



Bolstering the Pillars of IT

A Candid Survey of Government Officials on Agency IT Infrastructure



Smarter
technology
for all



November 2021

The bottom half of the slide features a background image of a server room with rows of server racks and a reflective floor, all in a blue color scheme.

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Overview

Purpose

Government agencies provide crucial services and infrastructure to the American people, but how do their technologies fare in supporting mission-critical work? Are the IT systems secure? Are they current and able to meet today's demands? To learn more, Microsoft and Lenovo surveyed government employees, particularly those supporting missions in the health and human services and transportation spheres of government.

Methodology

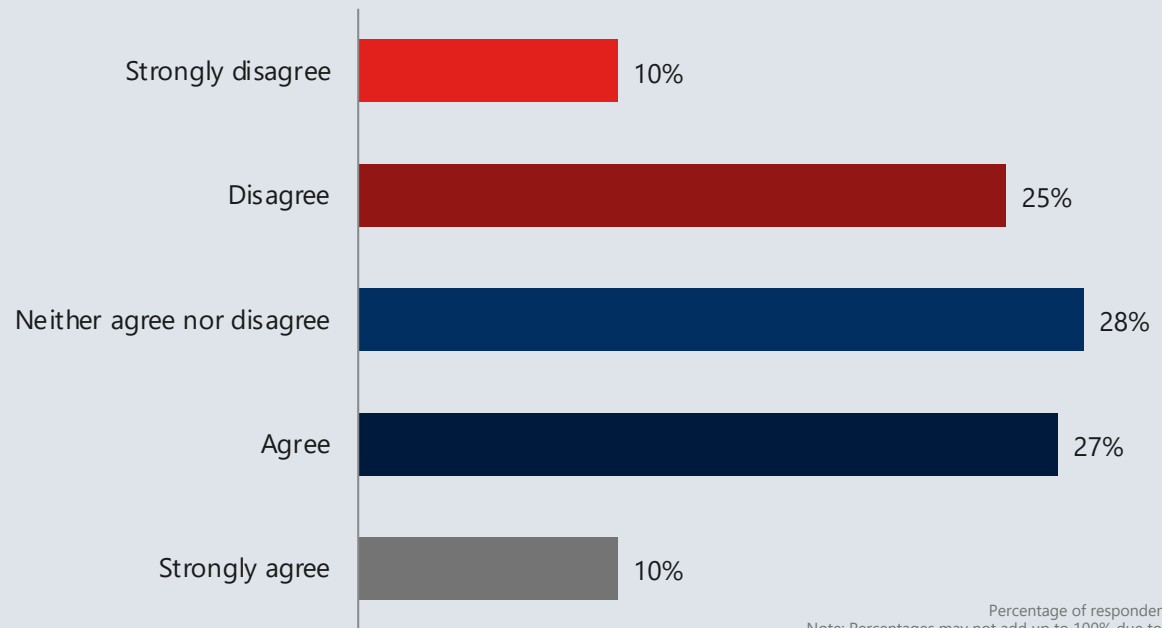
Between September and October of 2020, Microsoft and Lenovo issued a survey on IT infrastructure to federal and state and local government. 446 employees responded after quality control and screening, including 56% of respondents working in IT, procurement, and program management. 47% of respondents provide either health and human services or transportation and infrastructure services to their constituents. 60% of respondents are in federal government, while 40% are in state and local government.

For more information on respondents, please see the Respondent Profile.

Research Findings

Respondents have mixed feelings on whether their critical infrastructure relies on outdated technology

To what extent do you agree or disagree with the following: "The critical infrastructure my agency supports is reliant on outdated technology."

