

What 2020 teaches us about cybersecurity awareness, behaviour & culture

Dr Jessica Barker

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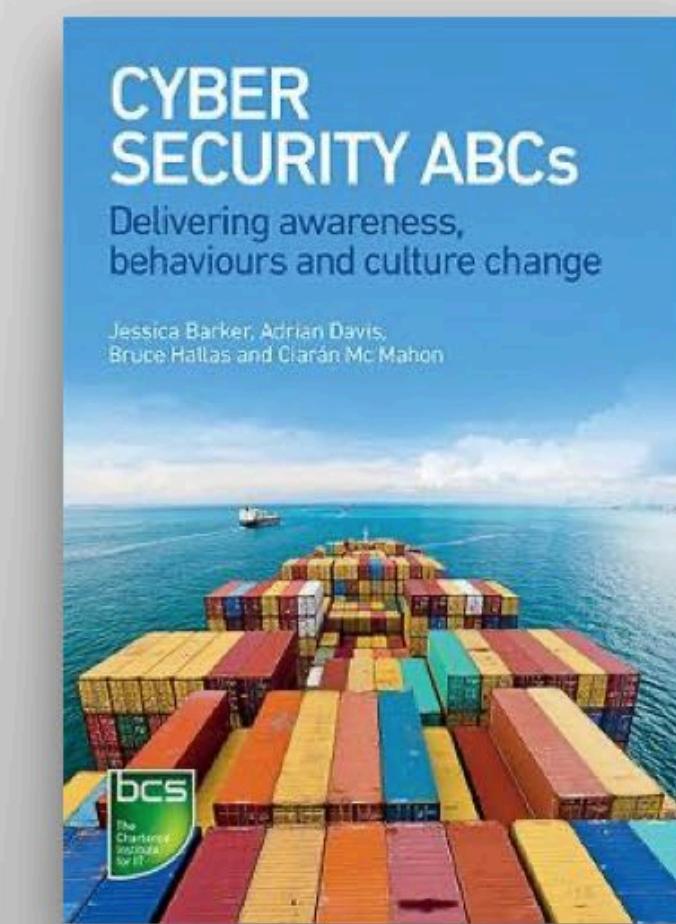
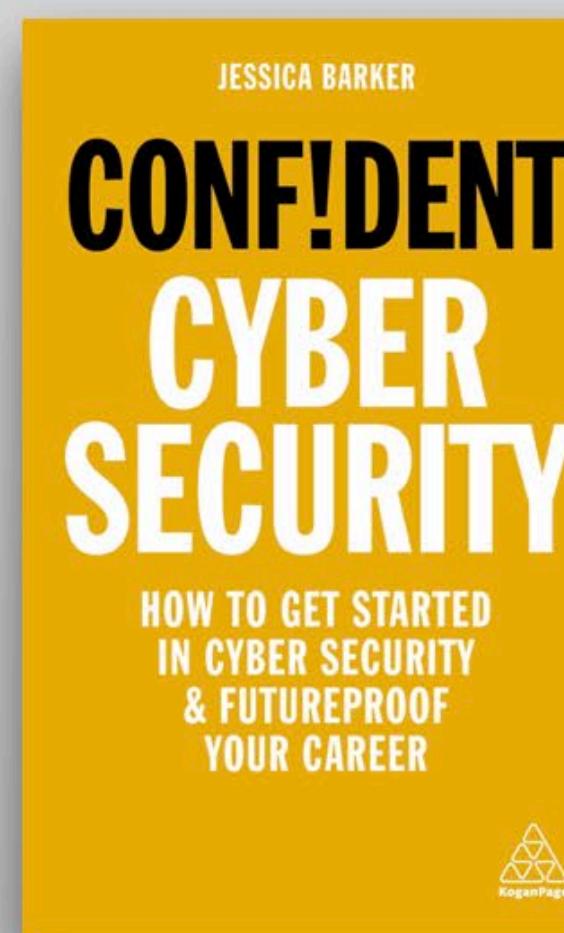


Co-CEO of Cygenta

Chair of ClubCISO

Author of number one best-seller Confident Cyber Security

Co-author of upcoming Cyber Security ABCs





Coronavirus lockdown

Face mask shortage

COVID-19: WHEN WILL THE OUTBREAK END?

Seniors at risk

Coronavirus death toll tops 20,000 worldwide

Who led the digital transformation of your company?

A) CEO

B) CTO

 C) COVID-19

12 OCT 2020

NEWS

Ransomware Tops 2020 Threat Rankings

Kroll's proprietary data on cyber incident response cases shows that ransomware attacks accounted for over one-third of all cases as of September 1, 2020.

Fintech Company Survived Ransomware Attack Without Paying Ransom

Garmin reportedly paid multimillion-dollar ransom after suffering cyberattack

A reported \$10 million was demanded in ransom after the attack took Garmin services offline

LILY HAY NEWMAN

SECURITY 10.29.2020 03:17 PM

Ransomware Hits Dozens of Hospitals in an Unprecedented Wave

As Covid-19 infections spike in many parts of the US, malware gangs are wreaking havoc on the health care system.

A fifth of UK workforce received a Covid-19-themed phishing email

By [Sead Fadilpašić](#) September 23, 2020

Always-on philosophy and an increase in the number of emails is driving a spike in fraud attempts.

Phishing in a Pandemic: 1 in 4 Americans Received a COVID-19 Related Phishing Email

opentext™

Covid-19 sparks 73% surge in HMRC phishing scams

Robert Scammell | 20th November 2020 (Last Updated November 20th, 2020 12:42)

Impersonation scams almost double in first half of 2020 as criminals exploit Covid-19 to target victims

Google detecting 18m malware and phishing messages per day related to Covid-19

Twitter hack: Staff tricked by phone spear-phishing scam

© 31 July

Russian state-sponsored hackers target Covid-19 vaccine researchers

UK National Cyber Security Centre says drug firms and research groups being targeted by group known as APT29

South Korea says it foiled North Korea attempt to hack its COVID-19 vaccine makers



Microsoft says Russian and North Korean hackers have also targeted researchers in Canada and 4 other countries

UK, US and Canada allege Russian cyberattacks on Covid-19 research centers

By [Zachary Cohen](#), [Luke McGee](#) and [Alex Marquardt](#), CNN

Updated 1104 GMT (1904 HKT) July 17, 2020

Microsoft says three APTs have targeted seven COVID-19 vaccine makers

The three state-sponsored hacker groups (APTs) are Russia's Strontium (Fancy Bear) and North Korea's Zinc (Lazarus Group) and Cerium.

