

# Operational Technology Cybersecurity Trends



Summary Results | August 2021

# EXECUTIVE OVERVIEW

Between June and July 2021, Gatepoint Research invited selected IT/OT, Security and Operations executives to participate in a survey themed *Operational Technology Cybersecurity Trends*. 102 executives have participated to date.

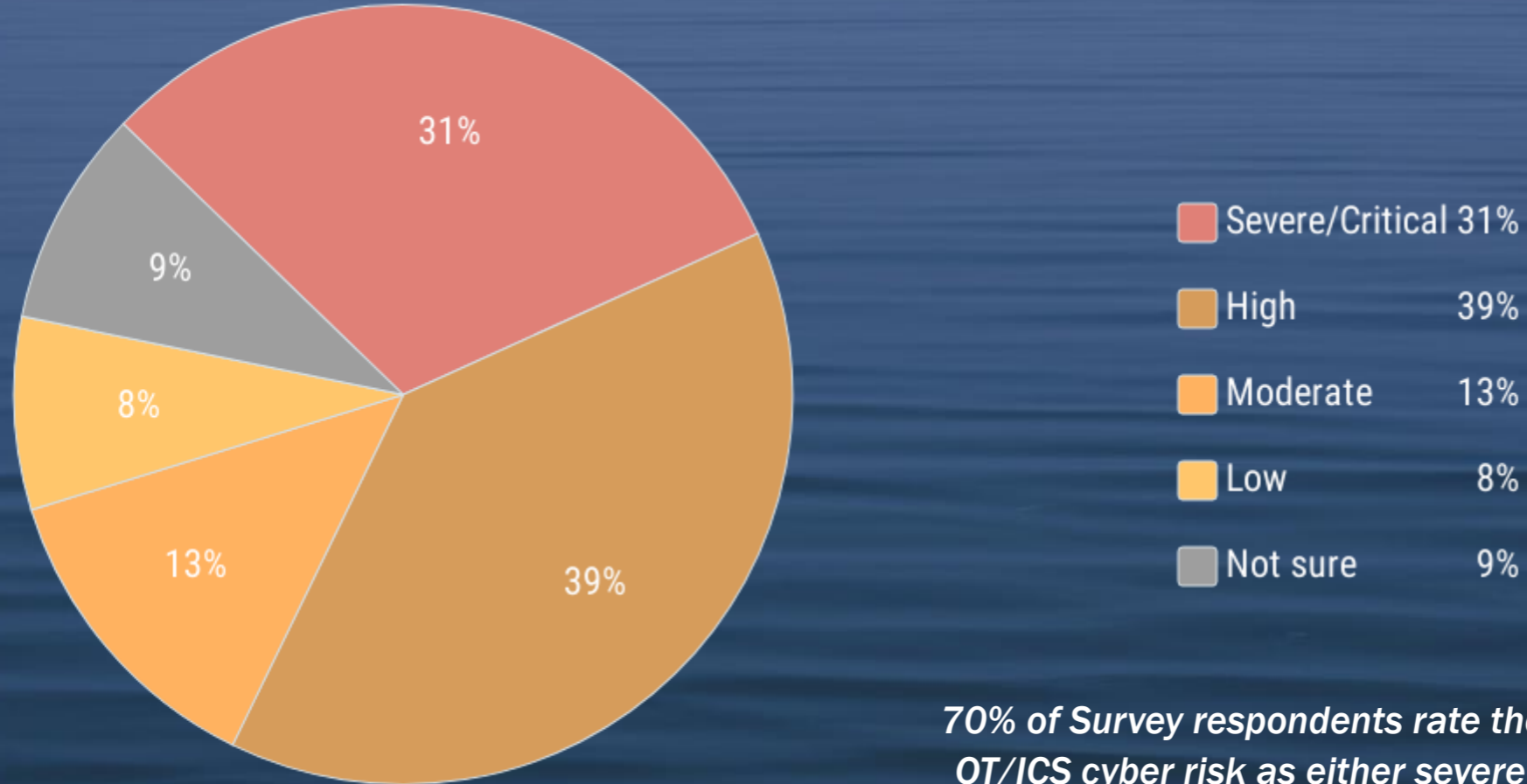
- Management levels represented are all senior decision makers and influencers: 10% hold the title CxO, 6% are VPs, 22% are directors, 52% are managers, and 10% are security engineers or architects.
- Survey participants represent firms from a wide variety of industries, including Power, Chemicals, Oil & Gas, Life Sciences, Food & Beverage, Pulp & Paper, DCS & Engineering Services, Mining & Metals, and Manufacturing.

The cyber risks that may affect Operational Technology (OT) and Industrial Control Systems (ICS) extend well beyond headline-grabbing malicious outside actors. The unintentional security breaches posed by employees or contractors can be just as disastrous. Or, simply not having an up-to-date inventory of control system configurations might take an entire production facility offline. How are organizations doing at staying on top of OT/ICS cybersecurity threats?

