

WEBINAR

The future of security awareness and training



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Featuring **FORRESTER**[®]

AGENDA

Jinan Budge, Forrester Research

Eliminate Fear In Security To Unlock Trust

Dr. Niklas Hellemann, SoSafe

The Human Layer: Current Threats and Trends

Dr. Niklas Hellemann and Jinan Budge

Discussion: The Future of Security Awareness

The Human Layer: Threats and Trends

Insights from the
SoSafe Human Risk Review 2022



SOSAFE

Market leader for awareness in Europe

300+ employees

Cyber Security, Educational Psychology, Software Development, Graphic Design, Gamification

1,800+ customers

Across all industries and sizes including logistics, public sector, automotive, CRITIS, etc.

1,500,000+ users

30+ learning modules and videos,
500+ phishing templates,
5,000+ simulated phishing mails per day

Trusted by leading global companies

CECONOMY Marc O'Polo®

vitra.



Why customers love us



Driven by behavioral science

Story-based, gamified micro-learning for maximum engagement



Easy to use and scale

Seamless and customized experience for both admins and users



100% GDPR-compliant

Privacy-by-design approach with smart reporting functions, e.g., for ISO-27001

HUMAN RISK REVIEW 2022

First-hand industry insights and an outlook on how security awareness needs to evolve

> 250

IT security professionals surveyed

> 4.3M

social engineering data points analyzed

3

expert interviews (Atlassian, Zurich Insurance, Bitkom)



www.sosafe-awareness.com/human-risk-review



The threat landscape is growing and becoming more complex



9 out of 10 IT and cybersecurity specialists say: The cyberthreat landscape has worsened.

The top 5 **cybercrime trends** in 2022

- 01** Hybrid work models
- 02** Multiple extortion ransomware
- 03** Supply chain attacks
- 04** AI and deepfakes
- 05** Event-based phishing waves

Attacks targeting the human factor are more sophisticated than ever

The most successful **phishing subject lines** in 2021...

66%

You must complete the following task: distribution of documents and assessment of tasks

