

Uptime Institute Supply Chain Survey 2021

Q3 2021

KEY FINDINGS

- The COVID-19 pandemic disrupted data center supply chains, interrupting operations and new builds. Operators, especially those with large sites, expect shortages to last at least 2-3 years.
- To maintain resiliency, operators are likely to demand greater visibility into their supply chains. Operators and builders may need to continuously review supply chain vulnerabilities to inform their sourcing strategy.

ABOUT THIS SURVEY

The Uptime Institute Supply Chain Survey 2021 was conducted in July and August 2021 and had over 430 global respondents. This report highlights responses from the 241 data center user/owner/operator participants.

Supply chain disruptions hit many

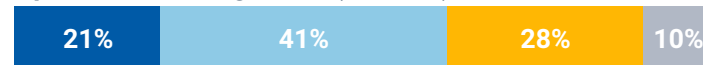
Larger operations and builders most affected

Have your organization's data center operations suffered supply chain disruptions or delays during the past 18 months?

Have your organization's data center build projects suffered supply chain disruptions during the past 18 months?

UPTIME INSTITUTE SUPPLY CHAIN SURVEY 2021

Operators with large sites (≥20 MW)



All other operators



Builders

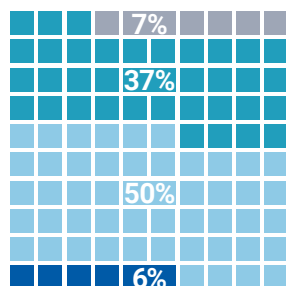


- Yes – Major disruptions or delays
- Yes – Moderate disruptions or delays
- Yes – Minor disruptions or delays
- No disruptions or delays

Threat of shortages remains a worry

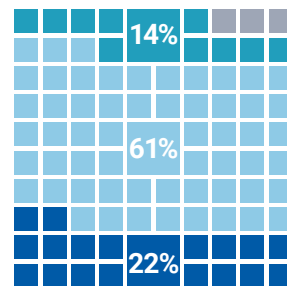
OPERATORS (n=205)

How would you rate the overall vulnerability of your data center(s) to supply chain shortages?



BUILDERS (n=111)

How would you rate the overall vulnerability of your data center projects to supply chain shortages?



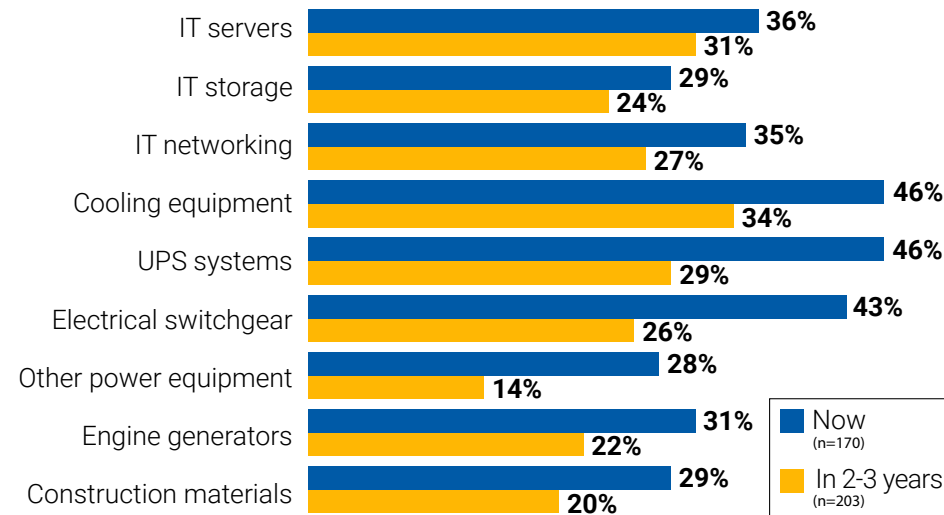
- Very vulnerable
- Somewhat vulnerable
- Not very vulnerable
- Not at all vulnerable

UPTIME INSTITUTE SUPPLY CHAIN SURVEY 2021

Operators expect shortages to remain but ease gradually

In which of the following areas - if any - is your organization vulnerable to supply chain shortages? Choose all that apply.

