

The Executive Cyber Viewpoint

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avertro
The cyber-why company

20+ years of cybersecurity experience. UNSW CSE Graduate.

Currently also



Advisory Board Member, UNSW
Institute for Cyber Security



Advisory Board Member, UTS
Faculty of Engineering and IT

Previously



Chief Technology Officer, APAC



Director, Cybersecurity

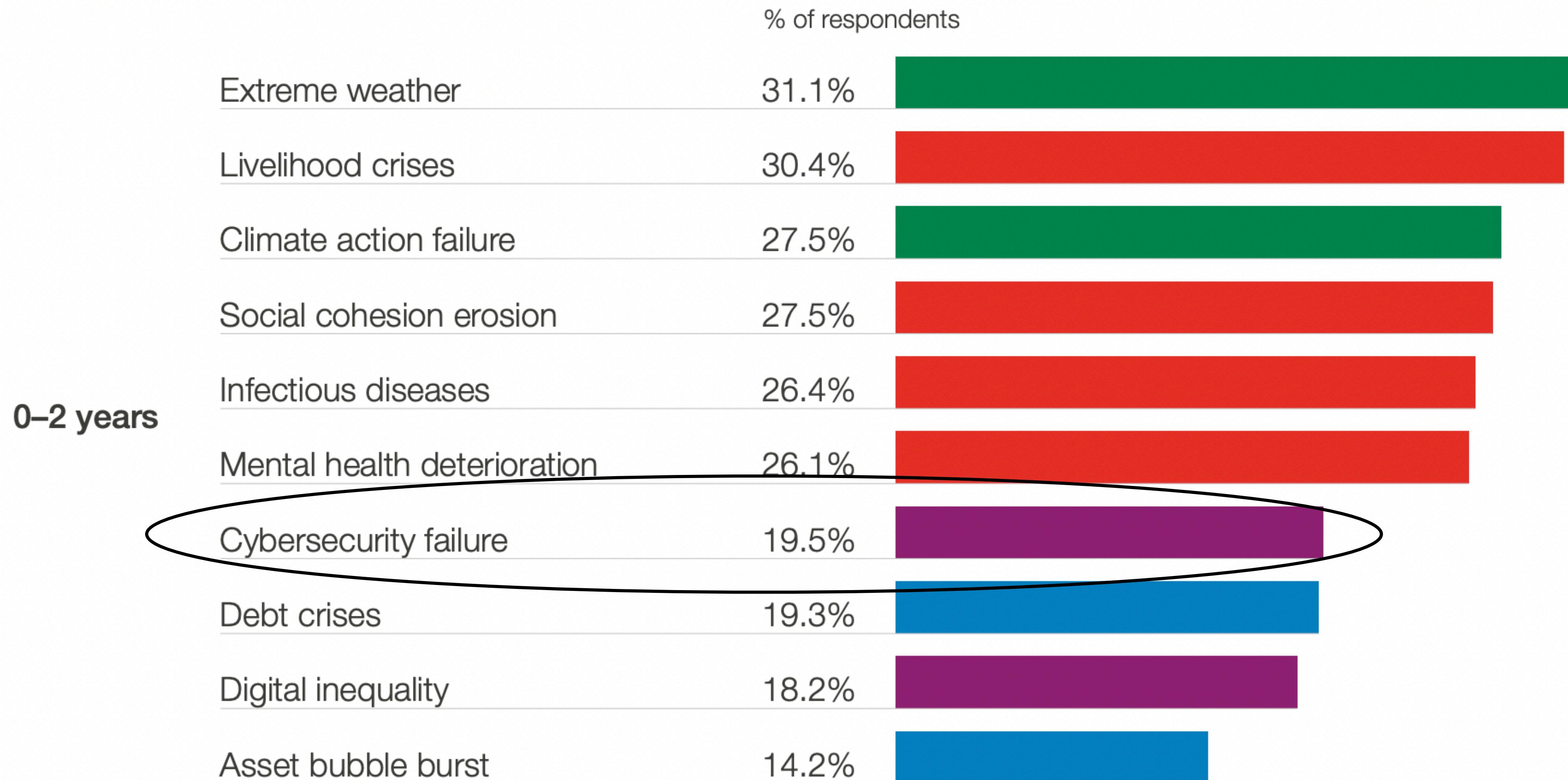


Bloomberg IAN YIP
MCAFEE CHIEF TECHNOLOGY OFFICER, ASIA-PACIFIC

Global Risks Horizon

When will risks become a critical threat to the world?

