

OMB Control #0693-0043 06/30/2025

This survey is being conducted by the National Institute of Standards and Technology (NIST) in cooperation with the University of Oulu and Cyber Hygiene Academy. We are interested in learning your thoughts on the role of people and human behavior in the overall cybersecurity of organizations.

To be eligible to complete the survey, you must:

- Work **part-time** or **full-time**
- **Use computers regularly** at work
- Be **18 years or older**

Your participation is voluntary. It is important that you know the following before you decide to complete the survey:

- **Purpose:** This research study is being performed to discover thoughts about the role of people and human behavior in the cybersecurity of organizations. Ultimately, the researchers hope to gain knowledge towards developing standards that help organizations and individuals be more secure.
- **Participant involvement:** You will complete an online survey (approximately 10 - 15 minutes). If you can't complete the survey in one sitting, you may save your progress and return later.
- **Data Protection:** Your responses will be anonymized. Any identifiers will be removed so that collected information cannot be traced back to you. We are collecting this information only to inform our research.
- **Possible risks:** Possible risks or discomforts associated with this study are minimal and no greater than those you face every day.

Welcome screen continued

You can see more detailed information about this survey and the protection of your data by clicking the link below.

[NIST Survey Information Sheet](#)

By continuing with the survey, you acknowledge that the following is true for you:

I understand the above description of the research and the risks and benefits associated with my participation as a research subject. I understand that by proceeding to the next page, I am choosing to take part in this research survey voluntarily.

Thank you for your time and participation! When you are ready to begin the survey, click the forward arrow.

A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995 unless the information collection has a currently valid OMB Control Number. The approved OMB Control Number for this information collection is 0693-0043. Without this approval, we could not conduct this survey/information collection. Public reporting for this information collection is estimated to be 15 minutes, including the time for reviewing instructions and completing and reviewing the information collection. All responses to this information collection are voluntary. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the National Institute of Standards and Technology: 100 Bureau Drive, Gaithersburg, MD 20899, Attn: Julie Haney, julie.haney@nist.gov.

Directions

- In this survey, you will be asked to share your thoughts on cybersecurity in your own organization and the role people play in cybersecurity.
- **There are no right or wrong answers. Please don't search online to help you answer any of the questions. We are interested in what immediately comes to mind for you.**

For the purposes of this survey:

- **Cybersecurity** is the practice of protecting computers, networks, and data from being stolen, damaged, or attacked. It involves using tools, rules, and actions to keep information safe from hackers and other online threats, ensuring everything works securely and privately.
- **Information technology (IT)** is the use of computers, software, and networks to store, manage, and share information. It includes everything from the devices we use, like phones and laptops, to the systems that run websites and help businesses work smoothly.
- **Artificial intelligence (AI)** is the ability of computers or machines to think, learn, and solve problems like humans. It uses data and patterns to make decisions, recognize things, or even have conversations.

Which of the following best describes your primary role within your organization?

- ☐ **Cybersecurity/IT decision maker** - I make high-level, strategic decisions or lead teams or organizations (e.g., CISO; CIO; security manager; senior executive).
- ☐ **Technical cybersecurity/IT professional** - I do hands-on technical work or conduct technical research (e.g., security analyst; system/network architect; system administrator; developer; security trainer; penetration tester; reverse engineer; cybersecurity researcher).
- ☐ **Cybersecurity/IT policy or regulatory professional** - I create, interpret, or enforce cybersecurity/IT rules, standards, or guidance (e.g., risk analyst; policy analyst; auditor; governance, risk, and compliance manager).
- ☐ **Human behavior/human factors specialist** - I research or apply human behavior, human-computer interaction, human factors, psychology, or related disciplines to cybersecurity/IT (e.g., human factors engineer; user experience professional; cyber psychologist; usable security researcher).
- ☐ **General end user** - I am an employee without specialized cybersecurity or IT knowledge (e.g., human resources specialist; business analyst; customer service representative; operations specialist; physicist; health professional).
- ☐ None of the above

How many years have you worked in your current organization?

- ☐ Less than 1 year
- ☐ 1 - 5 years
- ☐ 6 - 10 years
- ☐ 11 - 15 years
- ☐ 16 - 20 years
- ☐ More than 20 years

For each group below, rate how similar your views on cybersecurity are to theirs.

	Very dissimilar	Somewhat dissimilar	Somewhat similar	Very similar	Not sure
<u>Technical</u> <u>cybersecurity/IT</u> <u>professionals</u>	☐	☐	☐	☐	☐
<u>Cybersecurity/IT</u> <u>policy or regulatory</u> <u>professionals</u>	☐	☐	☐	☐	☐
<u>Human</u> <u>behavior/human</u> <u>factors specialists</u>	☐	☐	☐	☐	☐
<u>General end users</u>	☐	☐	☐	☐	☐

In this section, you will be asked about your thoughts on **human-centered cybersecurity**.

Even if you don't know what human-centered cybersecurity is, we are interested in what immediately comes to mind for you when you read this term.

In one or two sentences, how would you describe human-centered cybersecurity?

Characters remaining: 1000

In one or two sentences, how would you describe the primary goals of human-centered cybersecurity?

Characters remaining: 1000

In your opinion, who are the "humans" referred to in the term human-centered cybersecurity? Select all that apply.