This survey asked respondents to report:

- What is their organization's perception of OT/ICS cyber risk? How have security incidents changed in the past year?
- What approaches does their organization take to prevent OT/ICS security threats? And how long does it typically take to detect a threat?
- What are their top OT/ICS security initiatives currently?

# What is your organization's perception of operational technology (OT) and industrial control systems (ICS) cyber risk?



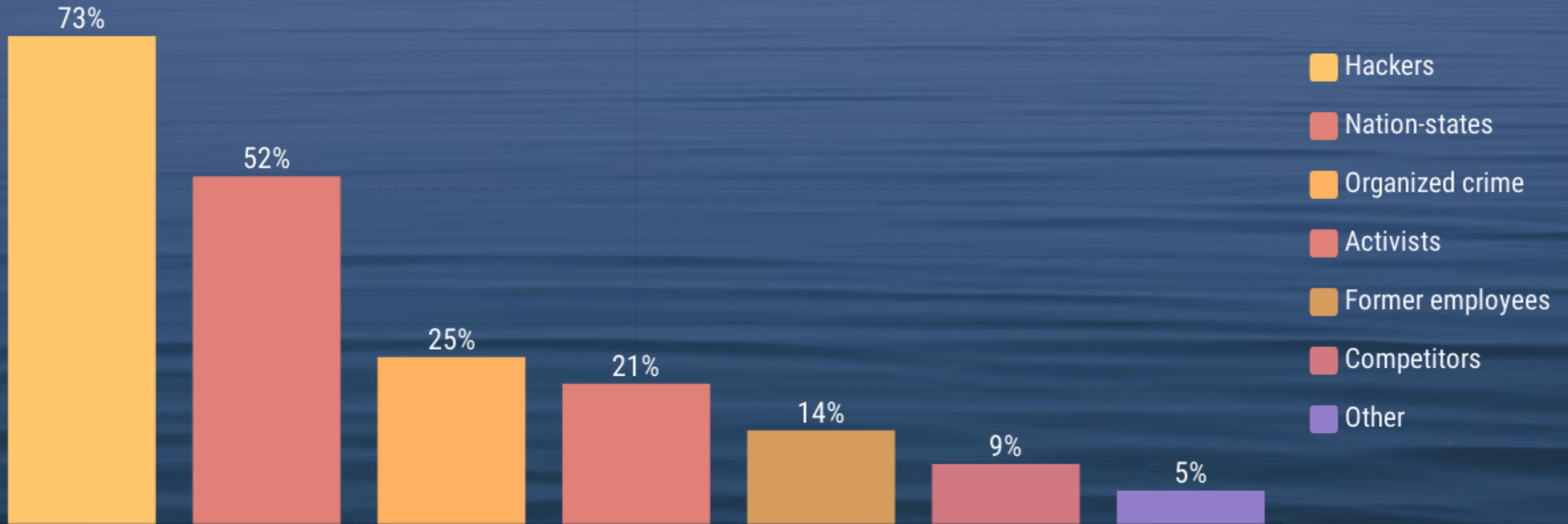
*70% of Survey respondents rate the potential OT/ICS cyber risk as either severe or critical.*

# How have OT/ICS security incidents changed in the past year?



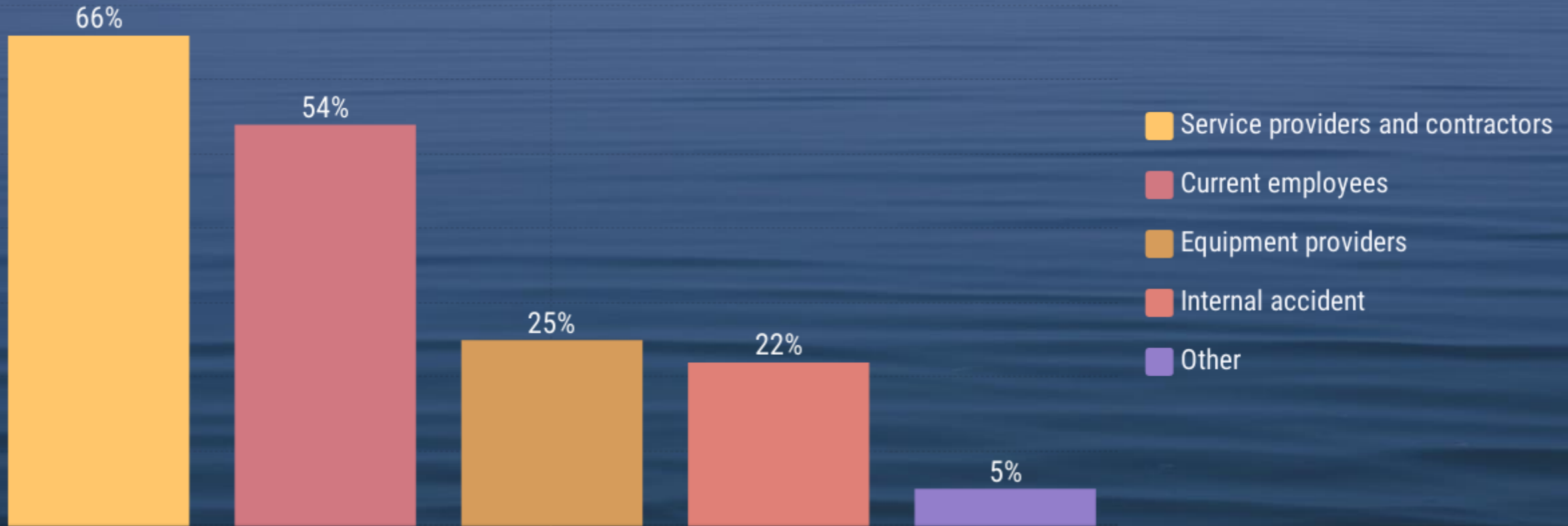
*A staggering 67% of survey participants report an increase in OT/ICS security incidents in the past year.*