66%

You have 2 mentions

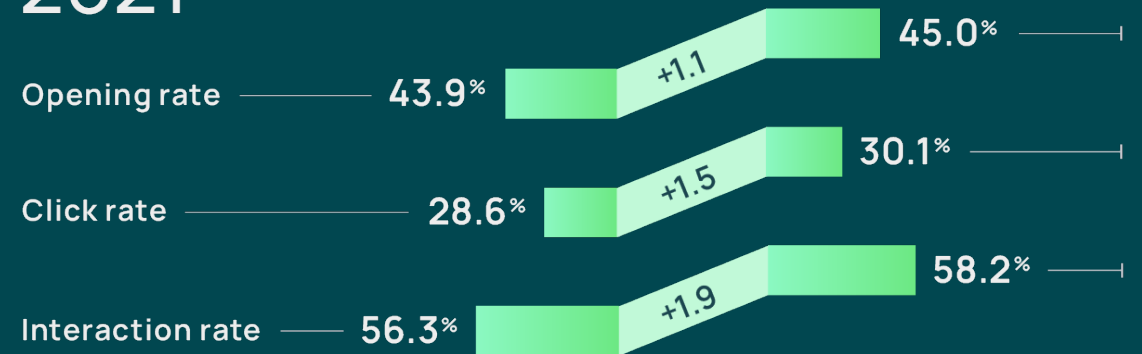
57%

Important: CORONAVIRUS update

...producing **increased threat KPIs.**

2021

2022



CYBERCRIME TRENDS 2022

Event-based phishing: Unscrupulous deceit coming in waves

+40%

cyberattacks on critical infrastructure since the Ukraine war

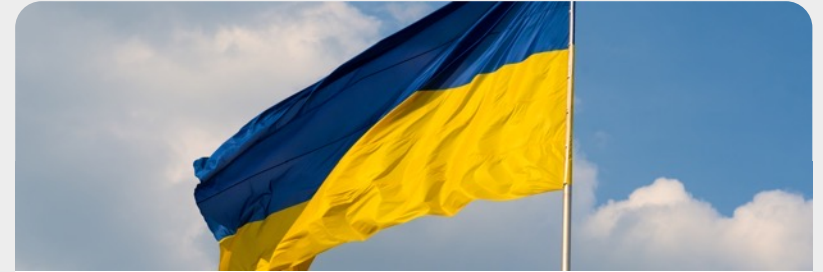
+£800k

scammed from Britons with fake omicron text message scams

+120%

higher click rates for phishing attacks connected to current events

Prominent cases: Ukraine and the ongoing pandemic



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Deplorable scam emails fake fundraising for Ukraine

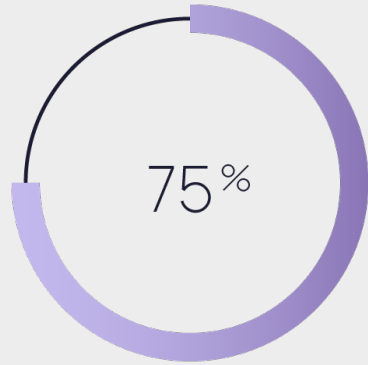


 **INDEPENDENT**

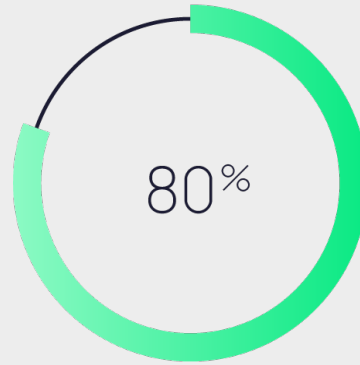
Scam warning over fake omicron testing text messages

CYBERCRIME TRENDS 2022

Hybrid work: new work models as a source of cyber risks



3 out of 4 respondents say **hybrid work has made cyberattacks more likely.**

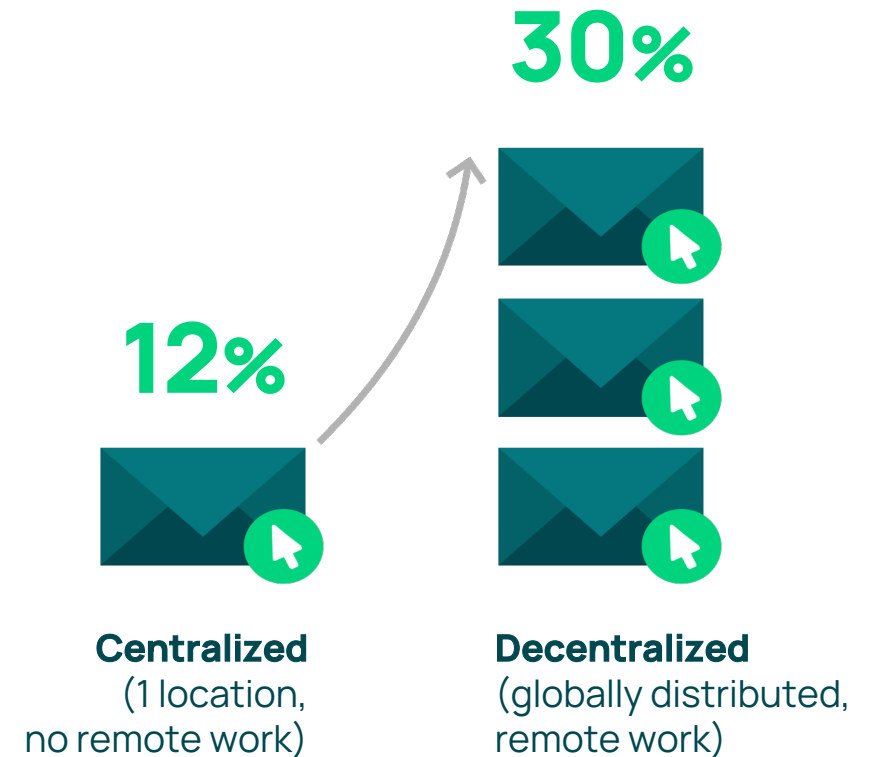


80% think this can be resolved by using **technical and organizational measures.**



IBM: The **costs of data protection violations** due to attacks are **1.07 million US dollars higher** on average when remote work is involved.