Exclusive: China-backed hackers 'targeted COVID-19 vaccine firm Moderna'





November 13, 2020

The Independent Scientific Advisory Group for Emergencies (SAGE)

The Independent SAGE Report 22

UK government messaging and its association with public understanding and adherence to COVID-19 mitigations:

Five principles and recommendations for a COVID communication reset

www.independentSAGE.org
@independentSAGE
YouTube: IndependentSAGE

Submitted to The UK Government and the People of Great Britain & Northern Ireland by Sir David King, former Chief Scientific Adviser, UK Government, Chair of Independent SAGE

“Precise messaging is more readily understood which, in turn, enables adherence and consistent behavioural enactment.

Imprecise, inconsistent, contradictory, untimely, or vague messaging, by contrast, can lead to mistakes, perceived inequities, frustration, and non-adherence.”

“There is absolutely no point in trying to enforce strategies if people are not readily able to adopt them”

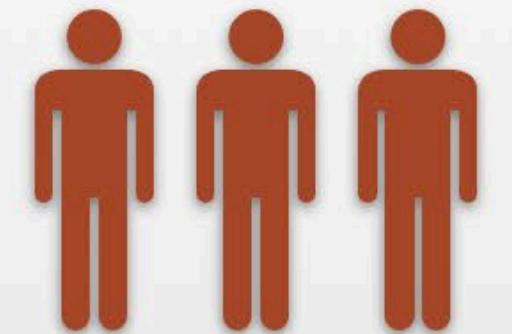


Exhibit A:

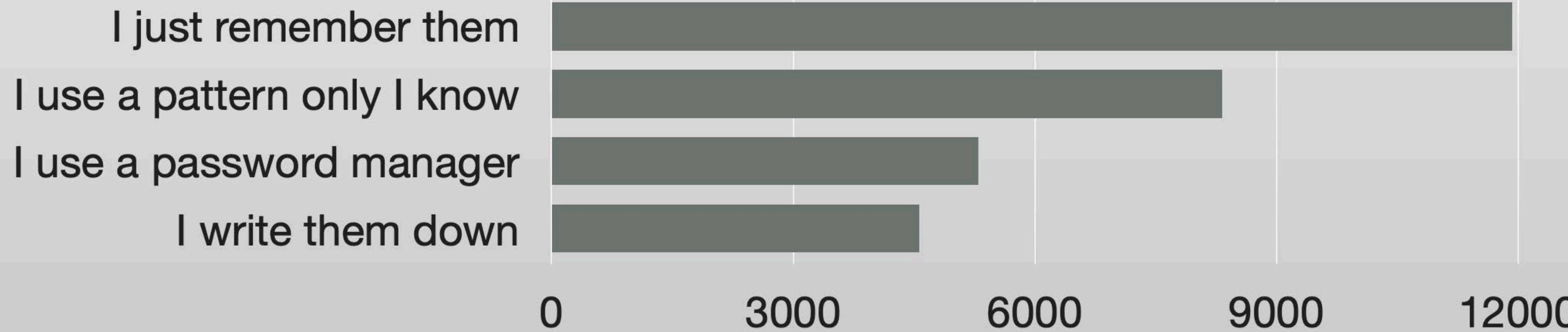
An organisation that has password
rules but no password manager or
single sign on



How do you manage your
passwords?



30,000 people



“Don’t click
malicious
links”

Exhibit B:

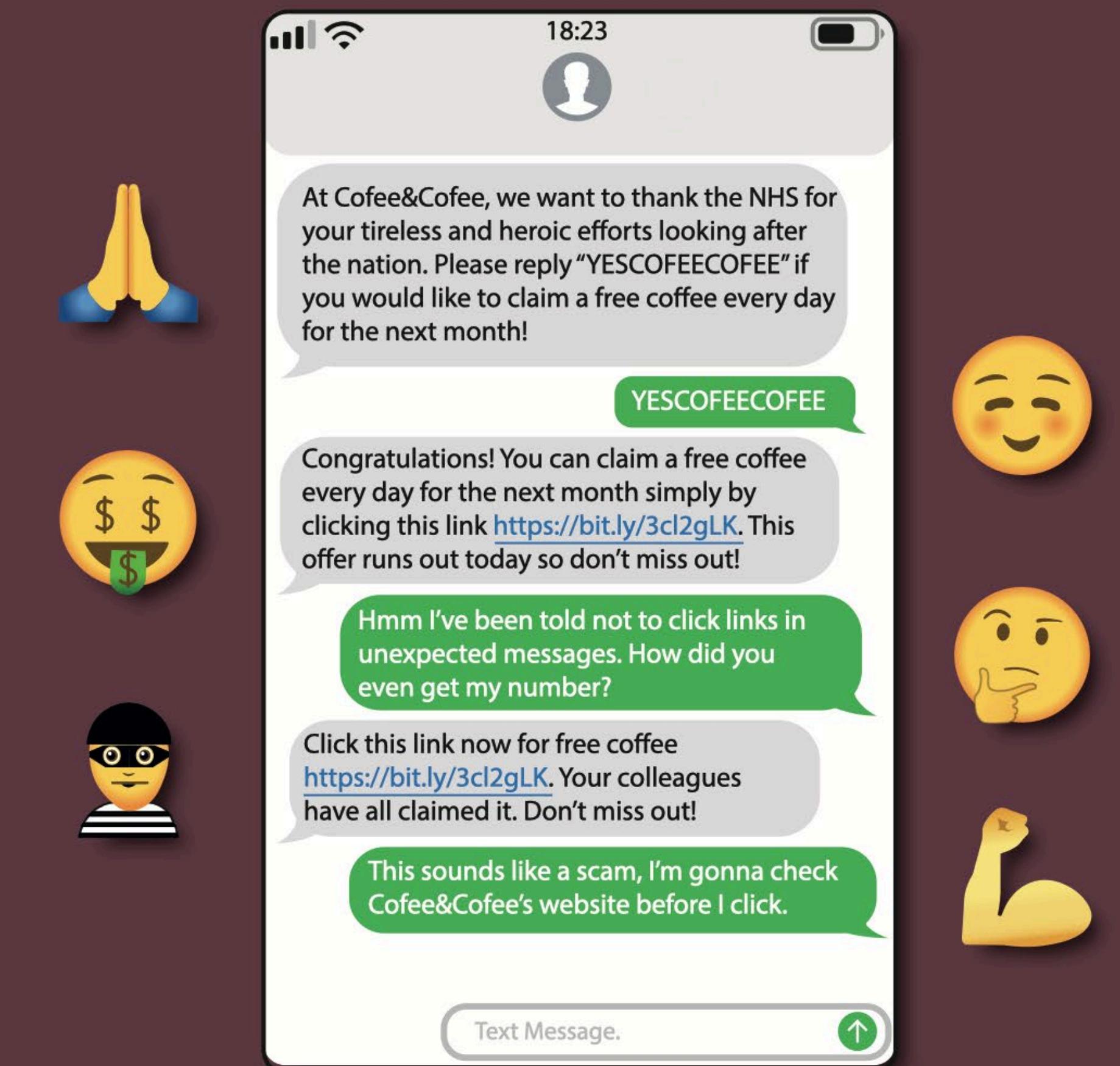
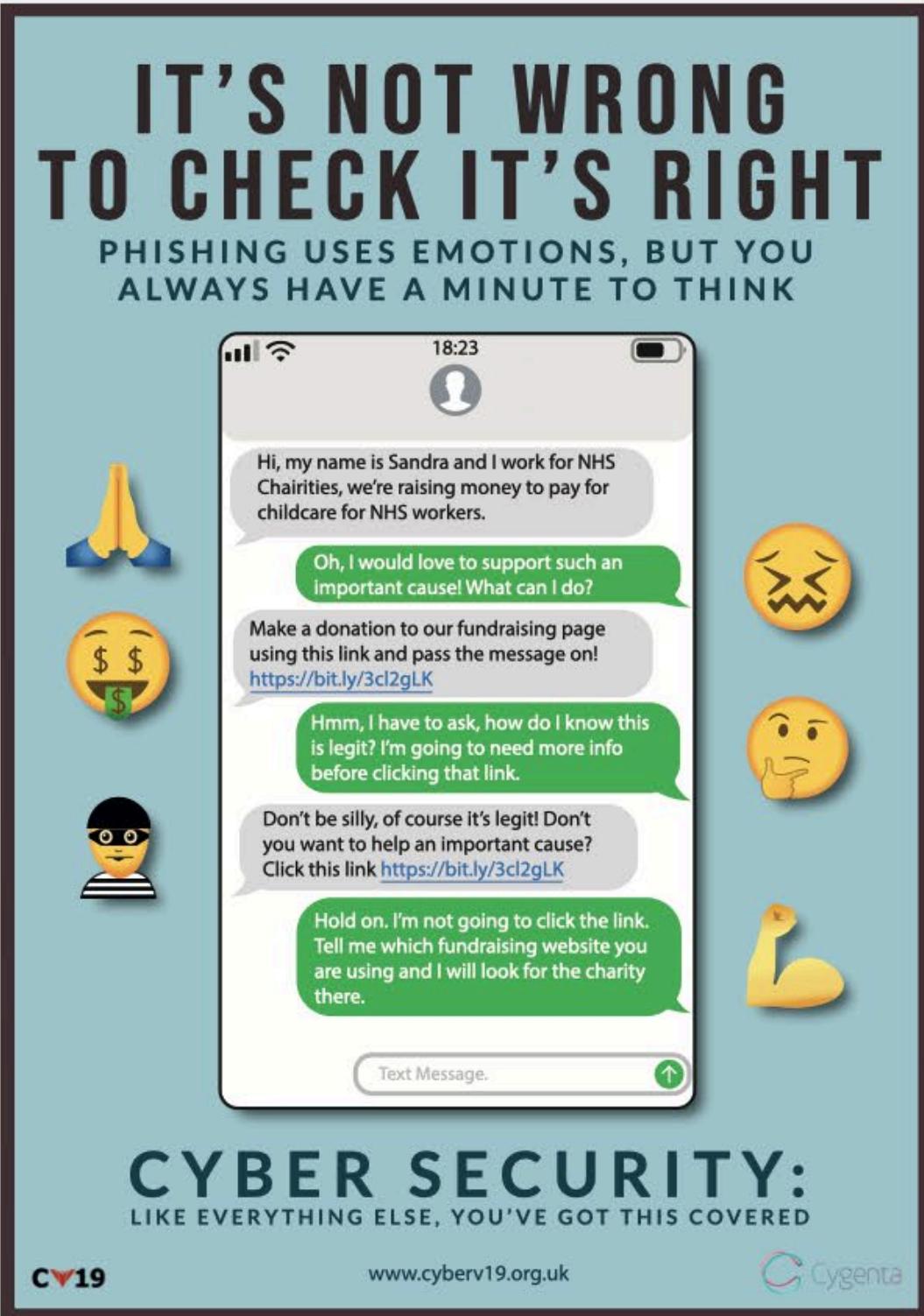


“This is how
you report a
suspected
phish”

“Positive messaging should enable more people to
do more things safely”