# Which two malicious OT/ICS security threats concern you the most?



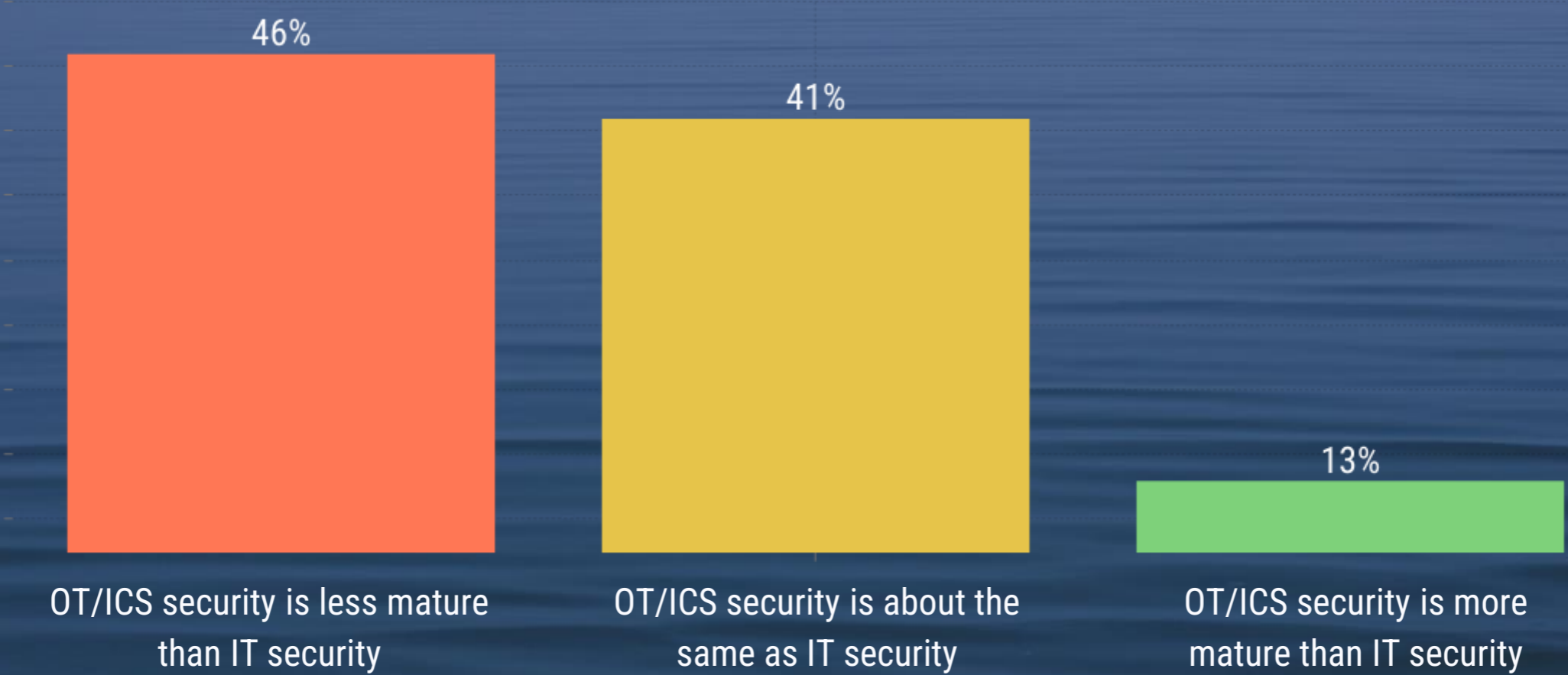
*Of all malicious security threats, nearly three quarters of respondents rate hackers as their highest concern, with more than half also being worried about nation-states.*

