

Uptime Institute Edge Data Center Survey 2022

Q3 2022

SUMMARY

Most enterprises have a small number of edge data centers and this is unlikely to change in the next two to three years. Reduced latency and bandwidth are the projected top technical drivers, with the internet of things and artificial intelligence being the most important applications. Power and cooling redundancy at most edge sites is likely to be N+1.

ABOUT THIS SURVEY

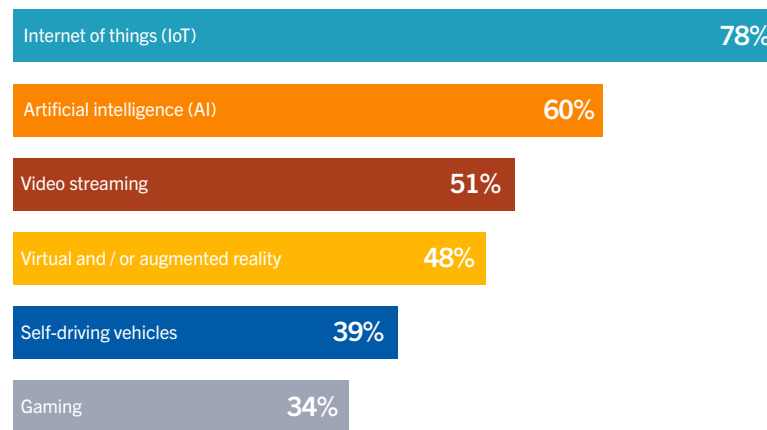
Uptime Institute Edge Data Center Survey 2022 was conducted in February 2022 and March 2022 and had 625 respondents including enterprises, colocation providers, cloud providers and data center vendors.

Edge data centers are generally smaller facilities (designed for IT workloads up to a few hundred kilowatts) that process data closer to the population of local end users and devices. This definition was shared with survey respondents.

IoT, AI will be important applications for edge data centers

Over the next two to three years, which of these applications do you think will be important drivers for edge data centers? Choose all that apply. (n=623)

Respondents: combination of enterprises, colocation providers, cloud providers, data center vendors

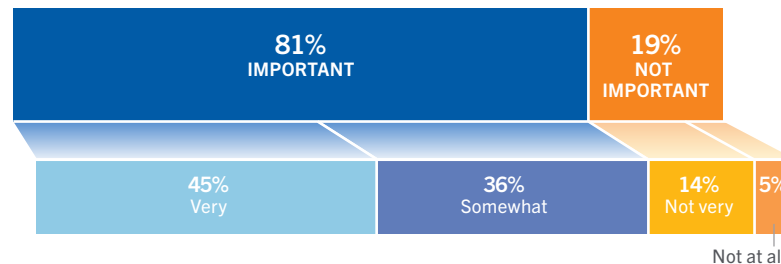


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Proximity to 5G is important for most edge locations

How important is proximity to 5G networks with regards to your choice of edge data center location? (n=572)

Respondents: combination of enterprises, colocation providers, cloud providers, data center vendors

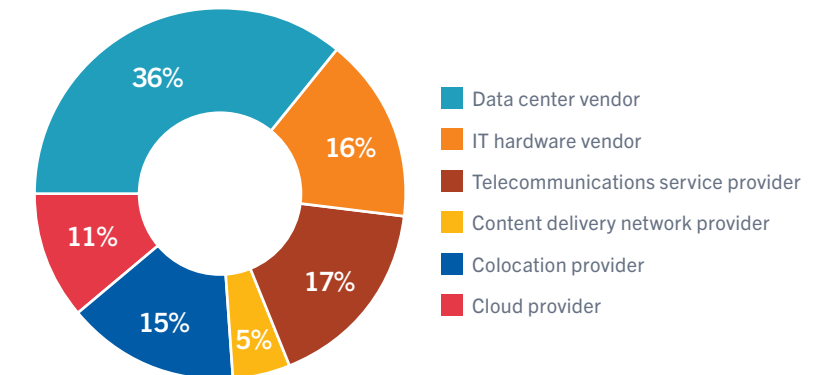


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Enterprises' primary edge vendor will vary

Which of these (if any) does your organization consider its primary vendor for edge? (n=177)