☐ Cybersecurity/IT decision makers

☐ Technical cybersecurity/IT professionals

☐ Cybersecurity/IT policy and regulatory professionals

☐ General end users

☐ Other (please specify):

Which of the following best aligns with your understanding of human-centered cybersecurity?

☐ Making security easier for end users, for example, designing usable security technologies or simplifying security processes.

☐ Helping end users be more security-aware, for example, holding security awareness campaigns or developing training programs.

☐ Considering all human influences in security, for example, cybersecurity professionals' decision-making processes or end users' cybersecurity attitudes and behaviors

To what extent are you familiar with the meaning of human-centered cybersecurity?

- ☐ Not at all familiar
- ☐ A little familiar
- ☐ Somewhat familiar
- ☐ Very familiar

To what extent are you confident in your ability to describe human-centered cybersecurity?

- ☐ Not at all confident
- ☐ A little confident
- ☐ Somewhat confident
- ☐ Very confident

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In this section, you will be asked about your thoughts about the roles of people in cybersecurity.

Rate the extent to which the following groups impact cybersecurity in your organization.

[illegible]

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Rate your level of disagreement or agreement with the following statements about cybersecurity failures.

[illegible]



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Rate your level of disagreement or agreement with the following statements about the role of technology in cybersecurity.

[illegible]

Please read and use the following working definition of **human-centered cybersecurity** for the rest of the survey:

Human-centered cybersecurity is an approach that considers people's needs, motivations, behaviors, and abilities to improve how individuals and organizations interact with cybersecurity systems, products, processes, and services.

Did you read the entire definition of human-centered cybersecurity?

☐ No

☐ Yes

Which of the following groups do you believe should be responsible for incorporating human-centered cybersecurity in your organization?
Select all that apply.

☐ Cybersecurity/IT decision makers

☐ Technical cybersecurity/IT professionals

☐ Cybersecurity/IT policy and regulatory professionals

☐ Human behavior/human factors specialists

☐ General end users

☐ Other (please specify)

Which cybersecurity areas should human-centered approaches influence the most within your organization? Select all that apply.

- ☐ Govern – Setting and communicating cybersecurity rules and policies
- ☐ Identify – Understanding current cybersecurity risks
- ☐ Protect – Implementing measures to reduce cybersecurity risks
- ☐ Detect – Finding and analyzing potential cybersecurity threats
- ☐ Respond – Taking action when cybersecurity threats are detected
- ☐ Recover – Restoring systems and data after a cybersecurity incident
- ☐ None of these areas
- ☐ Not sure

In which cybersecurity areas are human-centered approaches incorporated within your organization today? Select all that apply.

- ☐ Govern – Setting and communicating cybersecurity rules and policies
- ☐ Identify – Understanding current cybersecurity risks
- ☐ Protect – Implementing measures to reduce cybersecurity risks
- ☐ Detect – Finding and analyzing potential cybersecurity threats
- ☐ Respond – Taking action when cybersecurity threats are detected
- ☐ Recover – Restoring systems and data after a cybersecurity incident
- ☐ None of these areas
- ☐ Not sure

Rate the extent to which human-centered cybersecurity impacts your organization's **overall cybersecurity effectiveness/posture**.

- ☐ Very negatively impacts
- ☐ Somewhat negatively impacts
- ☐ No impact
- ☐ Somewhat positively impacts
- ☐ Very positively impacts
- ☐ Not sure

Rate the extent to which human-centered cybersecurity impacts your **ability to perform your job**.

- ☐ Very negatively impacts
- ☐ Somewhat negatively impacts
- ☐ No impact
- ☐ Somewhat positively impacts
- ☐ Very positively impacts
- ☐ Not sure

What do you think are the most significant benefits of human-centered cybersecurity in your organization? Select up to 3 benefits.

- ☐ Improved cybersecurity awareness and training
- ☐ Reduced or less costly cybersecurity incidents or errors
- ☐ Increased trust in cybersecurity systems and processes
- ☐ Enhanced threat detection
- ☐ Enhanced cybersecurity culture
- ☐ Improved compliance with policies and regulations
- ☐ Better alignment with organizational goals
- ☐ No benefits
- ☐ Not sure
- ☐ Other (please specify):

How, if at all, is human-centered cybersecurity being successfully incorporated in your organization? Please provide one or two examples.

Characters remaining: 1000

How, if at all, could human-centered cybersecurity play a stronger role in your organization? Please provide one or two examples.

Characters remaining: 1000

To what extent do you think artificial intelligence (AI) will increase or decrease the **involvement of humans** in shaping:

	Significantly decrease	Somewhat decrease	No change	Somewhat increase	Significantly increase	Not sure
Cybersecurity systems and technologies	☐	☐	☐	☐	☐	☐
Cybersecurity practices	☐	☐	☐	☐	☐	☐
Cybersecurity policies	☐	☐	☐	☐	☐	☐

What additional thoughts, if any, do you have about how AI might impact the role of humans in cybersecurity?

Which of the following best describes your organization?

☐ Educational institution

☐ Government (federal, state, or local)

☐ Non-profit organization

☐ Private industry

☐ Other (please specify):

In which region is your organization primarily based?

☐ Asia

☐ Caribbean Islands

☐ Europe

☐ North America

☐ Oceania

☐ Pacific Islands

☐ South America



We thank you for your time spent taking this survey.
Your response has been recorded.