# Which two user groups pose the greatest *unintentional* OT/ICS security risk?



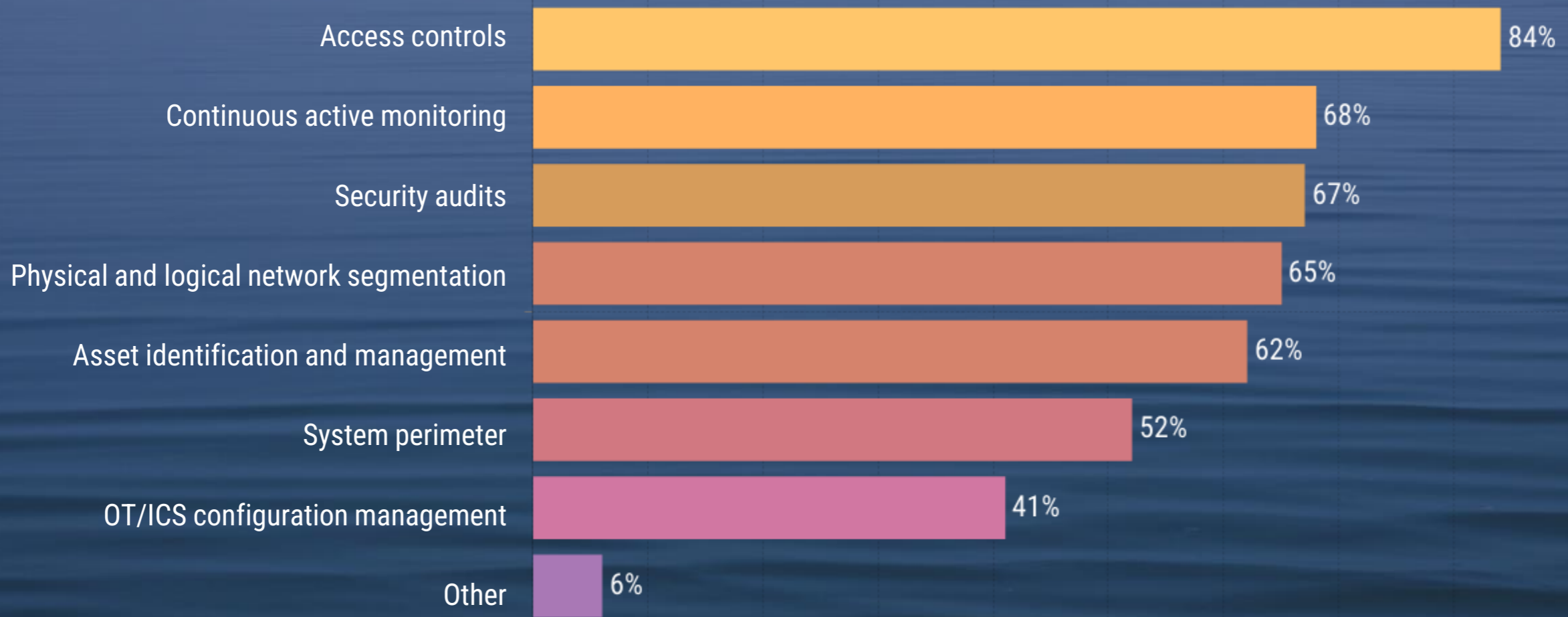
*Two thirds of those surveyed are primarily concerned about unintended security breaches caused by service providers and contractors. More than half cite the OT/ICS security risk posed by current employees to be a top worry for them.*

# How do you rate OT/ICS cybersecurity vs. IT cybersecurity maturity in your organization?



*Nearly half of respondents rate OT/ICS security as less mature than IT security; just 13% say it exceeds IT security.*

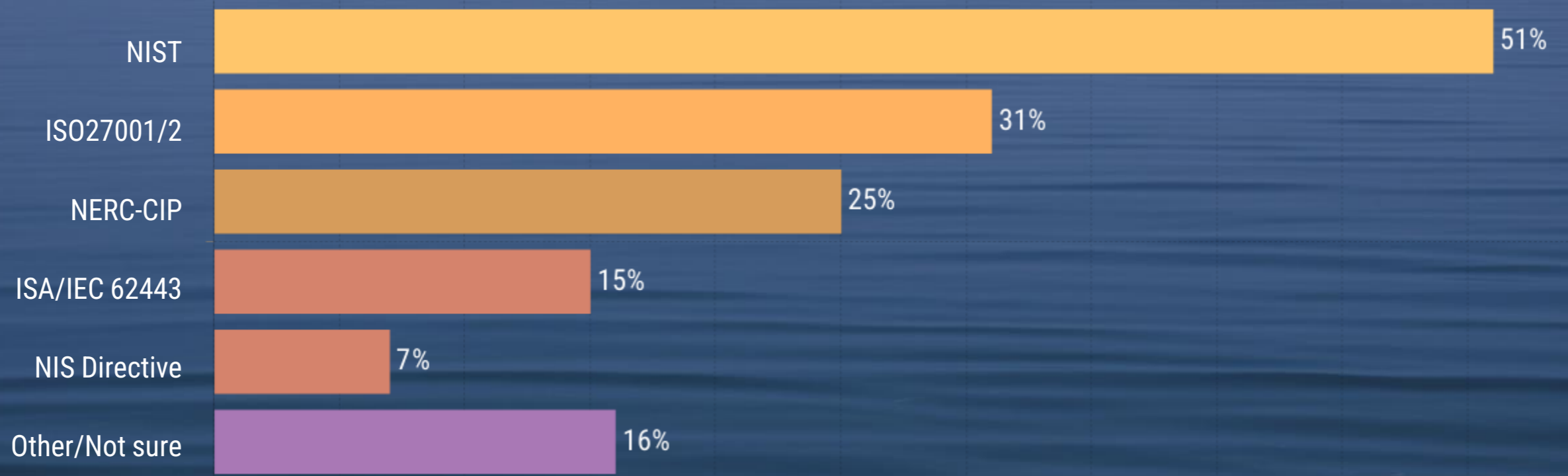
# What approaches does your organization take to prevent OT/ICS security threats?



