuous, centralised monitoring, analytics and the orchestration of incident response. Are you aware of such systems?**



And when you drill into the detail of specific functionality offered by these kinds of advanced solutions, it's no surprise why so many are interested.

*When you look at specific functionality, it's no surprise why advanced solutions are of interest.*

**How would you rate the value or potential of the following specific functions of centralised power-management solutions?**



Standing back from the data we have been looking at, the study highlights how easy it is for skills and knowledge gaps to open up over time. If the datacentre environment you are working in was designed quite a few years ago, for example, it's easy to overlook the fact that the facilities-related infrastructure, tools and techniques in place at the moment may be relatively inefficient and ineffective by today's standards.

If this sounds familiar, the best advice is to get yourself up-to-date. Beyond the myriad web sources available to help with this, it is worth considering engaging a specialist power management supplier to review your current setup and suggest ways of modernising and otherwise improving it. The right partner can even take a lot of the challenges off your hands, as managed services are becoming much more popular in this space nowadays.

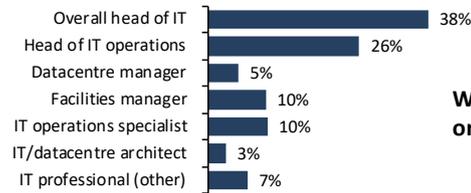
*Effective power management is critical, and nowadays needs to be considered as an aspect of the broader management of risk.*

The bottom line, though, is to make sure you are giving the power management aspects of your datacentre the proper level of attention. If you aren't already considering this as an important part of business risk management, then maybe it's time to start thinking in this way.

# 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.

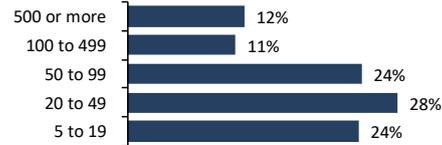
## Which of the following best describes your role?



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

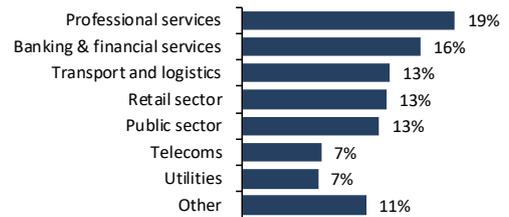


## Approximately how many racks of equipment are installed in your datacentre(s) overall?

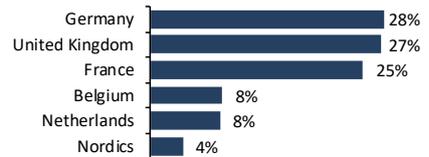


# RESEARCH SAMPLE

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



## Which country/region are you based in?



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.

## 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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## 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](http://www.eaton.eu).

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