Respondents: enterprises

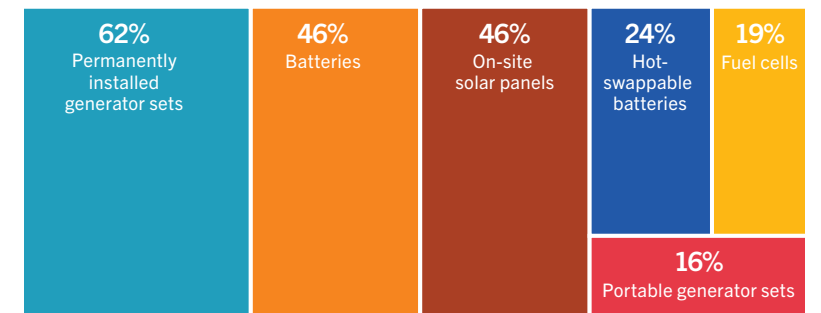


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Most expect edge data centers to have generators in three years

In addition to utility electricity grids, what power sources do you think edge data centers will be most commonly using two to three years from now? Choose no more than three. (n=564)

Respondents: combination of enterprises, colocation providers, cloud providers, data center vendors

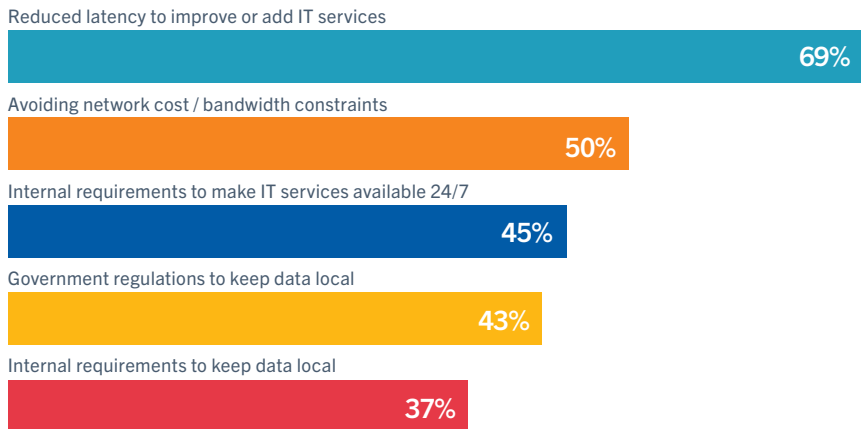


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Reduced latency, bandwidth are top edge data center drivers

Thinking about the data center industry in two to three years from now, which of the following do you think will be important drivers for edge data centers? Choose all that apply. (n=624)

Respondents: combination of enterprises, colocation providers, cloud providers, data center vendors



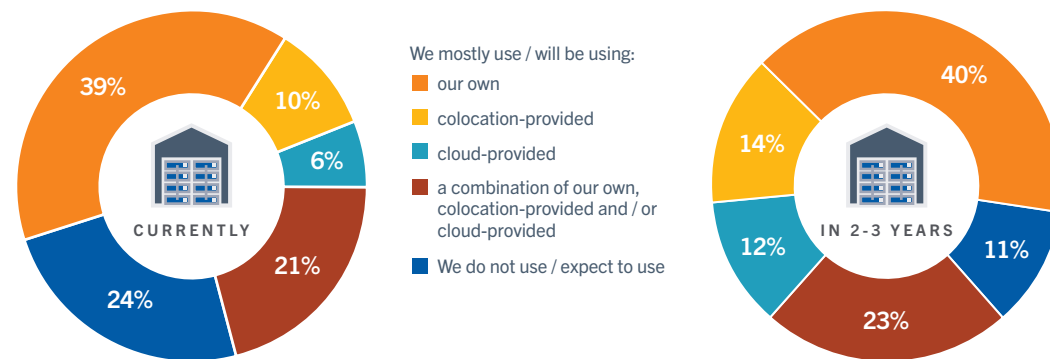
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Most enterprises plan to use their own edge data centers

Which of the following best describes how your organization utilizes edge data centers, both now and in two to three years time? (Currently: n=267; in 2-3 years: n=253)