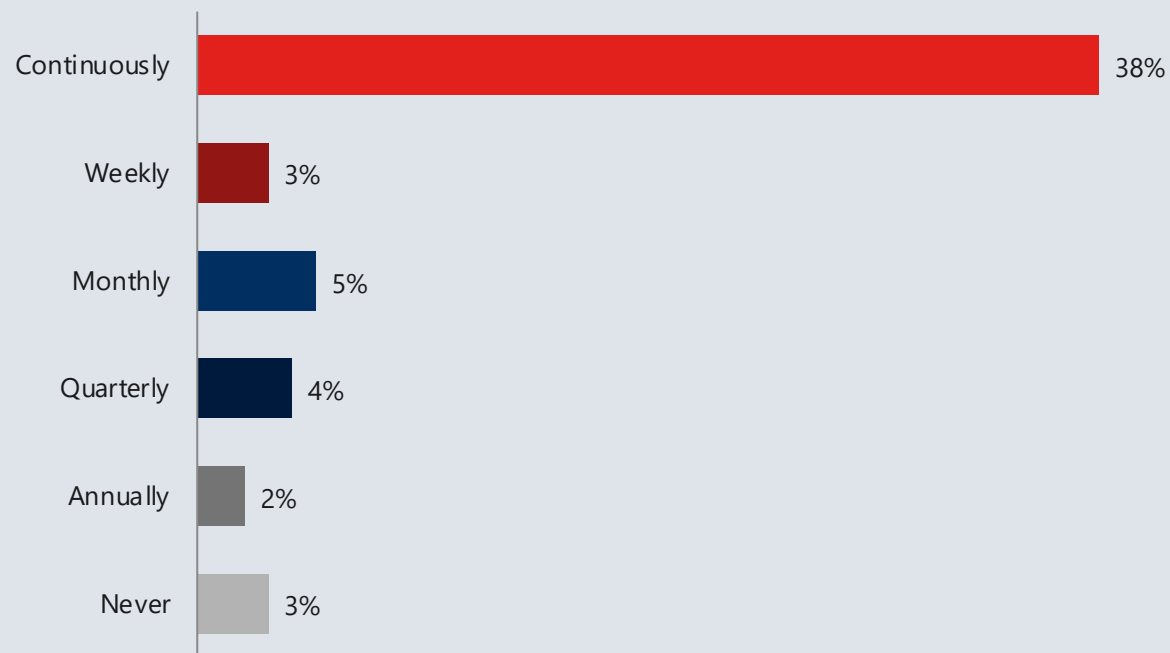


37%

of respondents agree to some extent that their agency's critical infrastructure relies on legacy architecture.

Over a third of respondents agree that their agencies continuously evaluate the cybersecurity of their critical infrastructure

To the best of your knowledge, about how often does your agency track cybersecurity progress of critical infrastructure?



Percentage of respondents, n=343
Note: 45% of respondents "Not sure" is not shown above

17%

of respondents think that their agencies less than continuously track cybersecurity progress of critical infrastructure.

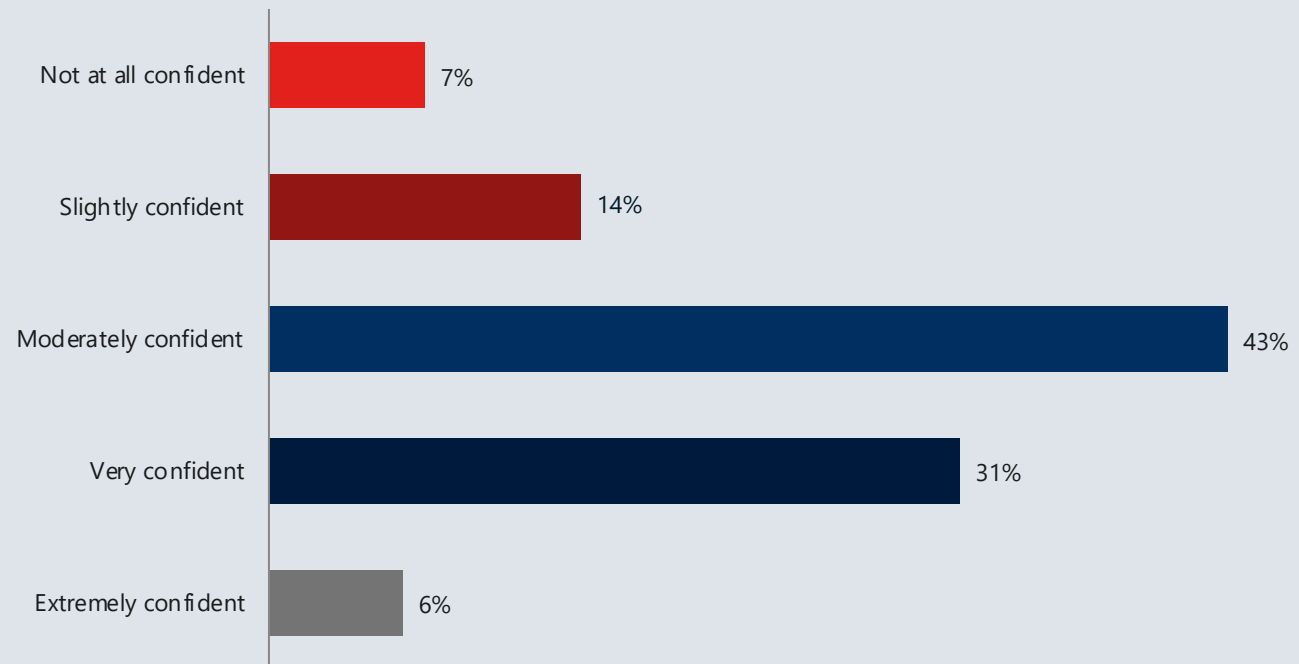


As they age, legacy systems can be more **costly** to maintain, **more exposed** to cybersecurity risks, and **less effective** in meeting their intended purpose.

2019 Government Accountability Office Report: Agencies Need to Develop Modernization Plans for Critical Legacy Systems

Most respondents are confident about inter-agency data in transit; however, some respondents remain skeptical

How confident are you that critical data being transmitted between your organization and another agency is fully secure?