UPTIME INSTITUTE SUPPLY CHAIN SURVEY 2021



Many want better supply chain visibility

UPTIME INSTITUTE SUPPLY CHAIN SURVEY 2021 (n=193)



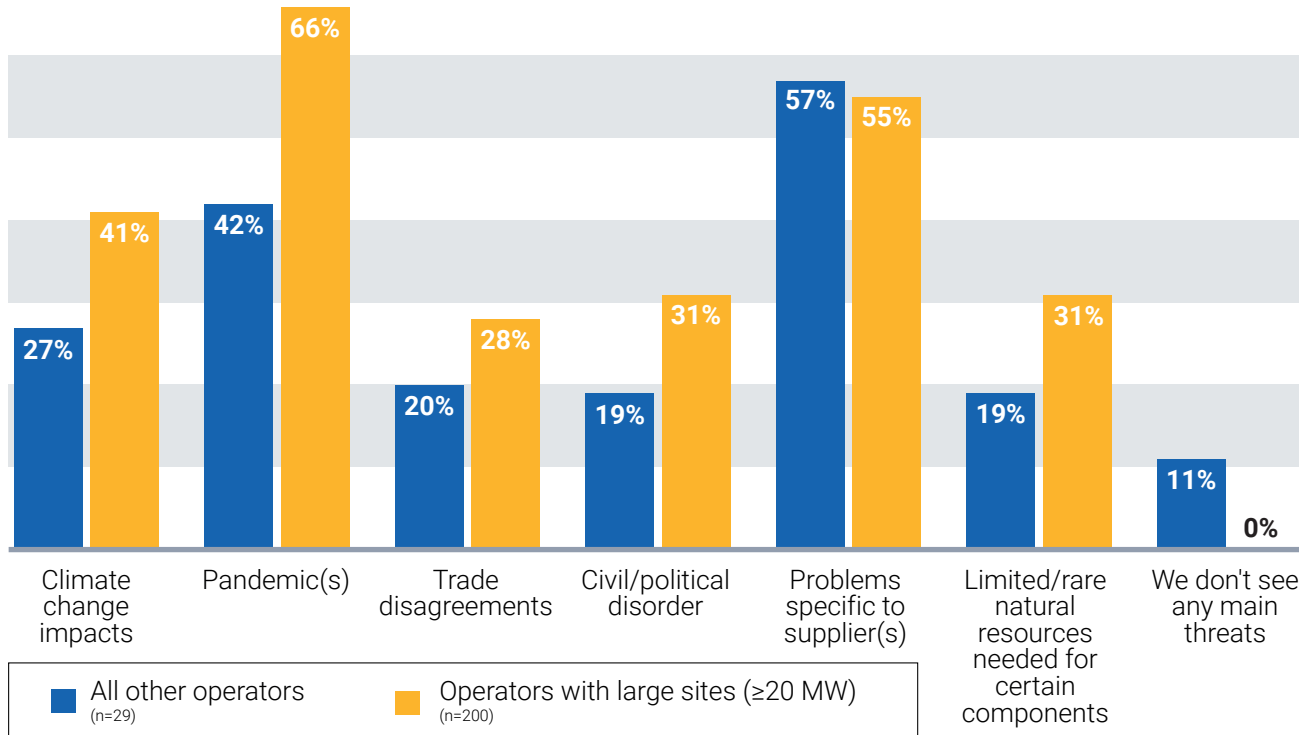
How would you rate your organization's visibility into the supply chain information of its key data center equipment/component vendors?