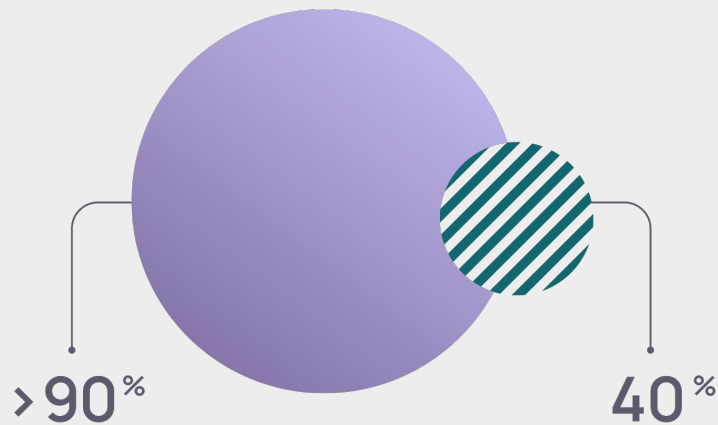
Click rate of phishing mails by organization type



AWARENESS

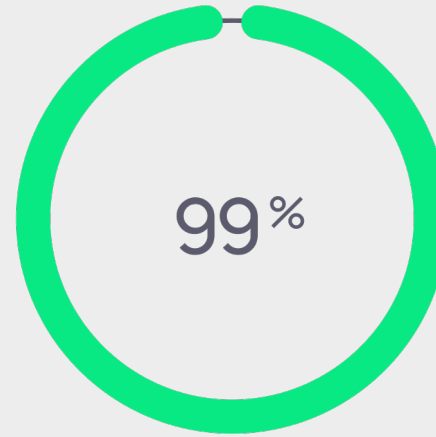
The security awareness gap: Organizations need to further strengthen their security cultures – and they are planning to

More than 90% of IT and cybersecurity specialists say: Awareness is important in their organization.



“Security Awareness Gap”

Yet, in 40 percent of the organizations that consider the topic important or very important, the awareness level of employees is still rated as low or very low.



of respondents say that they want to focus on strengthening their organizations' security cultures.

“Every awareness program should be based on behavioral science techniques.”

Marisa Fagan, Head of Trust Culture & Training at Atlassian

THE BEHAVIORAL SECURITY MODEL

A mature security culture: the shift from compliance-only to behavioral change

Security awareness needs to be more holistic

- Adoption of behavioral science & psychology principles (e.g., positive reinforcement)
- Moving from one-time measures to continuous security culture management
- Expanding the scope and include other dimensions driving behavior