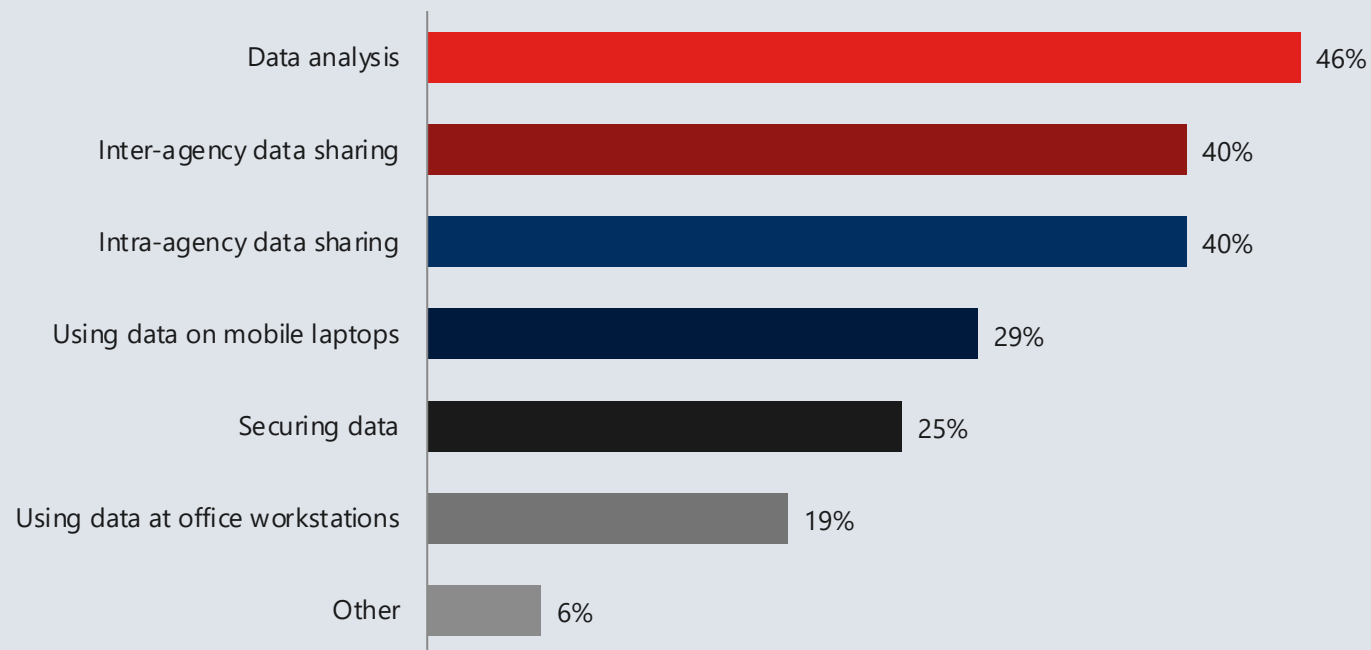
Percentage of respondents, n=49
Note: Percentages may not add up to 100% due to rounding

37%

of respondents are very or extremely confident that critical data is being transmitted safely to other agencies.

Data sharing and analytics percolate to the top data challenges agencies face

*Which of the following are historically the most significant data challenges for your agency?
Please select all that apply.*



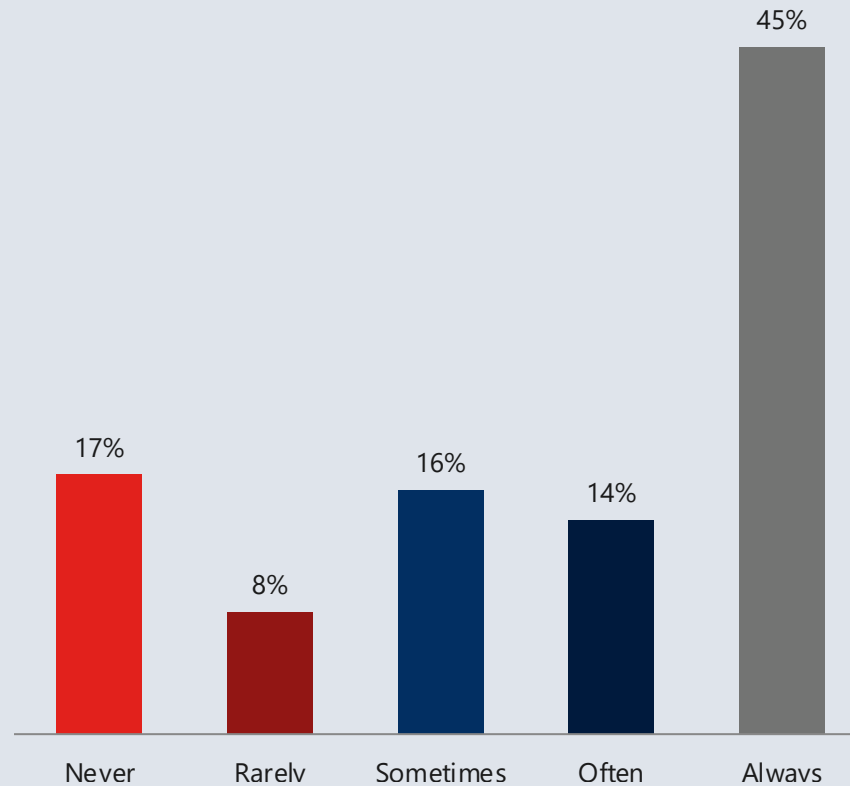
Percentage of respondents, n=48
Note: Respondents were asked to select all that apply.

46%

of respondents think that data analysis is amongst the top data challenges for their agency.

Opportunity exists to improve use of dual-factor authentication to protect agency IT infrastructure

Please fill in the blank: "I am _____ required to submit dual-factor authentication whenever I access my work device(s)."



Percentage of respondents, n=331
Note: Percentages may not add up to 100% due to rounding.