Economic Environmental Geopolitical Societal Technological



Source: World Economic Forum Global Risks Report 2022

Global cost of cybercrime (USD)

\$6 Trillion

2021

\$10.5 Trillion

2025

Measured as a country, cybercrime would currently be the world's third-largest economy after the U.S. and China.

By 2025, cybercrime will be exponentially larger than the damage inflicted from natural disasters in a year, and more profitable than the global trade of all major illegal drugs combined.

Source: Cybersecurity Ventures

What do cybercriminals earn annually (USD)?

\$1,992,000

High earners

\$900,000

Middle earners

\$42,000

Low earners



Source: Dr. Mark McGuire – Into the Web of Profit study

For a price, anyone can become a cybercriminal

Product/Service	Price (USD)
SMS Spoofing	\$20 / month
Custom Spyware	\$200
Hacker for Hire	Starts at \$200
Malware Exploit Kit	\$200 - \$700
Zero-Day Adobe Exploit	\$30,000
Zero-Day iOS Exploit	\$250,000

Source: Dr. Mark McGuire – Into the Web of Profit study

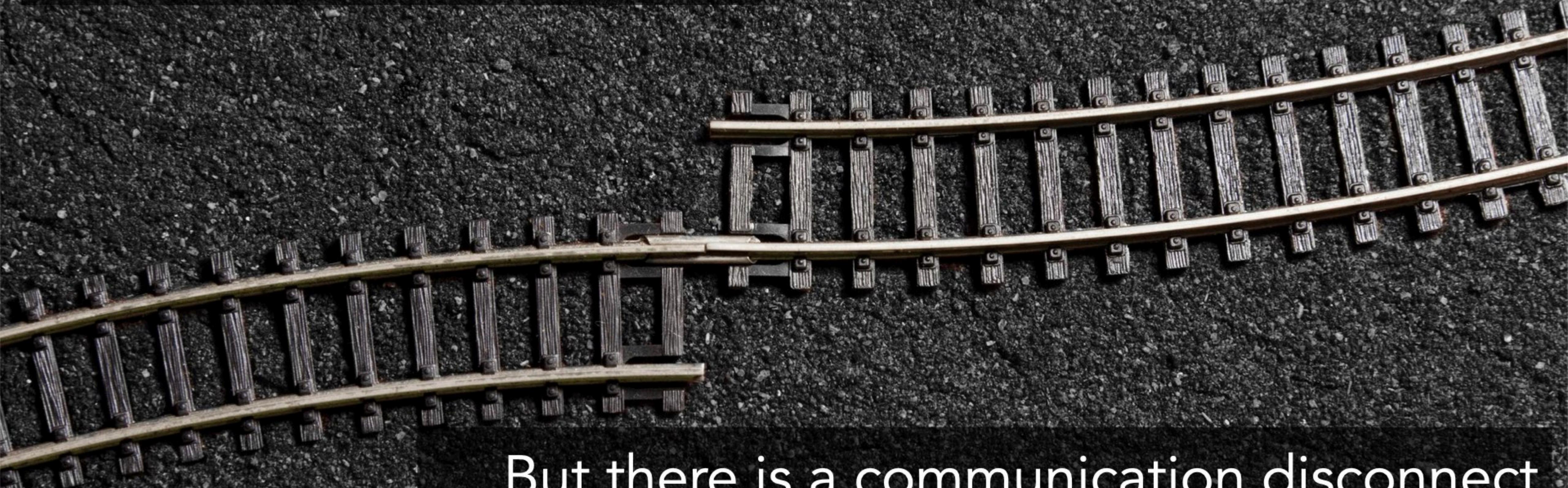


A professional portrait of Jim Hagemann Snabe, Chairman of A.P. Moller Maersk. He is a middle-aged man with dark hair, wearing a dark suit jacket over a white shirt with a subtle striped pattern. He is smiling slightly and looking directly at the camera. The background is a soft-focus indoor setting.

“It (the NotPetya cyber incident) cost us between \$250 to \$300 million. It is time to stop being naive when it comes to cybersecurity.”