*Most organizations surveyed are fairly proactive in their prevention of OT/ICS security threats, with more than half implementing 6 of the 7 methods listed.*

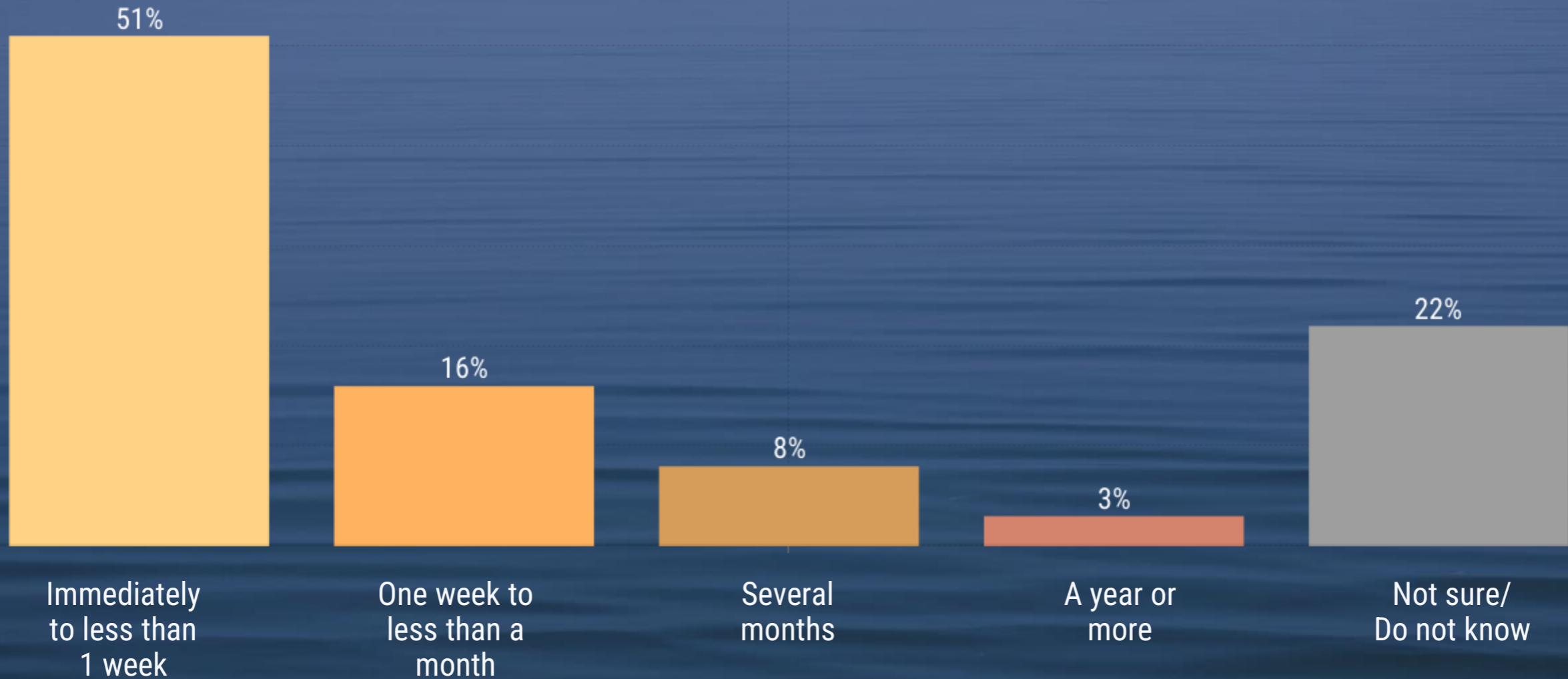


# What security frameworks are you using?



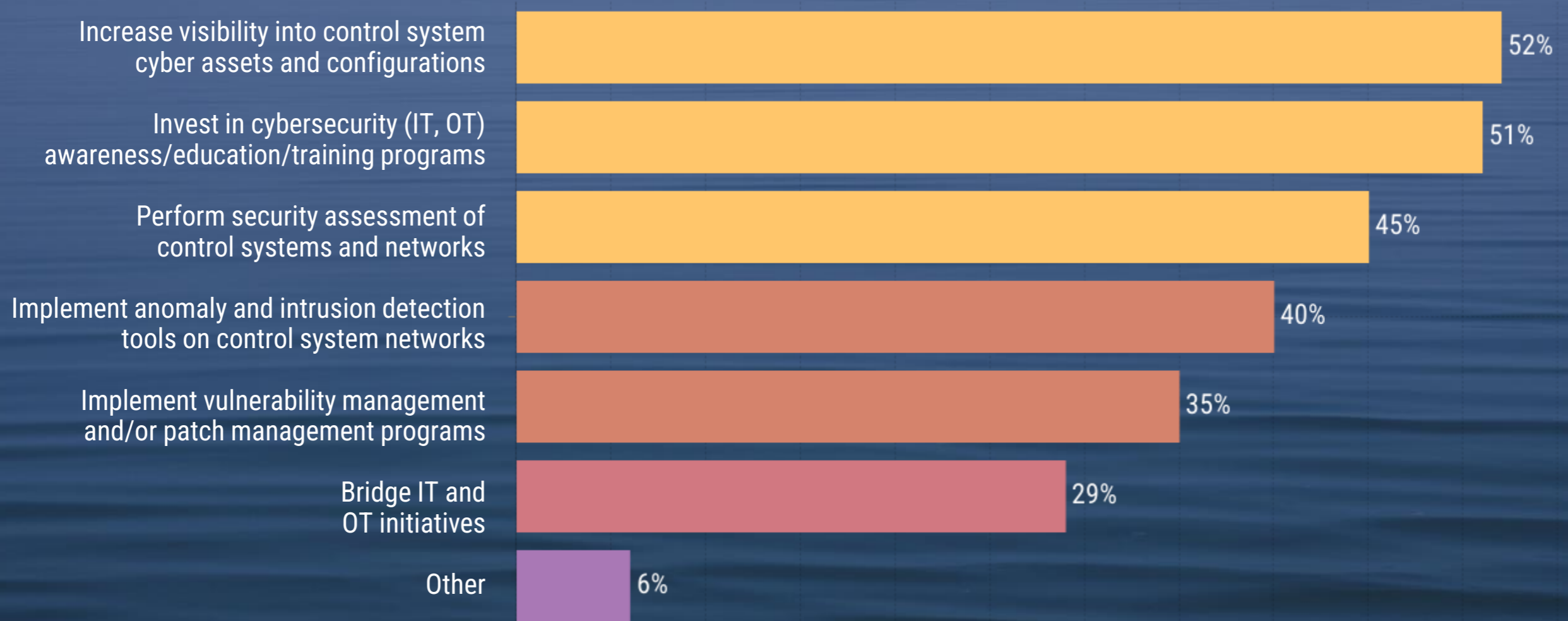
*Just over half of survey participants use NIST. Least popular is NIS Directive, with only 7% indicating usage.*