IT'S NOT WRONG TO CHECK IT'S RIGHT

PHISHING USES EMOTIONS, BUT YOU
ALWAYS HAVE A MINUTE TO THINK



CYBER SECURITY:
LIKE EVERYTHING ELSE, YOU'VE GOT THIS COVERED

CV19

www.cyberv19.org.uk

Cygenta



@CygentaHQ

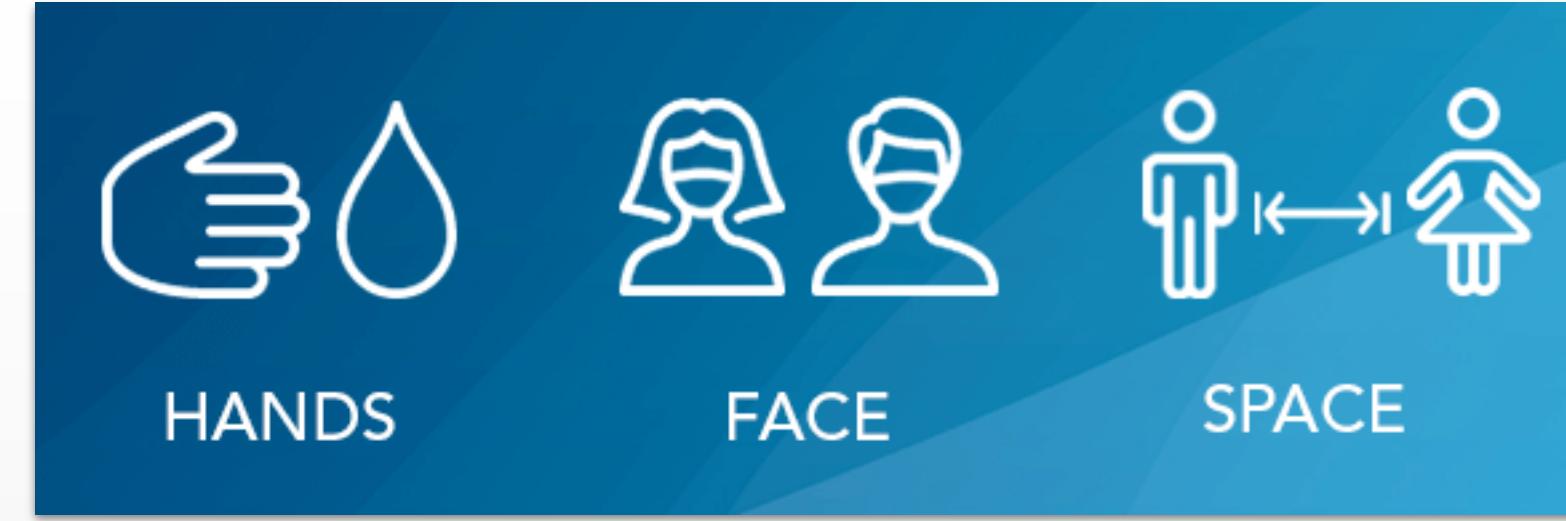


“Messages which hold examples of bad practice and say ‘don’t do this’ can easily backfire because they can convey that many people in our group are behaving like this anyway, even if they know they shouldn’t.”



Exhibit D:





“Unless one already has an understanding of what each component of the three-word instruction “Hands face space” means, its meaning is unclear”

Exhibit C:



“Use a secure password”



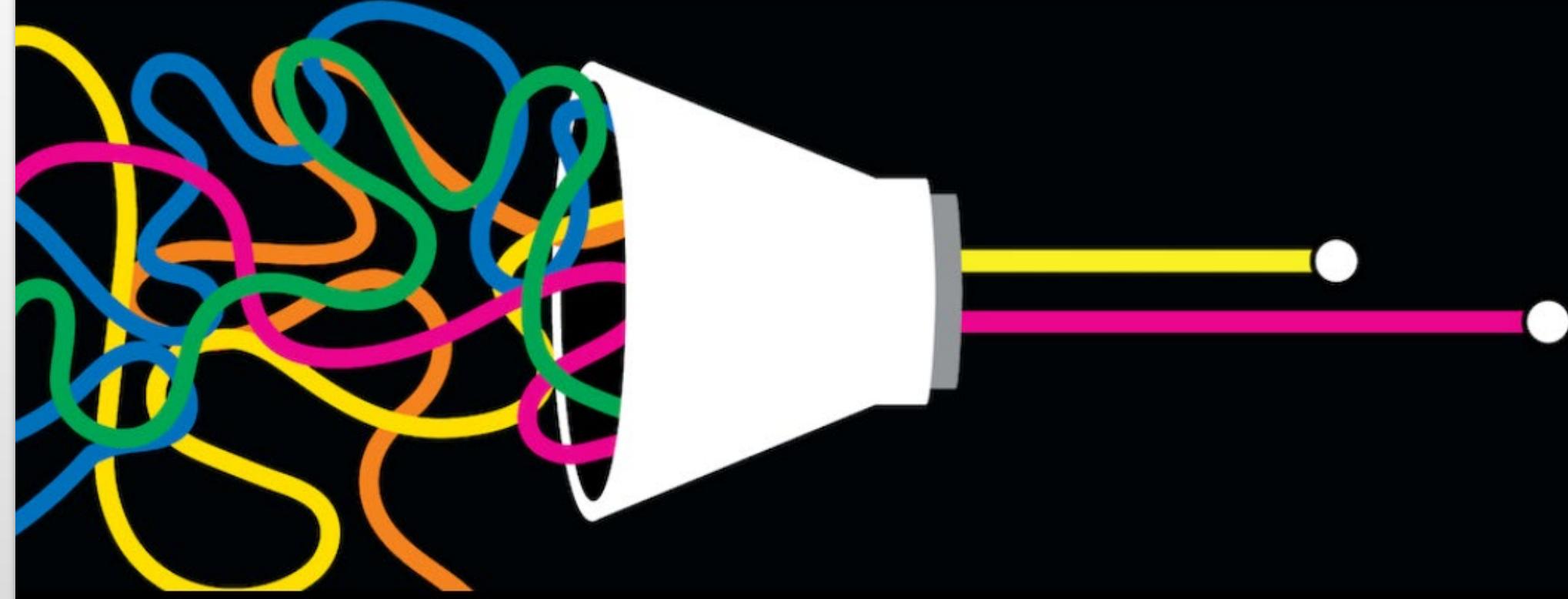
@CygentaHQ

Government of Canada Gouvernement du Canada

Français

Canadian Digital Service Service numérique canadien

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Read the blog /

Just enough detail: how we designed content for the COVID Alert app

“...one of the keys to success was trust...
the key to trust was understanding”

<https://digital.canada.ca>

"Every time you add detail, you make it harder for people to extract what's relevant for them."



What's in a word?



Anonymous

Step 1 of 6



Together, let's stop the spread of COVID-19

COVID Alert helps us break the cycle of infection. The app can let people know of possible exposures before any symptoms appear.

That way, we can take care of ourselves and protect our communities.

<https://digital.canada.ca>

@CygentaHQ

COMMENTARY

Culture Matters in Communicating the Global Response to COVID-19

C.O. Airhihenbuwa, PhD¹; J. Iwelunmor, PhD²; D. Munodawafa, EdD³; C.L. Ford, PhD⁴;
T. Oni, MD⁵; C. Agyemang, PhD⁶; C. Mota, PhD⁷; O.B. Ikuomola, BS¹; L. Simbayi, DPhil⁸;
M.P. Fallah, PhD⁹; Z. Qian, MD²; B. Makinwa, MPA¹⁰; C. Niang, PhD¹¹; I. Okosun, PhD¹