- We have adequate visibility into the supply chains of our key vendors
- We do not have adequate visibility into the supply chains of our key vendors
- We have no need for visibility into the supply chains of our key vendors

Operators with large sites tend to see more risks

UPTIME INSTITUTE SUPPLY CHAIN SURVEY 2021

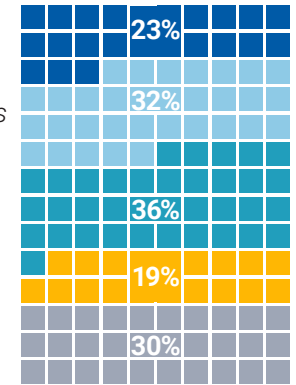
Which of the following do you think are the main threats to your organization's data center operations supply chain? Choose all that apply.



Most added inventory in response to COVID-19

Because of the COVID-19 pandemic, has your organization made any changes to its data center supply chain during the past 18 months? Choose all that apply.

- **Yes** We arranged for more local suppliers
- **Yes** We arranged for a second (or more) source
- **Yes** We increased inventory of parts/materials
- **Yes** We changed one or more suppliers
- **No changes**



UPTIME INSTITUTE SUPPLY CHAIN SURVEY 2021 (n=232)

Half are exposed to vendor-specific delays

Which statement best describes the sourcing strategy of your data center's capital equipment suppliers for mechanical, electrical, and plumbing (MEP) functions?

- We have one equipment supplier for all or nearly all MEP functions
- We have a single equipment supplier for each MEP function
- We have multiple equipment suppliers for some MEP functions, and a single equipment supplier for other MEP functions
- We have multiple equipment suppliers for each MEP function

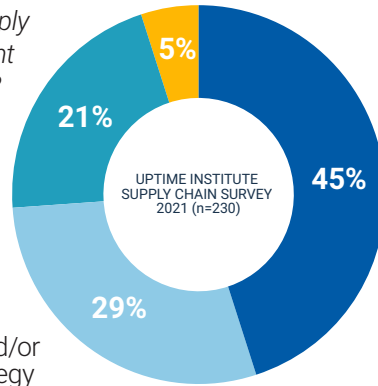


UPTIME INSTITUTE SUPPLY CHAIN SURVEY 2021 (n=226)

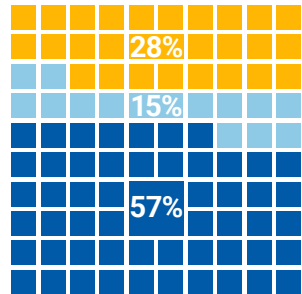
Most do not conduct regular supply chain reviews

Which best describes how your organization handles supply chain resilience with its data center suppliers of equipment for mechanical, electrical, and plumbing (MEP) functions?

- **Continuous** We regularly monitor and review
- **Proactive** We initially assess before adding them
- **Reactive** Our organization deals with supply chain issues as they arise
- **Inactive** Our organization accepts some delays and/or price increases without changing its sourcing strategy



Suppliers' costs, and leverage, raised equipment prices



Have data center supply chain issues driven up your equipment costs over the past 18 months?

- **Yes** Because supply chain issues have caused suppliers to increase their costs
- **Yes** Because suppliers now have more leverage and are increasing their profit margins
- **No** Supply chain issues have not driven up our costs

UPTIME INSTITUTE SUPPLY CHAIN SURVEY 2021 (n=362)

ABOUT UI INTELLIGENCE

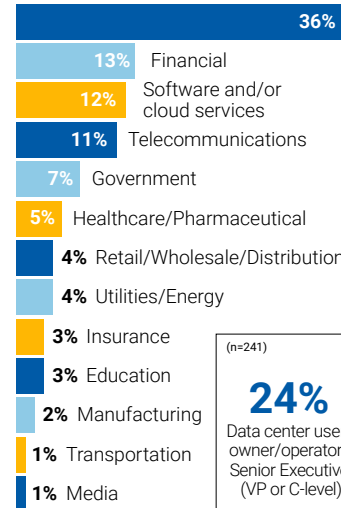
Uptime Institute (UI) Intelligence is an independent unit of Uptime Institute dedicated to identifying, analyzing and explaining the trends, technologies, operational practices and changing business models of the mission-critical infrastructure industry. For more about Uptime Institute Intelligence, visit uptimeinstitute.com/ui-intelligence or contact research@uptimeinstitute.com.