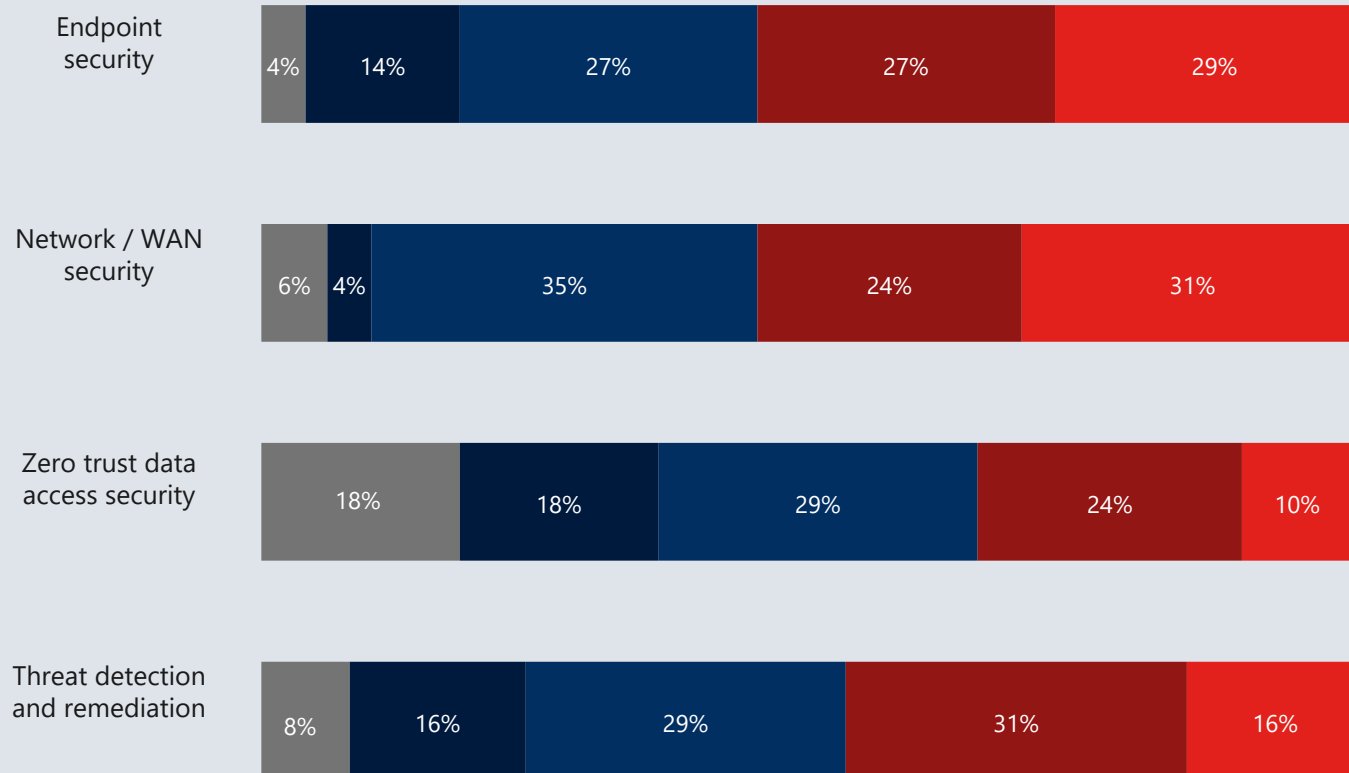
25%

of respondents rarely or never use dual-factor authentication whenever accessing their work devices.

Organizations' cybersecurity tools and practices could be improved across the board

How confident are you that your agency has each security component below to safeguard data of critical infrastructure?

■ Not at all confident ■ Slightly confident ■ Moderately confident ■ Very confident ■ Extremely confident



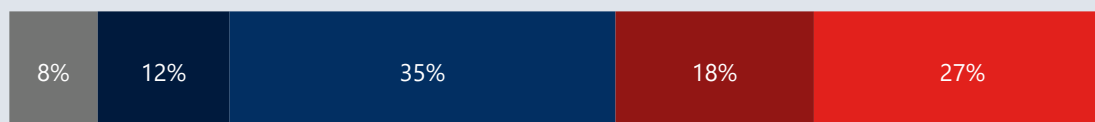
Percentage of respondents, n=49
Note: Percentages may not add up to 100% due to rounding

Organizations' cybersecurity tools and practices could be improved across the board

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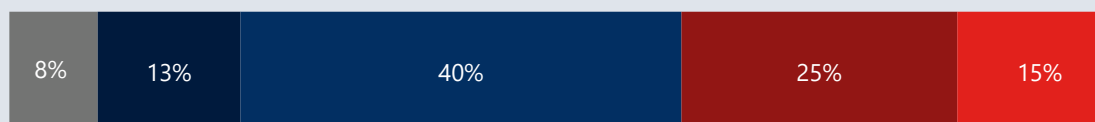
Formal cybersecurity
procedures
and policies