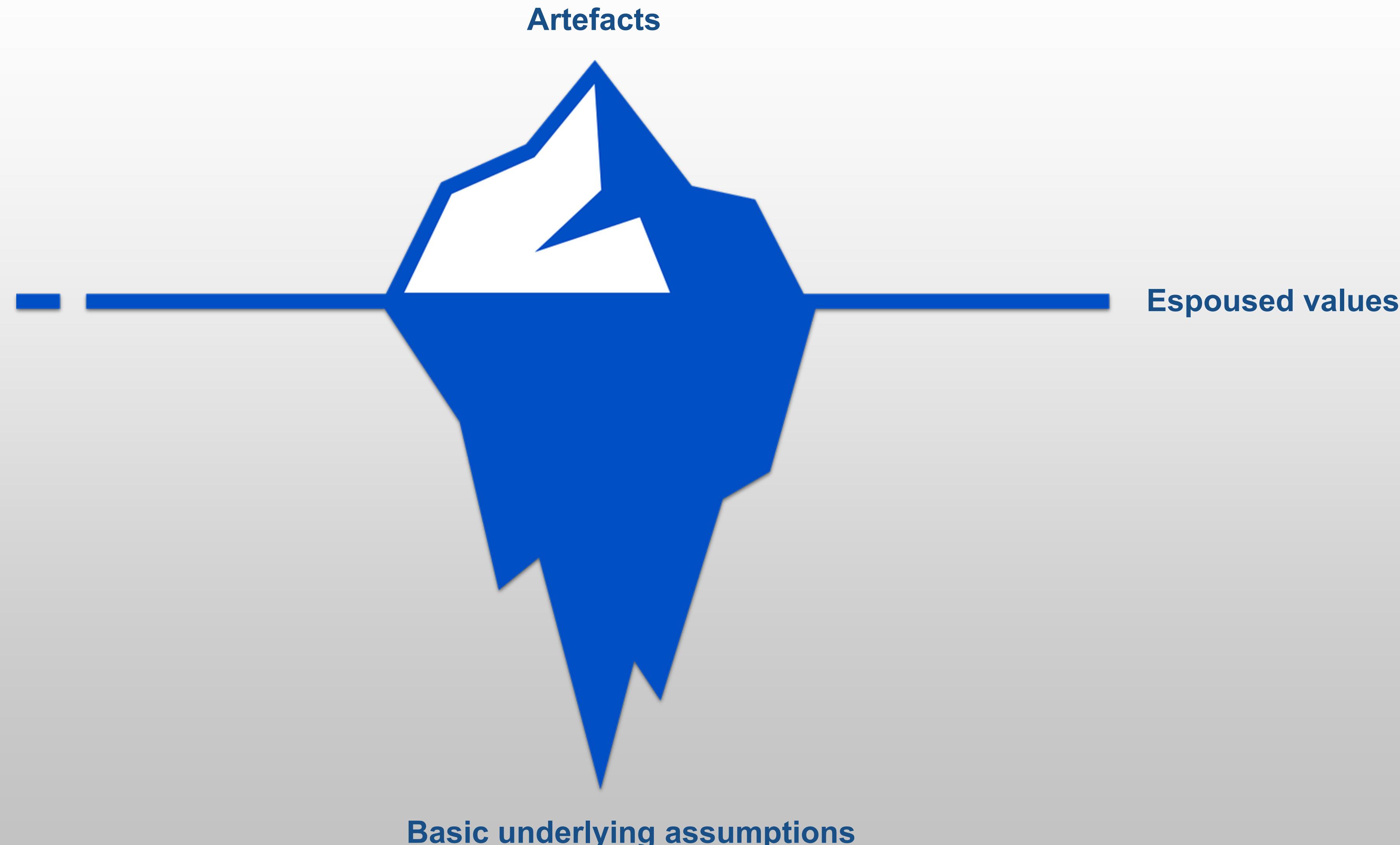
“Current communication messages in the COVID-19 pandemic tend to focus more on individual risks than community risks resulting from existing inequalities. Culture is central to an effective community-engaged public health communication to reduce collective risks.”



CULTURE

The values and beliefs that establish norms of expected behaviours that employees might follow

Edgar Schein



Schein's model applied to security culture in an organisation

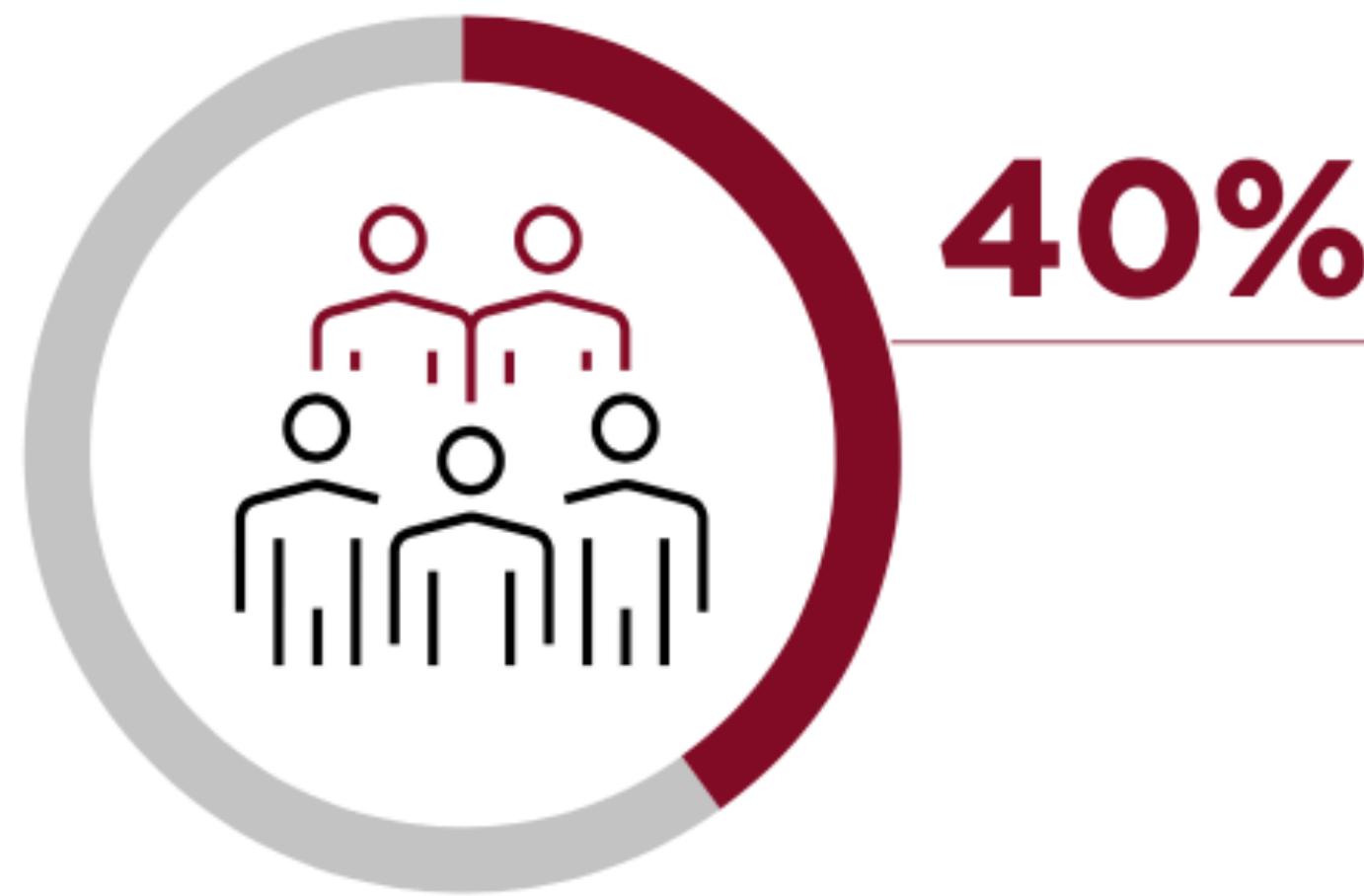


“Talent is equally
distributed, but
opportunity is not”

Leila Janah

A security culture that lacks diversity is a
security culture that lacks fairness,
representation and talent.