Uptime Institute – The Global Data Center Authority®, a division of The 451 Group, has office locations in the US, Mexico, Costa Rica, Brazil, UK, Spain, UAE, Russia, Taiwan, Singapore and Malaysia. Visit uptimeinstitute.com for more information.

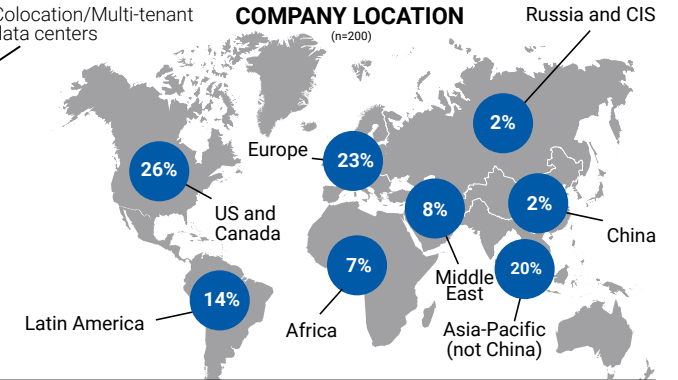
All general queries:
Uptime Institute,
5470 Shilshole Avenue NW, Suite 500,
Seattle, WA 98107 USA
+1 206 783 0510; info@uptimeinstitute.com

End user demographics

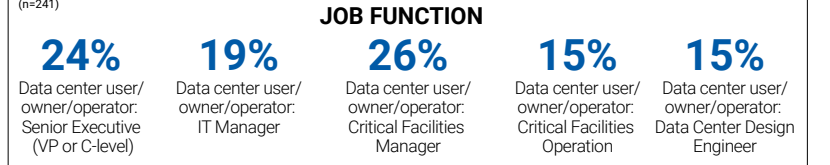
VERTICALS (n=197)



COMPANY LOCATION (n=200)

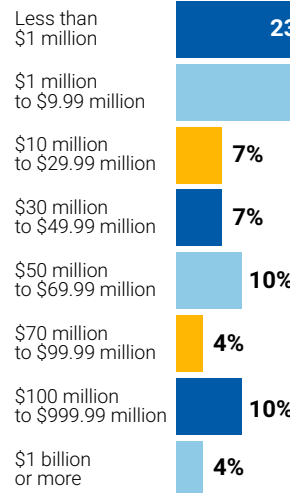


JOB FUNCTION (n=241)

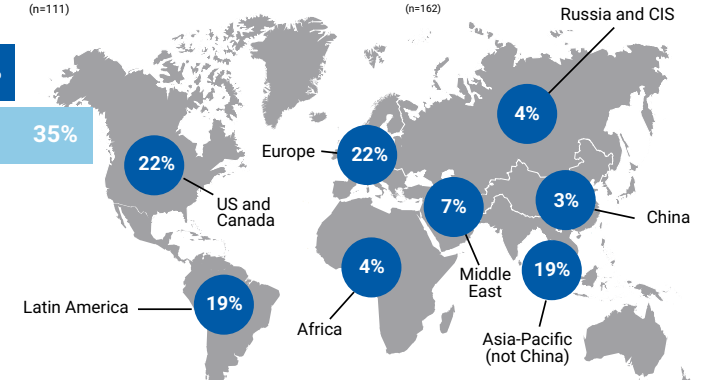


Vendor demographics

DATA CENTER-RELATED REVENUE (ANNUAL, IN US DOLLARS) (n=111)



COMPANY LOCATION (n=162)



JOB FUNCTION (n=191)