Formal cybersecurity
education for
all employees



Firmware
security

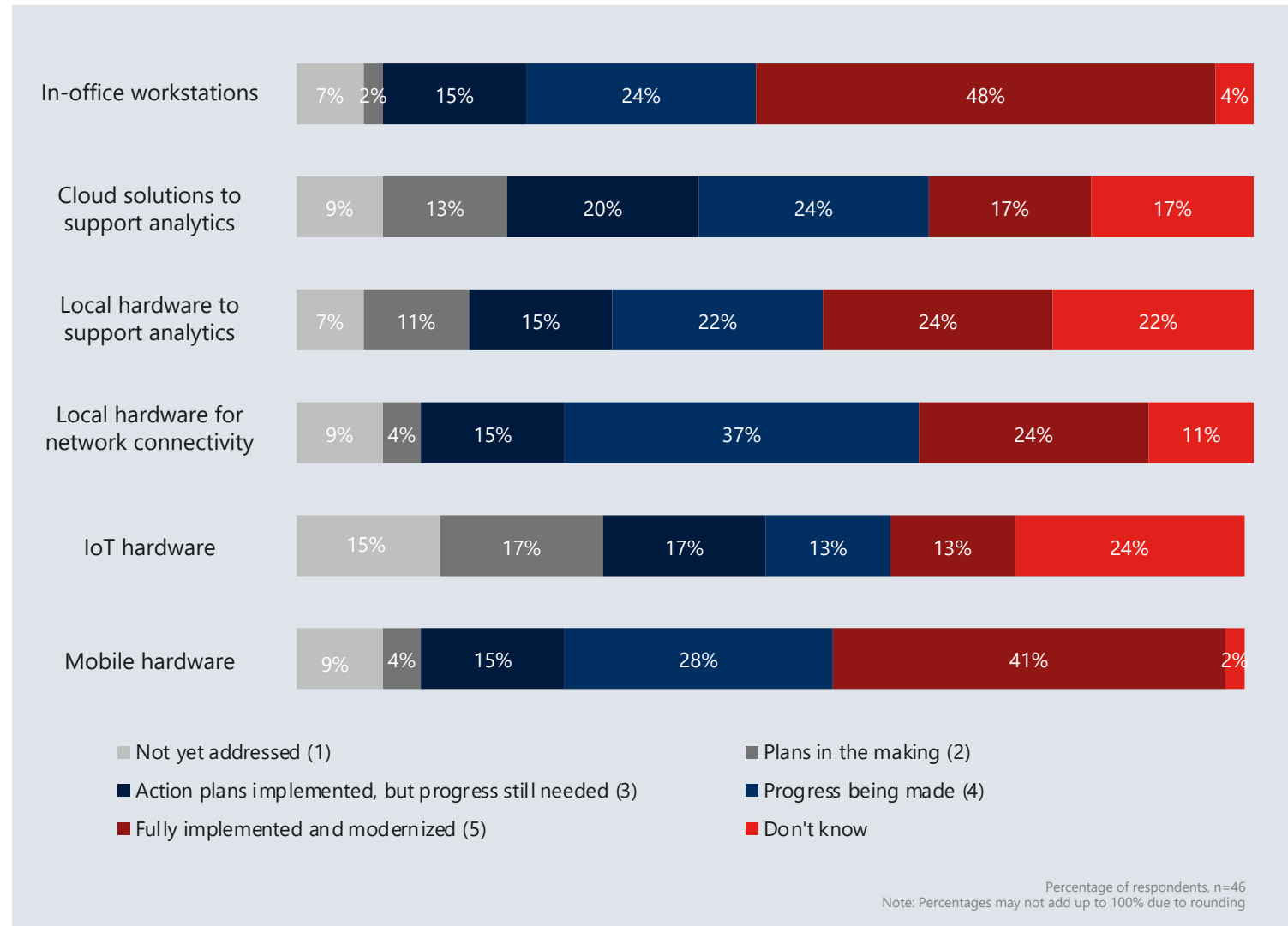


Web-access
security



Percentage of respondents, n=49
Note: Percentages may not add up to 100% due to rounding

Please rank the following in terms of current progress:



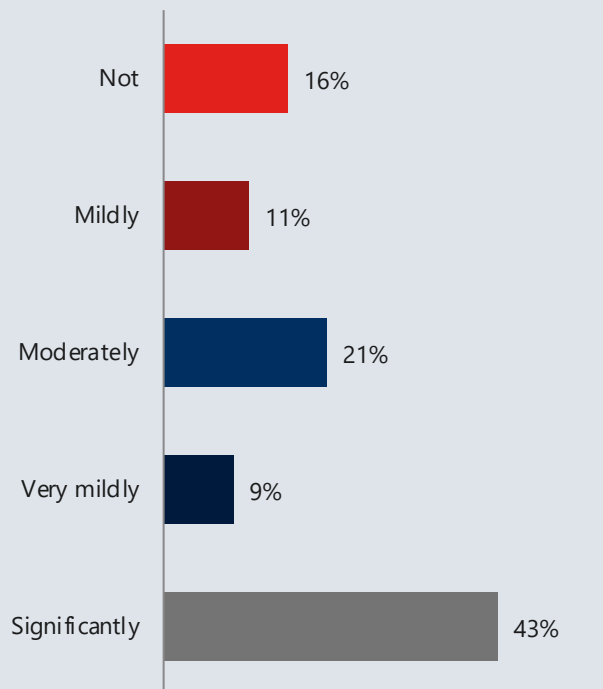


We need to be **more aggressive** in determining what things can be done in a digital manner.