Percentage of CISOs who rate the inclusivity and diversity of their team as 4 or 5*



*5 is most diverse and inclusive

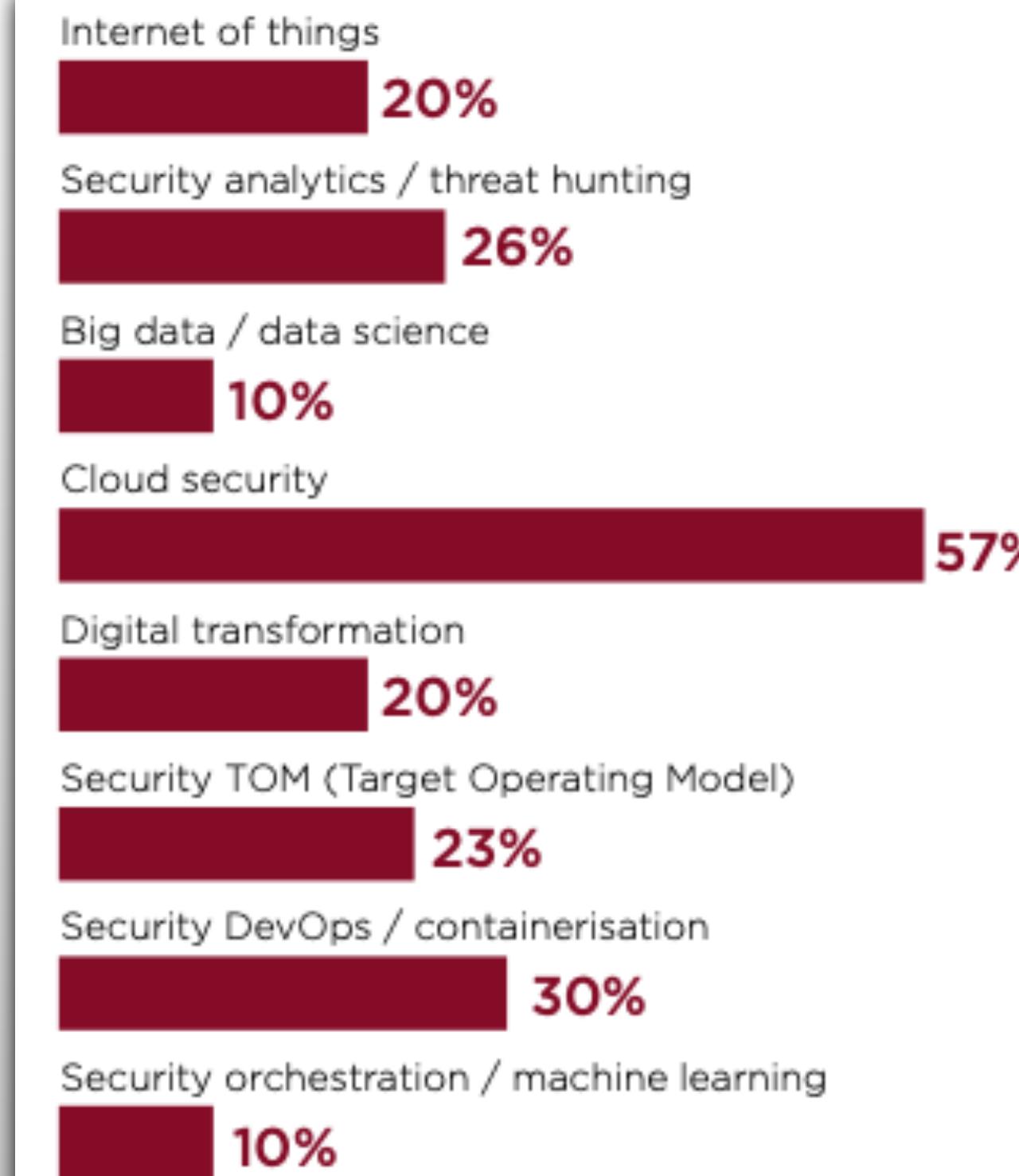
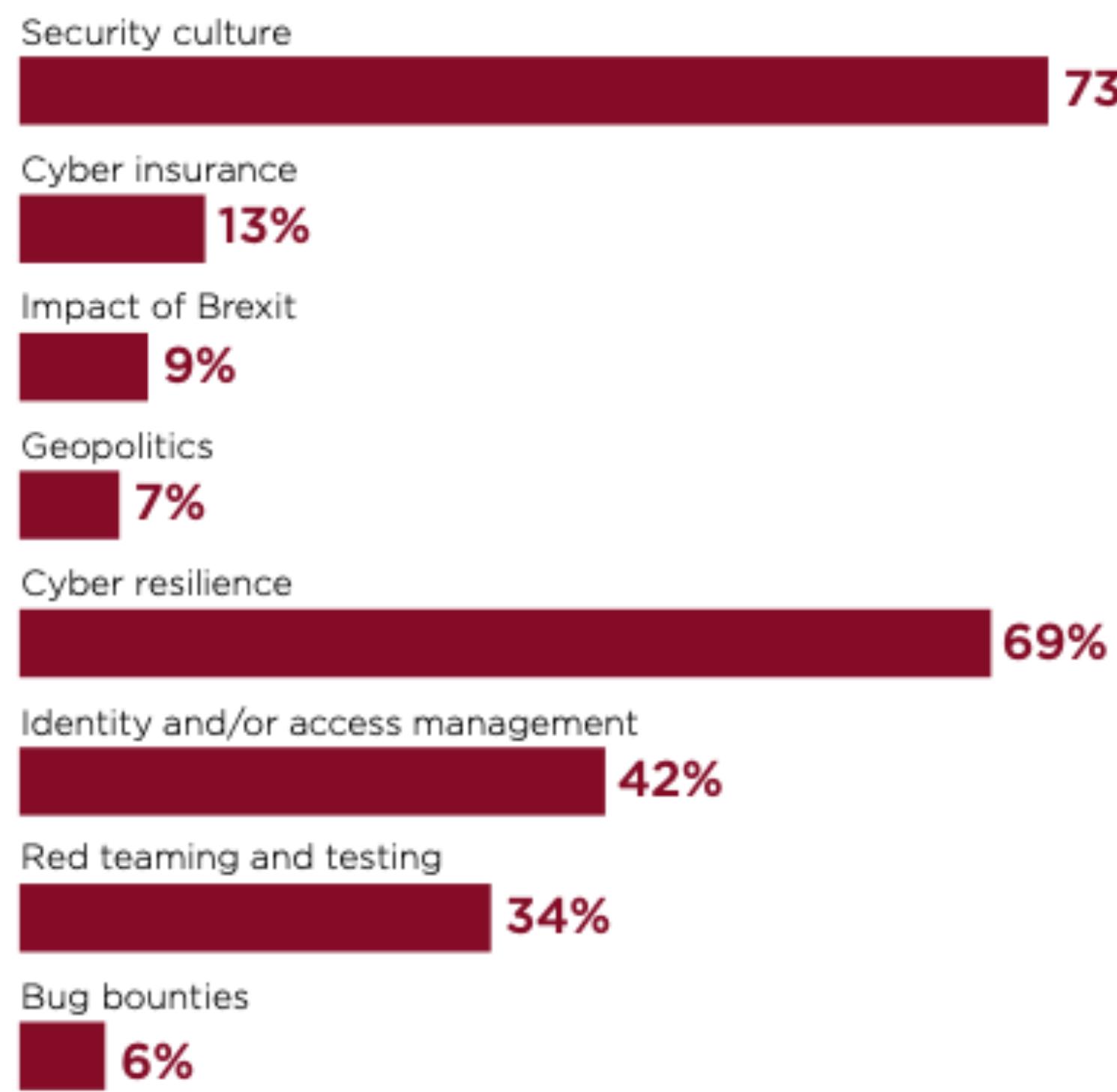
Percentage of CISOs who rate the inclusivity and diversity of their hiring policy as 4 or 5*