Jim Hagemann Snabe
Chairman, A.P. Moller Maersk

Cybersecurity is a board and executive-level issue today



But there is a communication disconnect between the cyber team and everyone else

Common security metrics are too technical

Intrusion Attempts

Number of Security
Events and Alerts

Number of
Vulnerabilities Found

Mean Time to
Detect (MTTD)

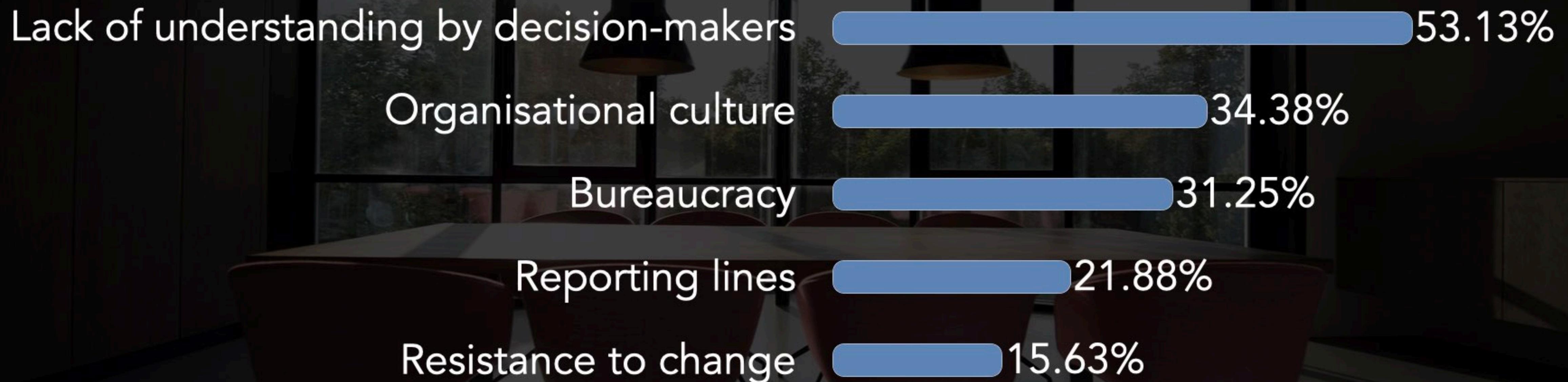
Mean Time to Respond/
Recover (MTTR)

Mean Time to
Contain (MTTC)

Patching Cadence

Vendor Risk

Biggest challenges when requesting funding for strategic & transformative initiatives