Suzette Kent, former Federal Chief Information Officer of the Trump Administration

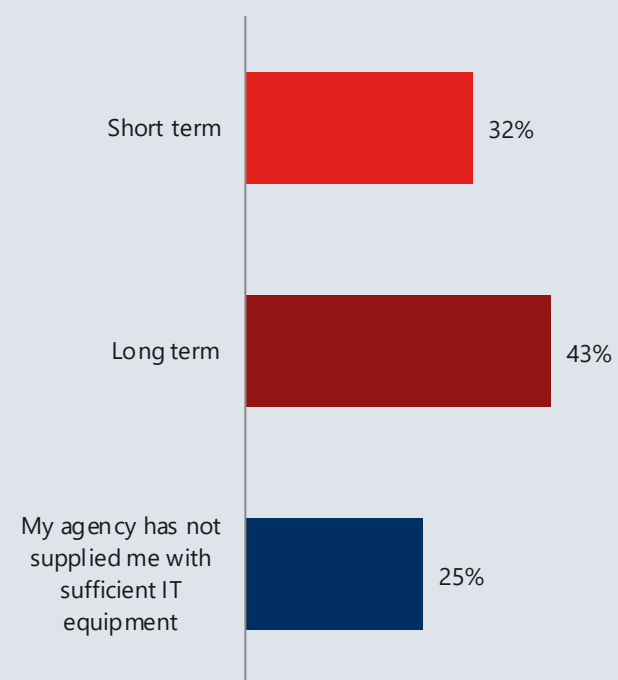
Respondents were asked to complete the following statements:

"COVID-19 will _____ increase the number of people in my organization who work from home on a permanent basis."



Percentage of respondents, n=332
Note: Percentages may not add up to 100% due to rounding

"My agency has supplied me with sufficient IT equipment to fulfill my work duties from home for the _____."



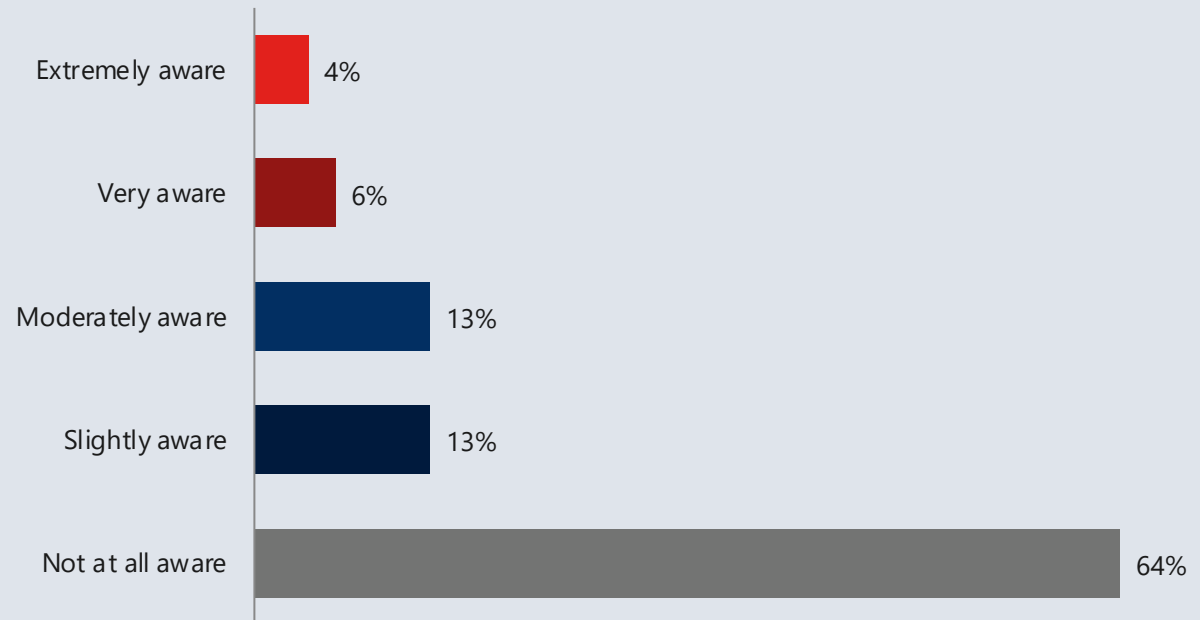
Percentage of respondents, n=330
Note: Percentages may not add up to 100% due to rounding

25%

of respondents say that their agencies have not provided them with sufficient IT equipment despite being over six months into the pandemic.

Microsoft has announced a new capability called Secured-core that allows companies to prevent attacks at the firmware level by establishing a secure root of trust that ensures that only valid software is allowed to execute upon boot.

How aware are you of this capability?