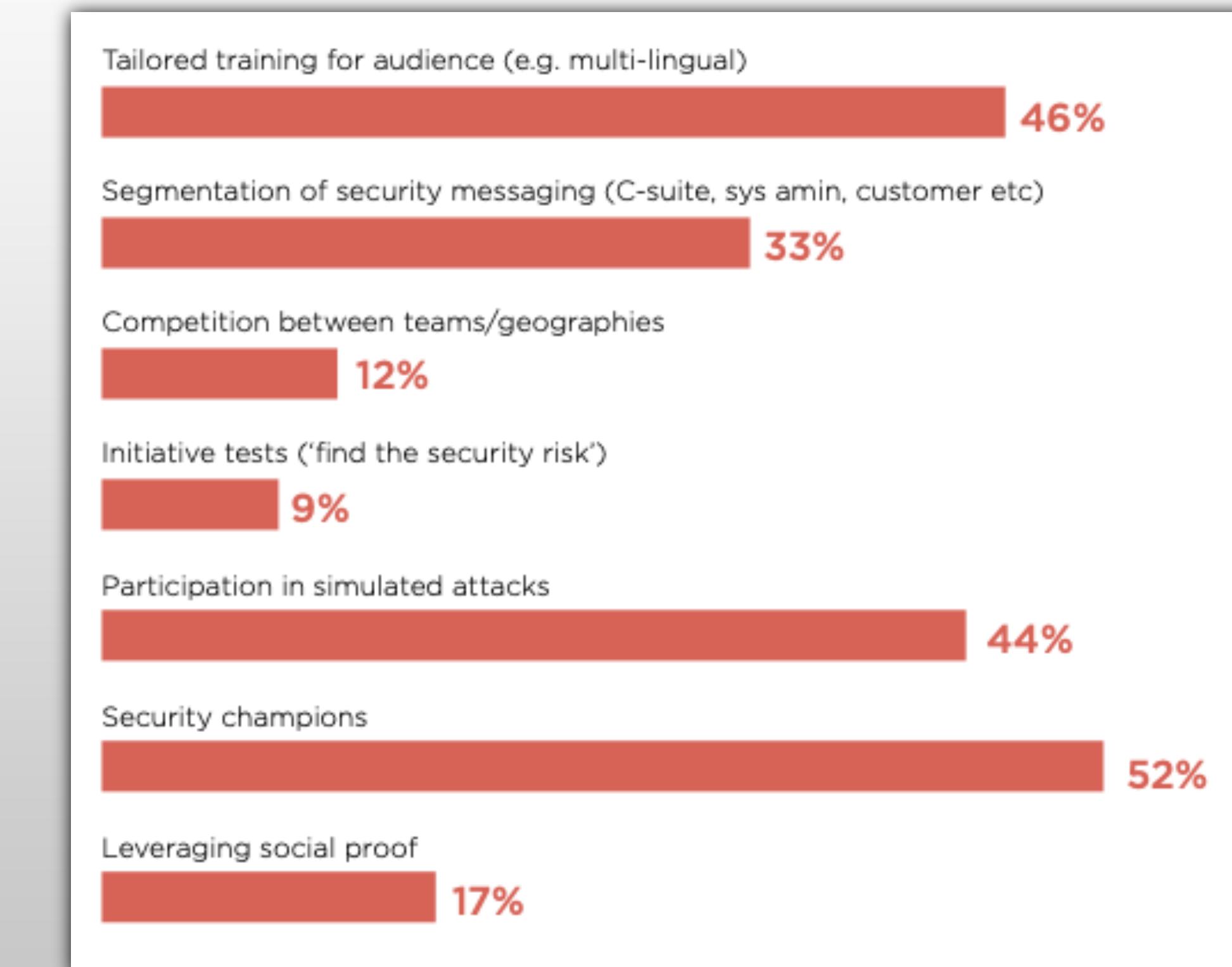
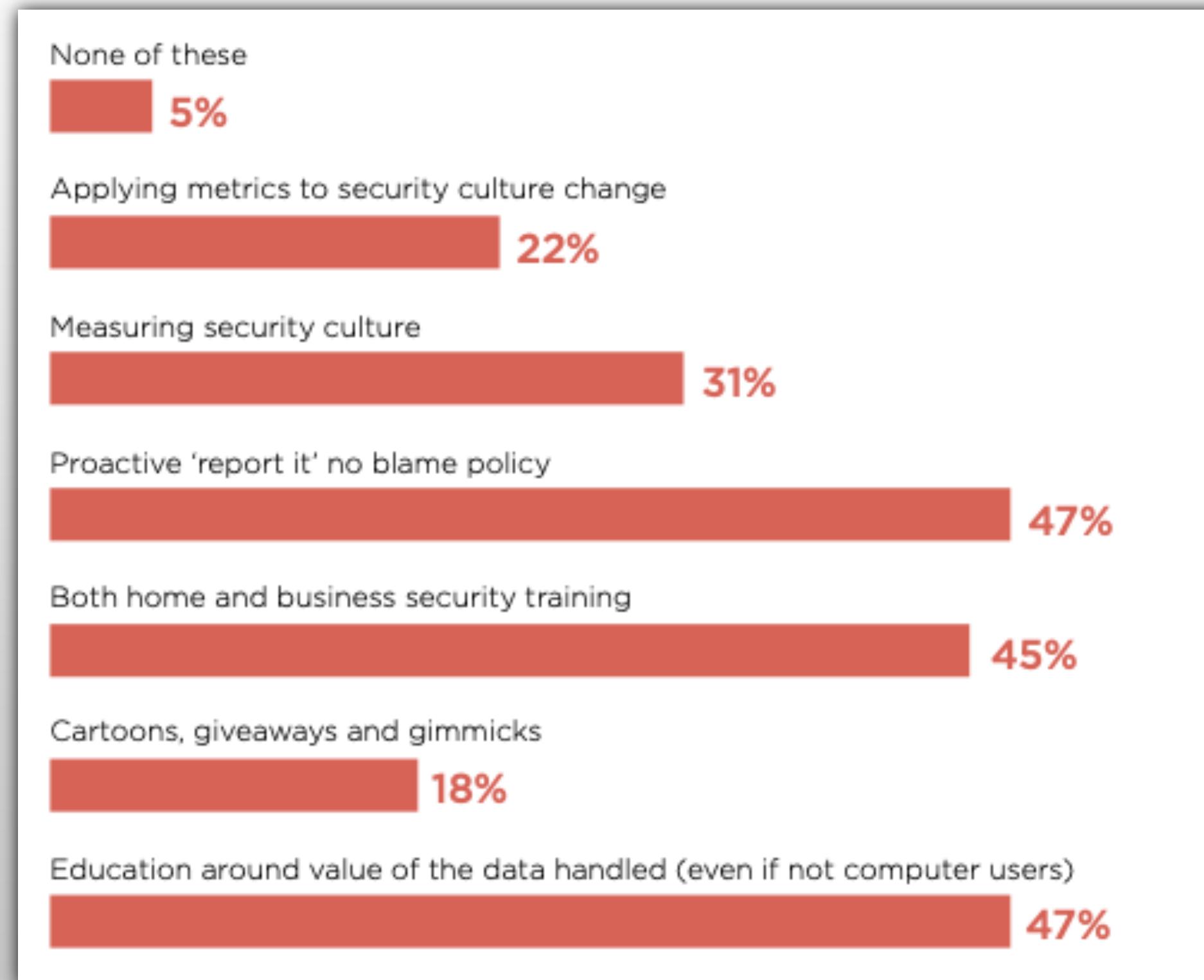
*5 is most diverse and inclusive