# How long does it typically take to detect an OT/ICS security threat?



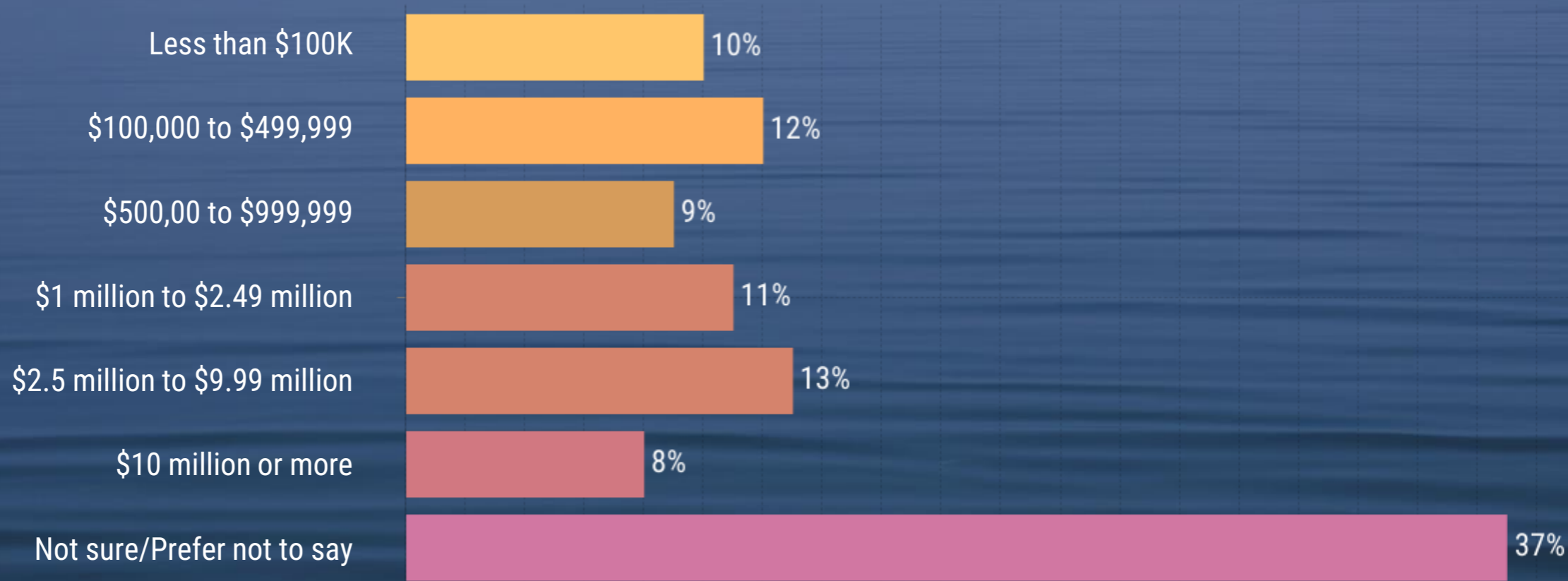
*Although half of respondents can detect a security threat in less than a week, 27% say it could take anywhere from a week to a year or more - and 22% don't even know how long it might take.*