Respondents: enterprises

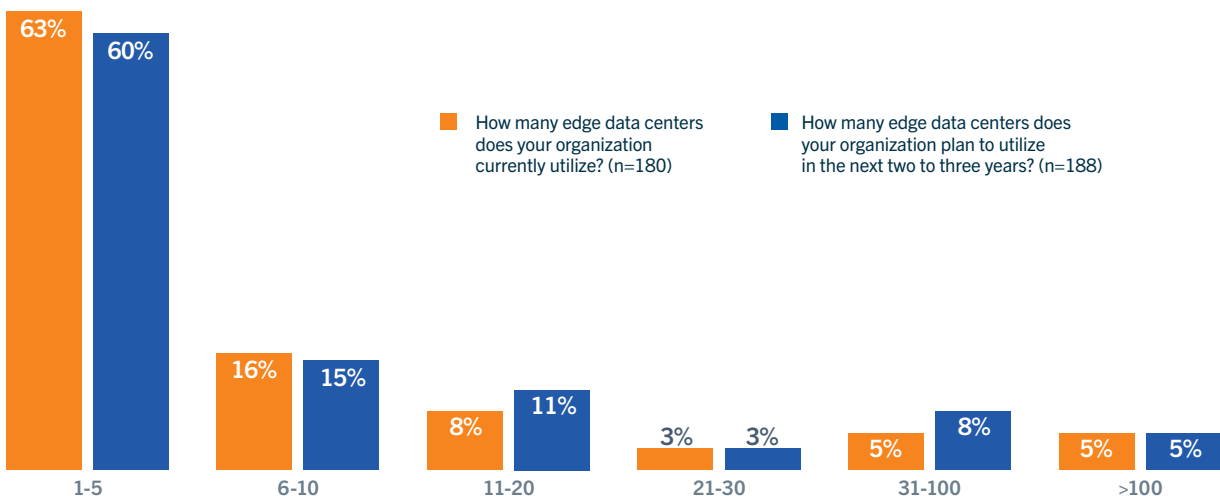


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Most enterprises will use fewer than six edge data centers

Respondents: enterprises



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Most edge sites likely to have N+1 power and cooling

Respondents: combination of enterprises, colocation providers, cloud providers, data center vendors

Which of the following best describes the most common level of redundant cooling equipment edge data centers will be using two to three years from now? (n=529)



Which of the following best describes the most common level of redundant power equipment edge data centers will be using two to three years from now? (n=542)



■ Cooling / power equipment necessary to support IT load (N)
 ■ One additional cooling / power unit for higher resiliency (N+1)
 ■ Two additional cooling / power units for higher resiliency (N+2)
 ■ Twice the capacity needed to support IT load (2N)

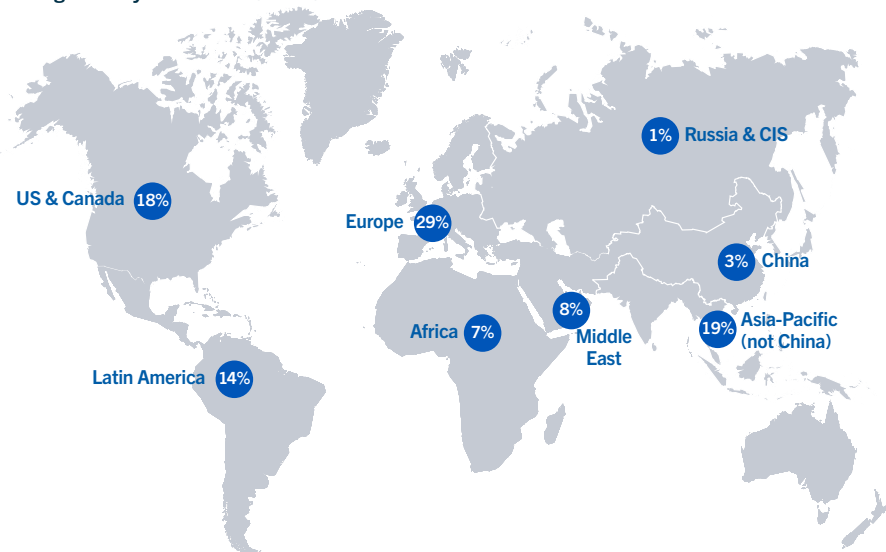
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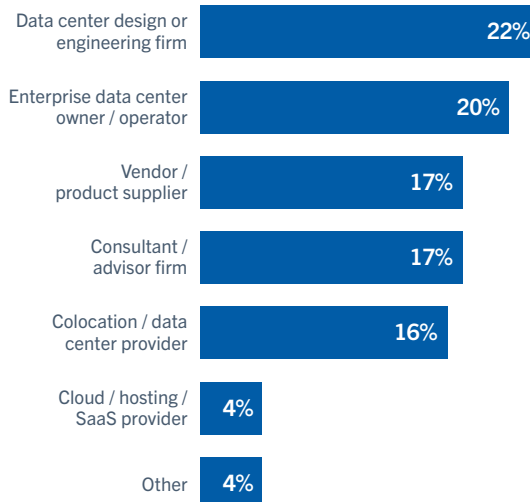
Uptime Institute Edge Data Center Survey 2022: demographics