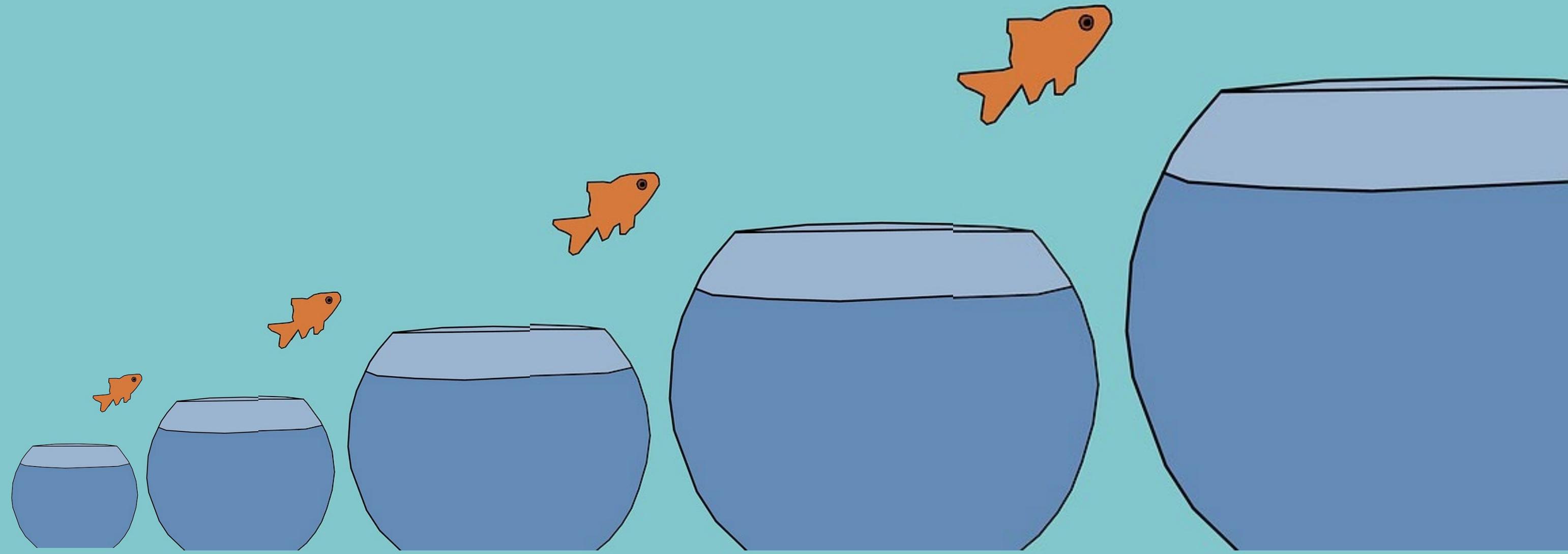
ClubCISO Information Security Maturity Report 2020

31. Which of these hot topics are on your radar?



30. Which of the following are you currently doing to foster a better security culture within your organisation?





Blaming people for security incidents
doesn't reduce the likelihood of further
incidents, it just reduces the likelihood of
you knowing about them



Community





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