THE BEHAVIORAL SECURITY MODEL

Knowledge: Continuous micro-learning and nudging as success factors

Continuous delivery of micro-modules increases monthly active users by

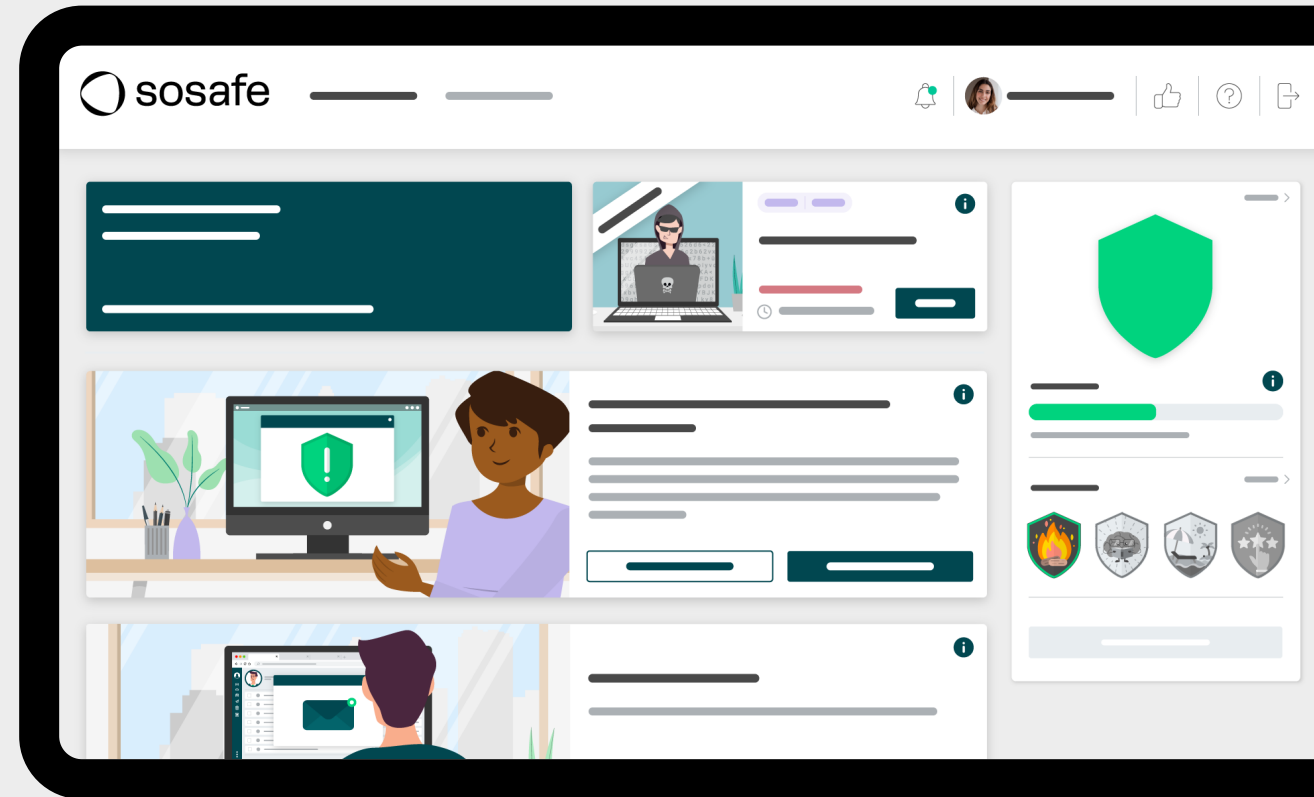
50%

Registration nudges increase user activation by

90%

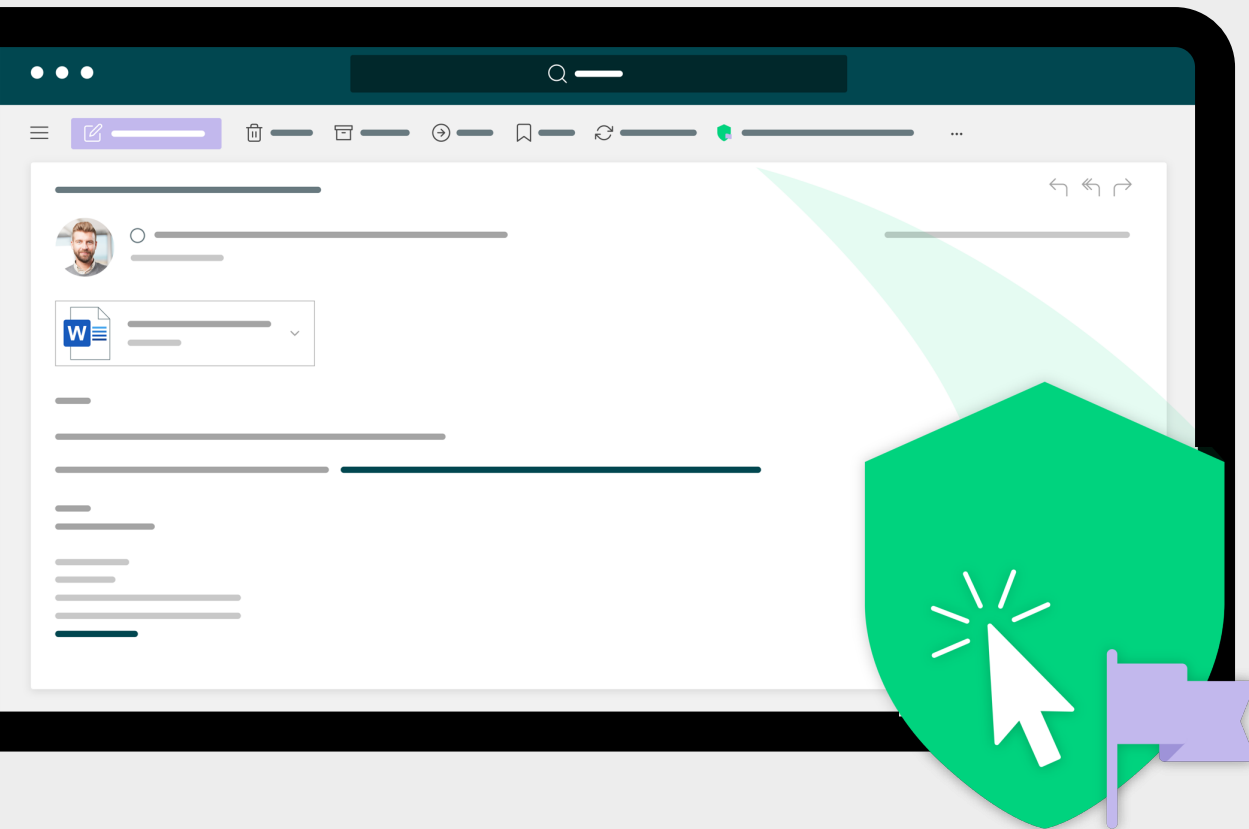
Completion nudges increase number of completed modules by

30%



THE BEHAVIORAL SECURITY MODEL

Context: Lay the foundation for secure behavior in everyday work situations



Integrated reporting functions turn users into sensors.

On average, every individual user reports every **2nd** phishing email.