Source: Avertro Cyber Leadership Effectiveness Study 2021

Board & C-suite attitude towards managing cyber risk

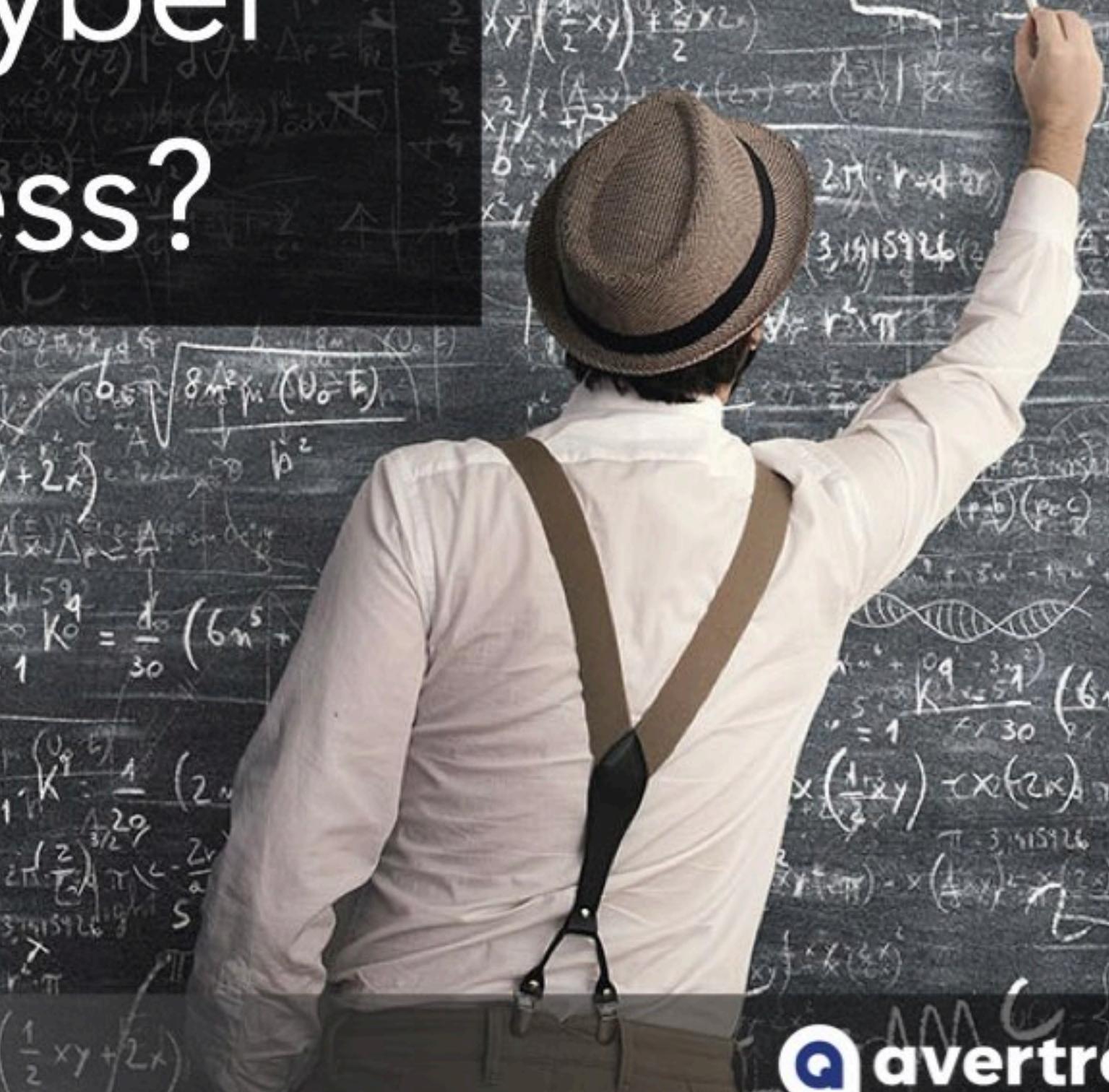


Source: Avertro Cyber Leadership Effectiveness Study 2021

Respondents who selected:

- Lack of understanding by decision-makers
- Organisational culture
- Bureaucracy

How can we improve Cyber Leadership Effectiveness?





For boards and executives, cybersecurity
is really all about managing risk

Are these business or technical risks?

There are 500 vulnerabilities in our cloud infrastructure that need to be addressed.

Our fleet of servers in the data centre have not been patched for 3 months.

Cyber risks at the executive level are not technical

Always ask: "So what?"

There are 500 vulnerabilities in our cloud infrastructure
that need to be addressed. So what?

Answer: This technical risk increases the following
business risk - **Exfiltration of sensitive data** stored in
our cloud resulting in regulatory fines.

Cyber risks at the executive level are not technical

Always ask: "So what?"

Our fleet of servers in the data centre have not been patched for 3 months. So what?

Answer: This technical risk increases the following business risk - **System unavailability** as a result of a malicious cyber attack resulting in the inability to process customer financial transactions.

Executives and board members only care about the business risks

Data Breach Risk: Exfiltration of sensitive data stored in our cloud resulting in regulatory fines.

System Availability Risk: System unavailability as a result of a malicious cyber attack resulting in the inability to process customer financial transactions.

Closing the knowledge gap

What executives and board members needs answers to

Why and What

1. Why do we care about cyber risk?
2. What are our key assets?
3. What are our cyber risks and capabilities?
4. What are our goals and desired outcomes?
5. What are the gaps?

How and When

1. How are we measuring cyber?
2. How are we currently doing and is it enough?
3. How are we going to close our gaps?
4. How do we know we are spending the right amount?
5. When will we get there?

Closing the knowledge gap

- Understand the value at stake
- Plain and simple language
- Financial implications
- Independent view



How do you better **empower** business
executives to ask the **right questions** when it
comes to **cybersecurity**?

Setting up a robust model

What did the Avertro Cyber Leadership Effectiveness Study data tell us?