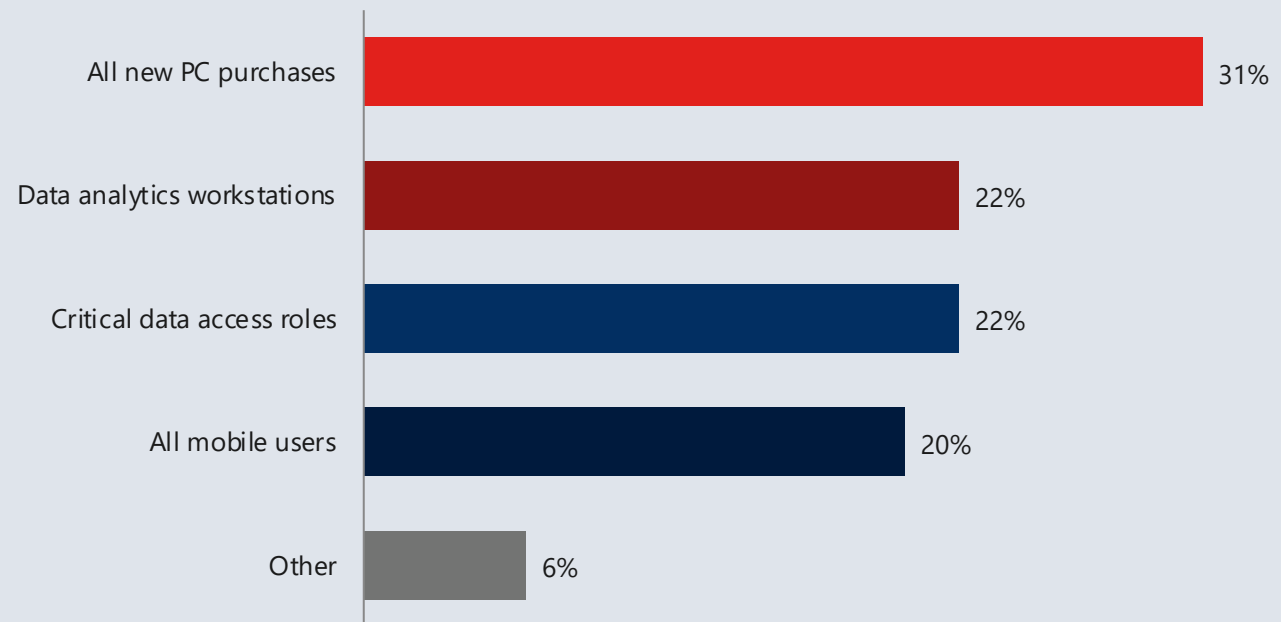


Percentage of respondents, n=159
Note: 44% of respondents selected "Don't know." Respondents were asked to select all that apply.

37%

of respondents are aware of the Secured-core capability.

Which of the following have new specifications for purchasing equipment that require Secured-core PCs at your agency? Select all that apply.

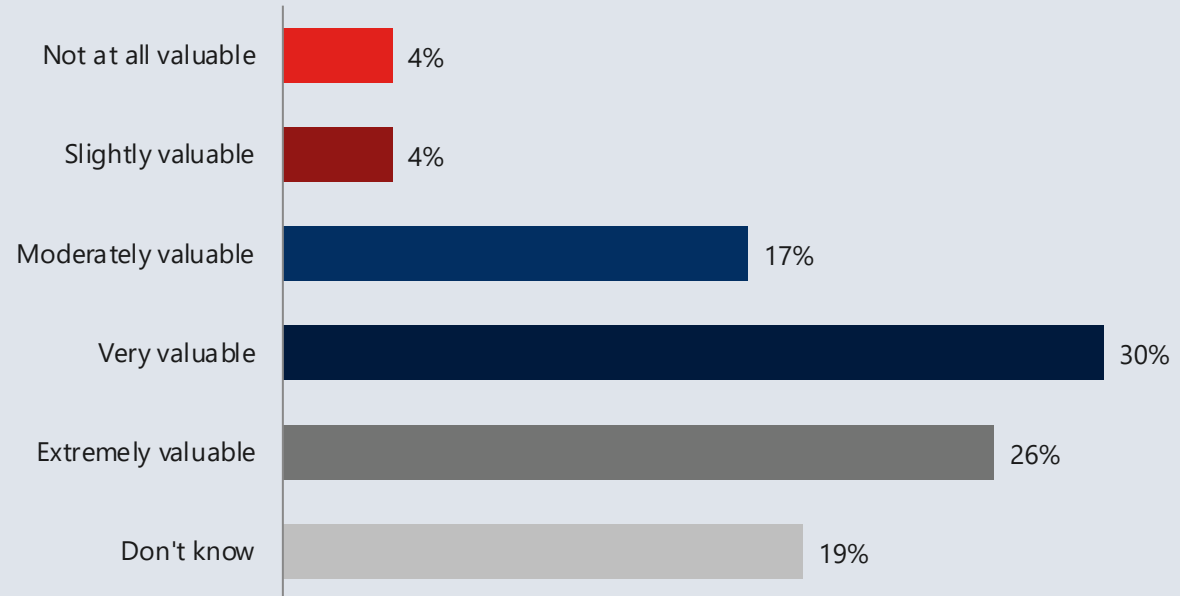


Percentage of respondents, n=54
Note: 44% of respondents selected "Don't know." Respondents were asked to select all that apply.

31%

of respondents report that all new PC purchases must be Secured-core PCs, according to new specifications.

How valuable would it be for your agency to know that the BIOS and critical operating system software would be secure from the point of manufacture and continually updated while in use to protect from firmware-level attacks?