Respondents: combination of enterprises, colocation providers, cloud providers, data center vendors

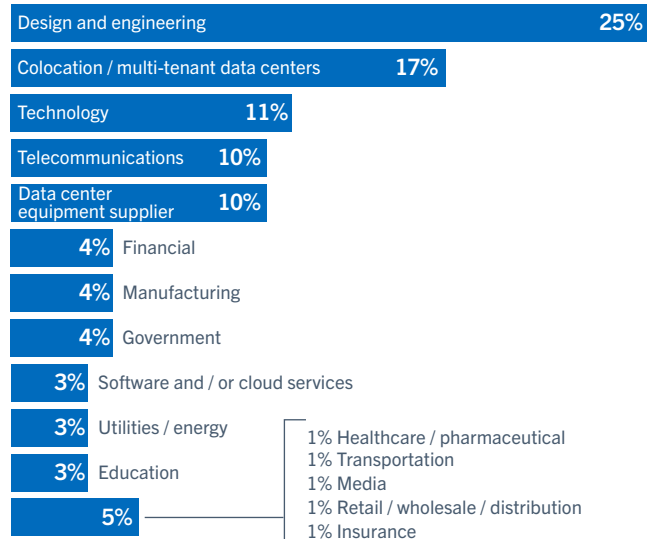
In which region are you located? (n=622)



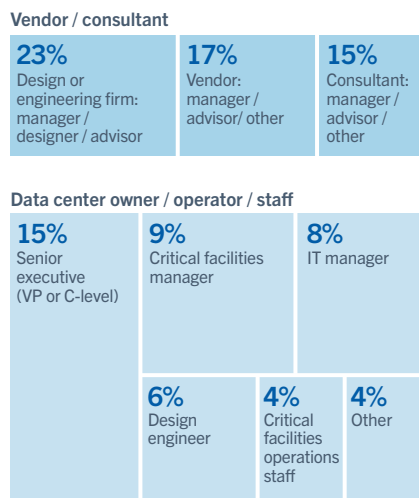
Which of the following best describes your organization? (n=625)



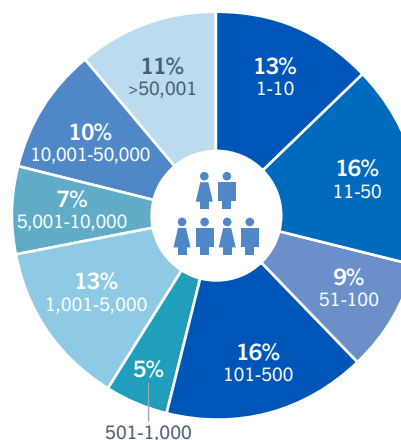
Which term best describes your organization's vertical industry? (n=567)



Which of the following responses best fits your job description? (n=568)



How many full-time employees work in your entire organization globally? (n=568)



Authors

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About Uptime Institute

Uptime Institute is the Global Digital Infrastructure Authority. Its Tier Standard is the IT industry's most trusted and adopted global standard for the proper design, construction, and operation of data centers – the backbone of the digital economy. For over 25 years, the company has served as the standard for data center reliability, sustainability, and efficiency, providing customers assurance that their digital infrastructure can perform at a level that is consistent with their business needs across a wide array of operating conditions.

With its data center Tier Standard & Certifications, Management & Operations reviews, broad range of related risk and performance assessments, and accredited educational curriculum completed by over 10,000 data center professionals, Uptime Institute has helped thousands of companies, in over 100 countries to optimize critical IT assets while managing costs, resources, and efficiency.

Uptime Institute is headquartered in New York, NY, with offices in Seattle, London, Sao Paulo, Dubai, Singapore, and Taipei. For more information, please visit www.uptimeinstitute.com

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