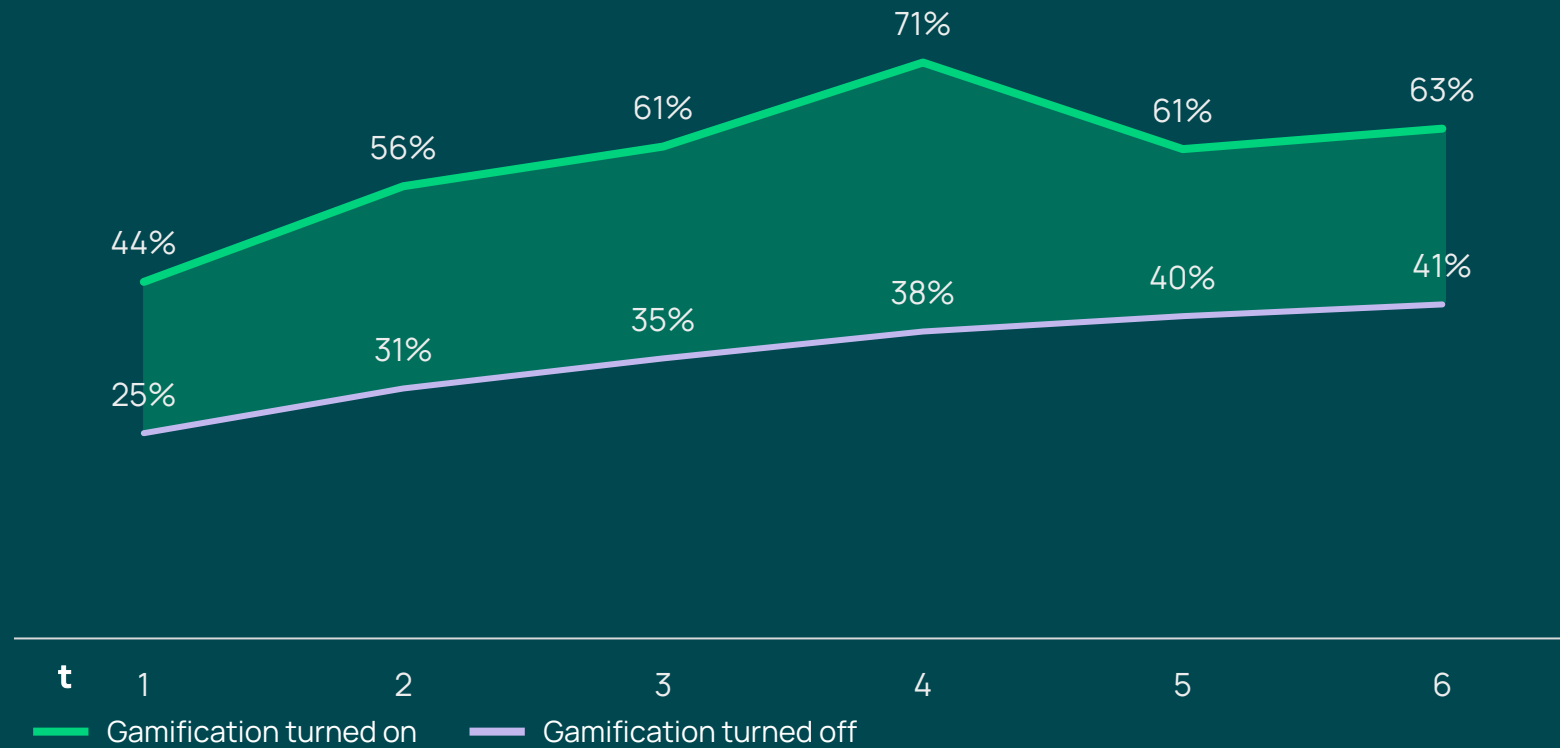
Per company:

+100 real phishing emails are reported every month.

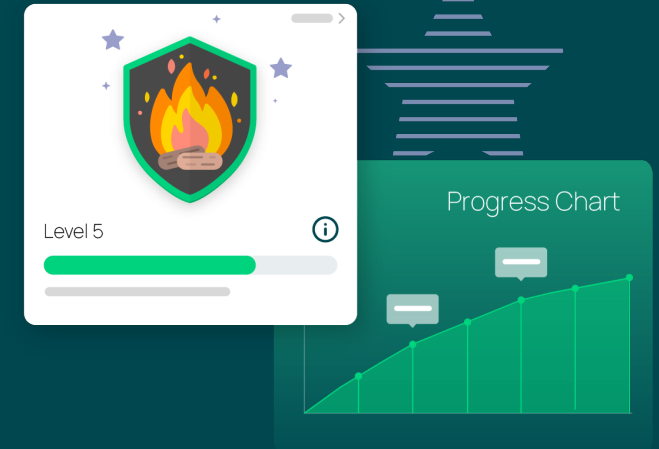
THE BEHAVIORAL SECURITY MODEL

Motivation: Gamification with tangible effects towards engagement and habit building

Average activation rate in month (t) since start



Deep gamification drives user engagement



Behavior: Expand the set of metrics towards more meaningful KPIs

First generation CSAT metrics

- Clickthrough rate (phishing simulations)
- Interaction rate
- WBT completion

Main goal: Proof compliance

Next generation CSAT metrics

- Differentiated clickthrough rates (e.g., by psychological tactic)
- Reporting rate
- Time to report
- Skill level (across various topic areas)
- Psychometric risk score
- Return on invest / Risk reduction

Main goal: Measure risk level and manage security culture

HUMAN RISK REVIEW 2022

Read up on the insights and how you can scale your organization's security culture

- Insight into **regulatory demands** and **geopolitical developments**
- **Industry deep dives** into vulnerable sectors
- **Social engineering analyses** with a focus on most significant risk factors
- **Cyber security (awareness) outlook** and recommendations for the coming year



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