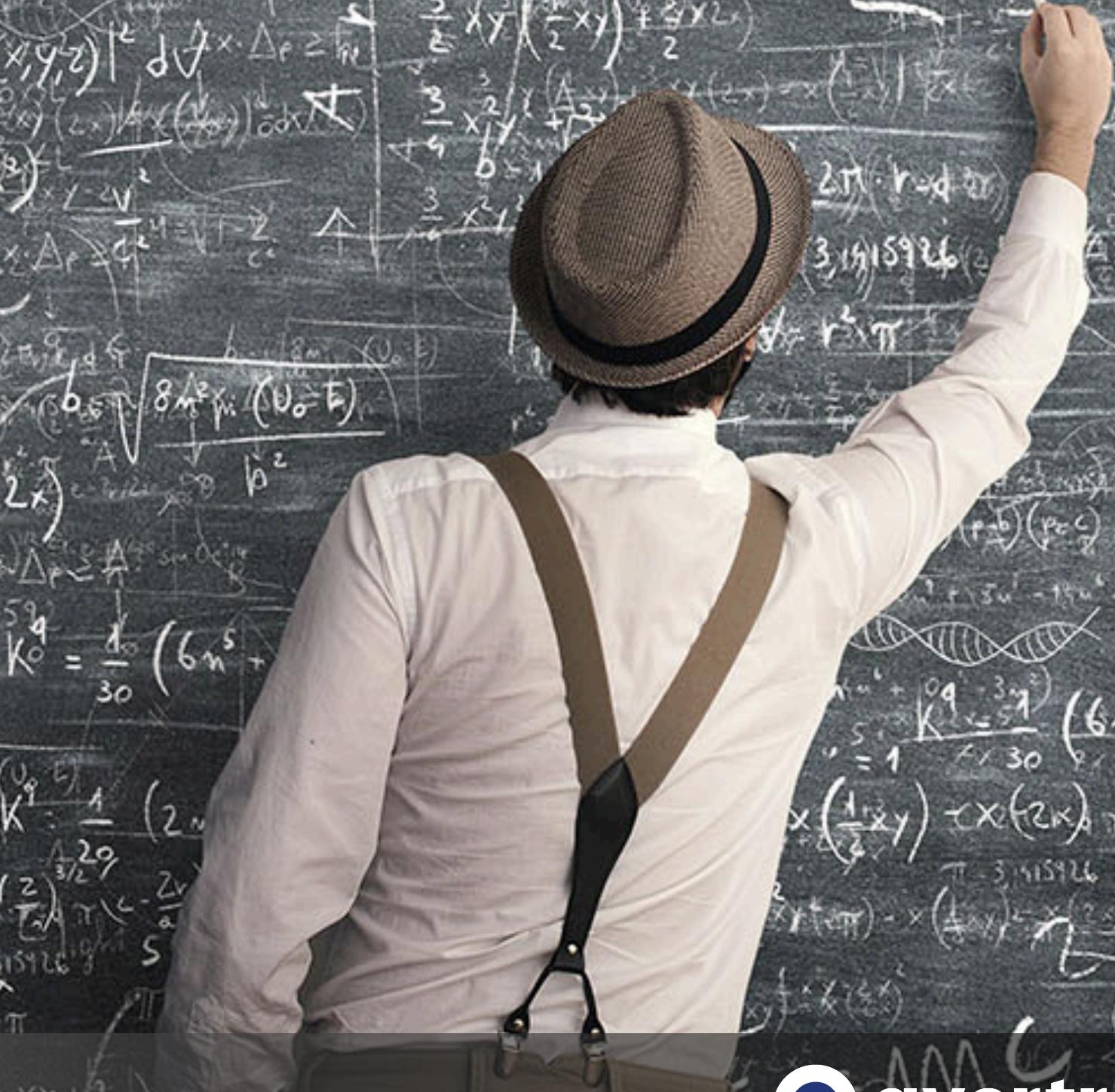
How can the board and executives help?

1. Take a strategic approach to managing cyber risk.
2. Drive accountability, setting the right KPIs and incentives.
3. Set the right tone.

What can the cybersecurity leader do?

1. Bridge the knowledge gap.
2. Humanise the data.
3. Be transparent.

Key Takeaways



1. Use the language of risk, business impact, capabilities, and outcomes.

2. Investment is driven by risks, business/financial impacts, regulatory requirements, key industry trends, and audit findings.

3. There must be logical, defensible ties between (and to) the key cyber risk metrics being tracked and reported on.