# What are your top 3 OT/ICS security initiatives currently?



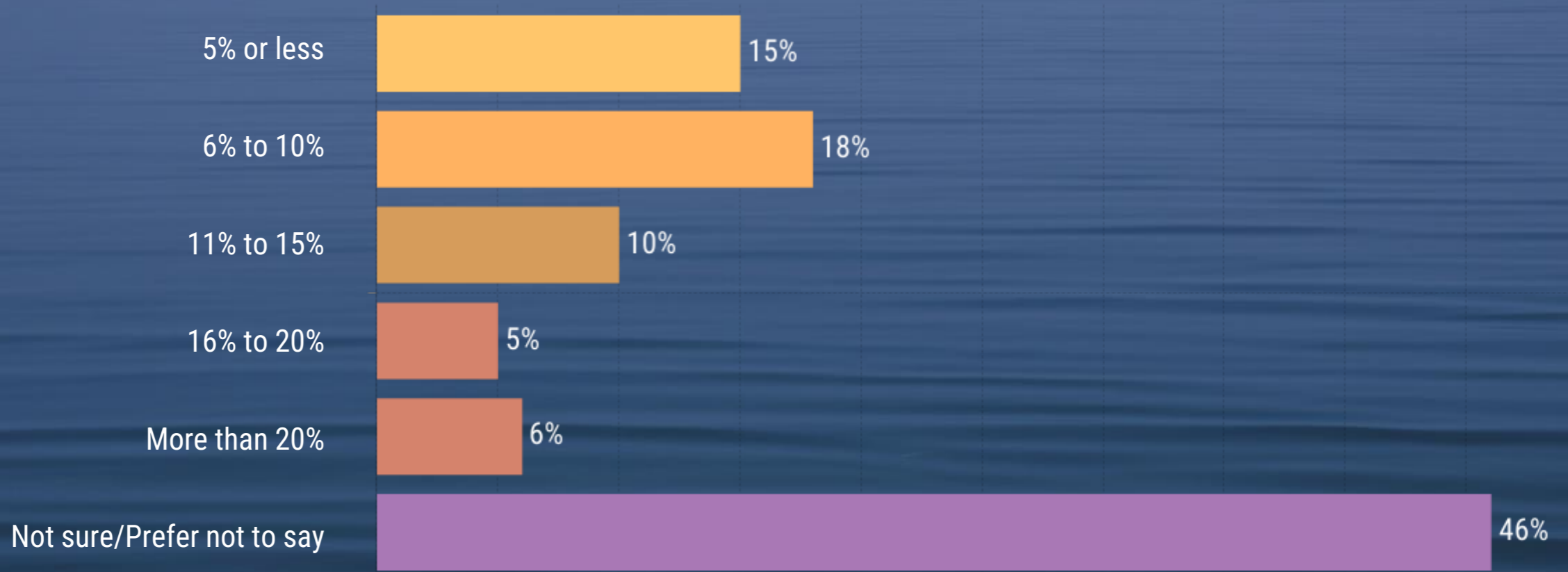
*Respondents are primarily focused on three top initiatives: increasing visibility into control system cyber assets and configurations, expanding cybersecurity awareness/education, and assessing security of control systems and networks.*

# What is your organization's total OT/ICS cybersecurity budget for 2021?



*OT/ICS security budgets run a fairly wide gamut, from less than \$100k to \$10 million or more. 37% of survey participants are either not sure or prefer not to divulge.*