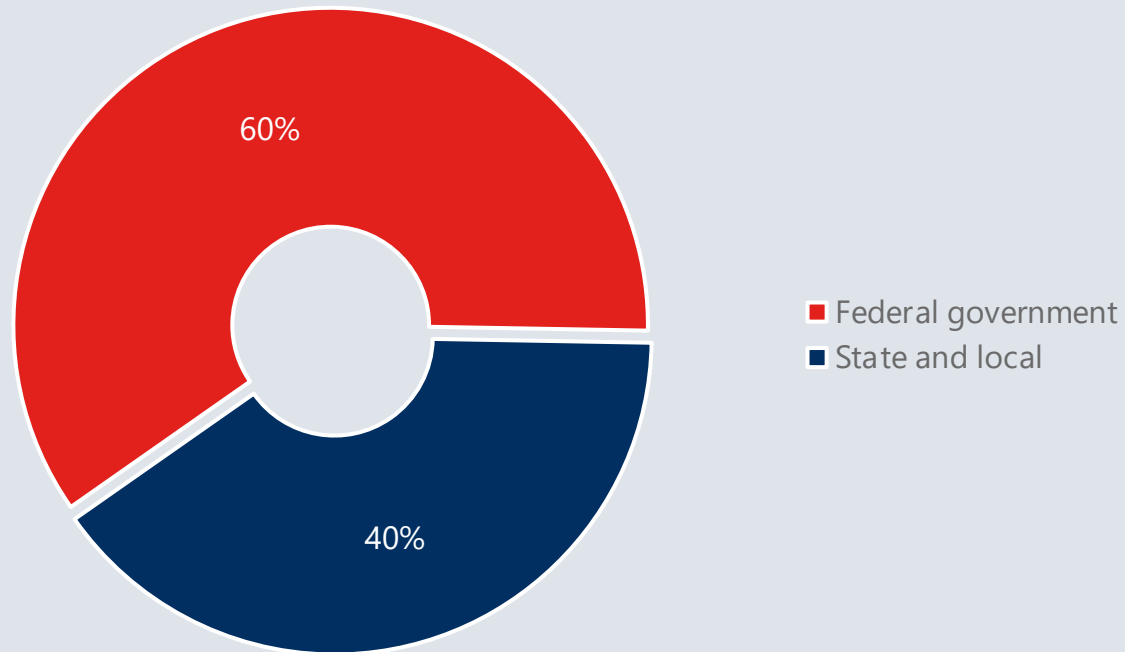
Percentage of respondents, n=47
 Note: 44% of respondents selected "Don't know." Respondents were asked to select all that apply.

56%

of respondents think that this information would be very or extremely valuable to their agency.

Respondent Profile

A majority of respondents are federal government employees

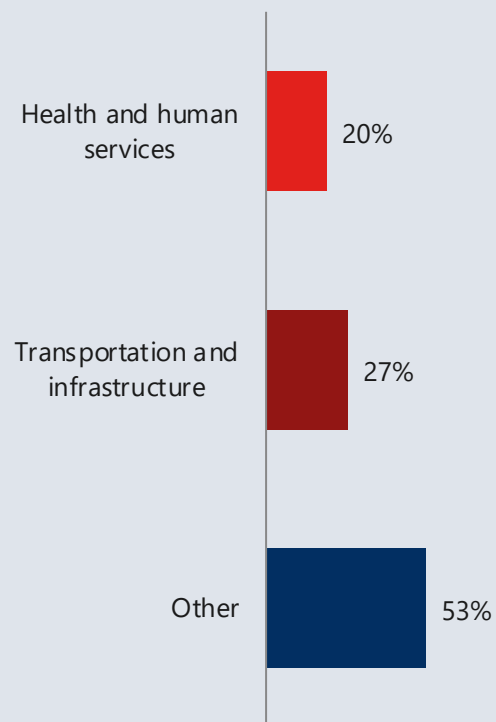


Percentage of respondents, n=446
Note: Percentages may not add up to 100% due to rounding

Over half of respondents work for the federal government.

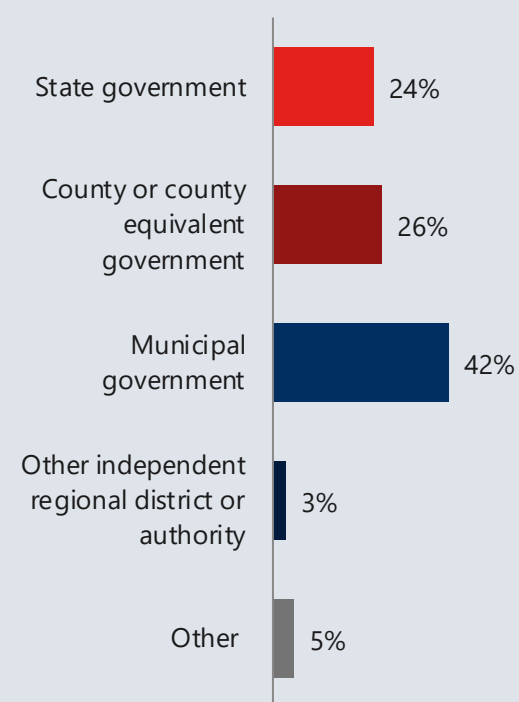
Over 2 of 5 state and local respondents serve government's critical infrastructure in health and transportation services

Of the following, which service does your organization provide to its constituents?



Percentage of respondents, n=154
Note: Percentages may not add up to 100% due to rounding

State and local government composition



Percentage of respondents, n=156
Note: Percentages may not add up to 100% due to rounding

47%

are involved with health and human services or transportation and infrastructure.

About



About Microsoft

At Microsoft, our mission is to empower every person and every organization on the planet to achieve more. Our mission is grounded in both the world in which we live and the future we strive to create. Today, we live in a mobile-first, cloud-first world, and the transformation we are driving across our businesses is designed to enable Microsoft and our customers to thrive in this world.

Learn more at www.Microsoft.com



About Lenovo

As the world's #1 PC and tablet vendor, Lenovo is committed to providing secure technology and services for federal, state, and local government agencies. For more than 40 years, our customers have relied on us for reliable, high-performance devices and world-class support to meet their evolving needs.

To learn more, visit LenovoForGovernment.com