# What percent of the total IT budget is allocated to OT/ICS cybersecurity?

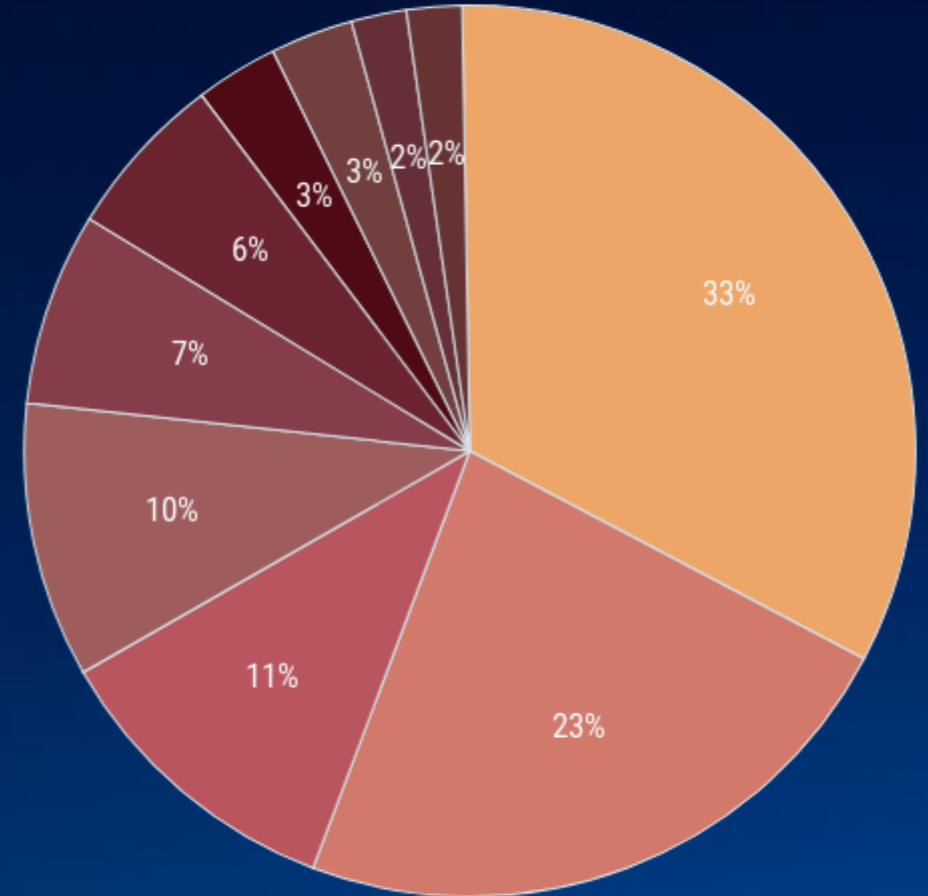


*Considering the total IT budget for organizations, OT/ICS allocation is as low as 5% (or less), up to as much as 20% or more among those surveyed, though almost half would rather not disclose (or just do not know).*

# INDUSTRY SECTORS

Survey participants represent primarily power, chemicals and refining industries.

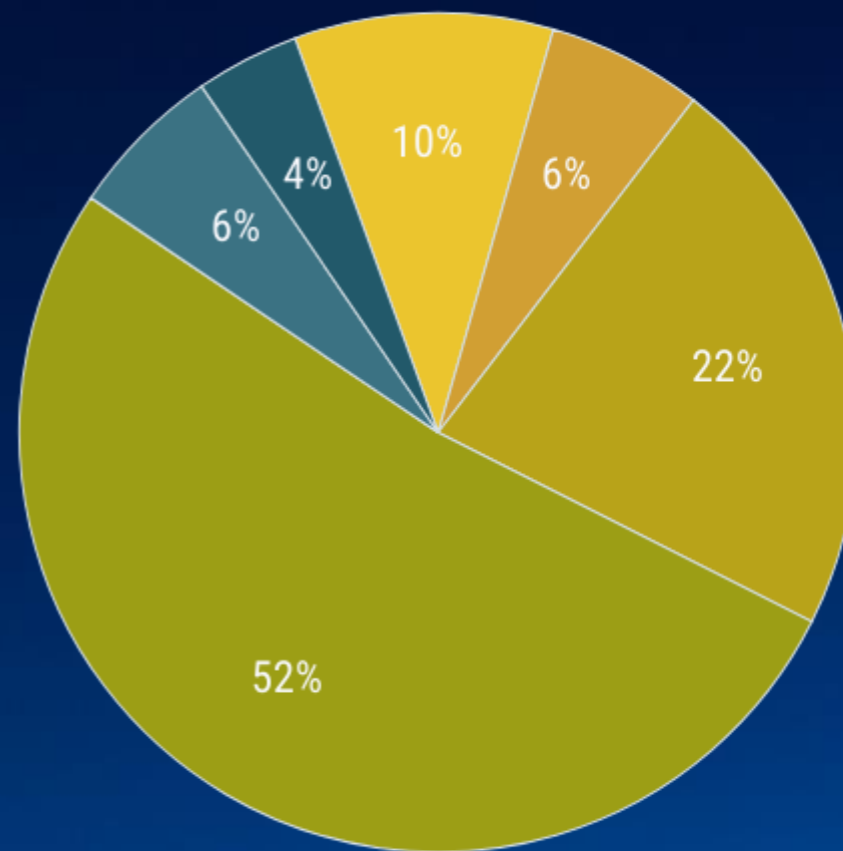
Power	33%
Chemicals	23%
Oil and Gas	11%
Life Sciences	10%
Food and Beverage	7%
Pulp and Paper	6%
DCS and Engineering Service	3%
Mining and Metals	3%
Manufacturing	2%
OTHER	2%



# JOB LEVEL

**38% of survey respondents hold director or executive level positions in their organization.**

CxO	10%
VP	6%
Director	22%
Manager	52%
Security Engineer	6%
Security Architect	4%





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