

# Everything you wanted to know about SAP Security: Myths, Truths and Insights Workshop

Tobias Keller, Arndt Lingscheid and Gabriele Fiata  
SAP

Las Vegas

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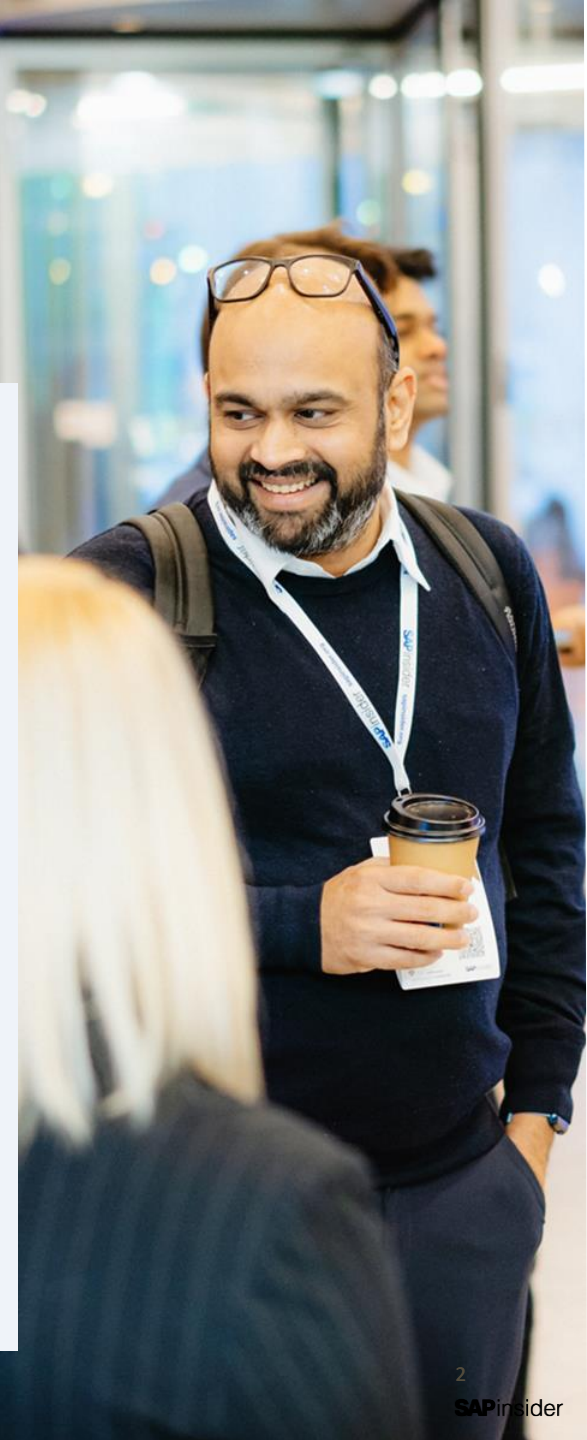
2024

**SAP**insider

# What We'll Cover

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- Quiz and Intro
- Myth vs Truth - Round 1: **Security Focus and Responsibilities**
- Coffee and Networking
- Myth vs Truth - Round 2: **OnPrem vs Cloud Security**
- Myth vs Truth - Round 3: **Where is the biggest security risk**
- Coffee and Networking
- Wrap-up
- Key points to take home



# Quiz and Intro – How SAP Security old-school are you?

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Guess the tcode:

Used by user administrator to maintain User Information.

# SU01

(also accepting SU10 as an answer)

# Quiz and Intro – How SAP Security old-school are you?

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Guess the tcode:

It defines and manages set of permission for user according to their job responsibilities

# PFCG



# Quiz and Intro – How SAP Security old-school are you?

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Guess the tcode:

Allow users to view detailed information about failed authorization attempts in the SAP GUI

# SU53

# Quiz and Intro – How SAP Security old-school are you?

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Guess the tcode:

Used to display and analyse the security audit log in the SAP system

# SM19

(also accepting SM20 as an answer)

## Quiz and Intro – How SAP Security old-school are you?

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Guess the tcode:

Used for tracing and analysing user activities, RFC calls, HTTP calls and more.

# ST01

# Quiz and Intro – How SAP Security old-school are you?

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Guess the tcode:

Useful for auditing and  
analysing user authorizations  
– not dangerous

# SUIM



# Quiz and Intro – How SAP Security old-school are you?

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Guess the tcode:

Useful for auditing and  
analysing user authorizations  
– dangerous

# SE16

# Myth vs Truth - Round 1

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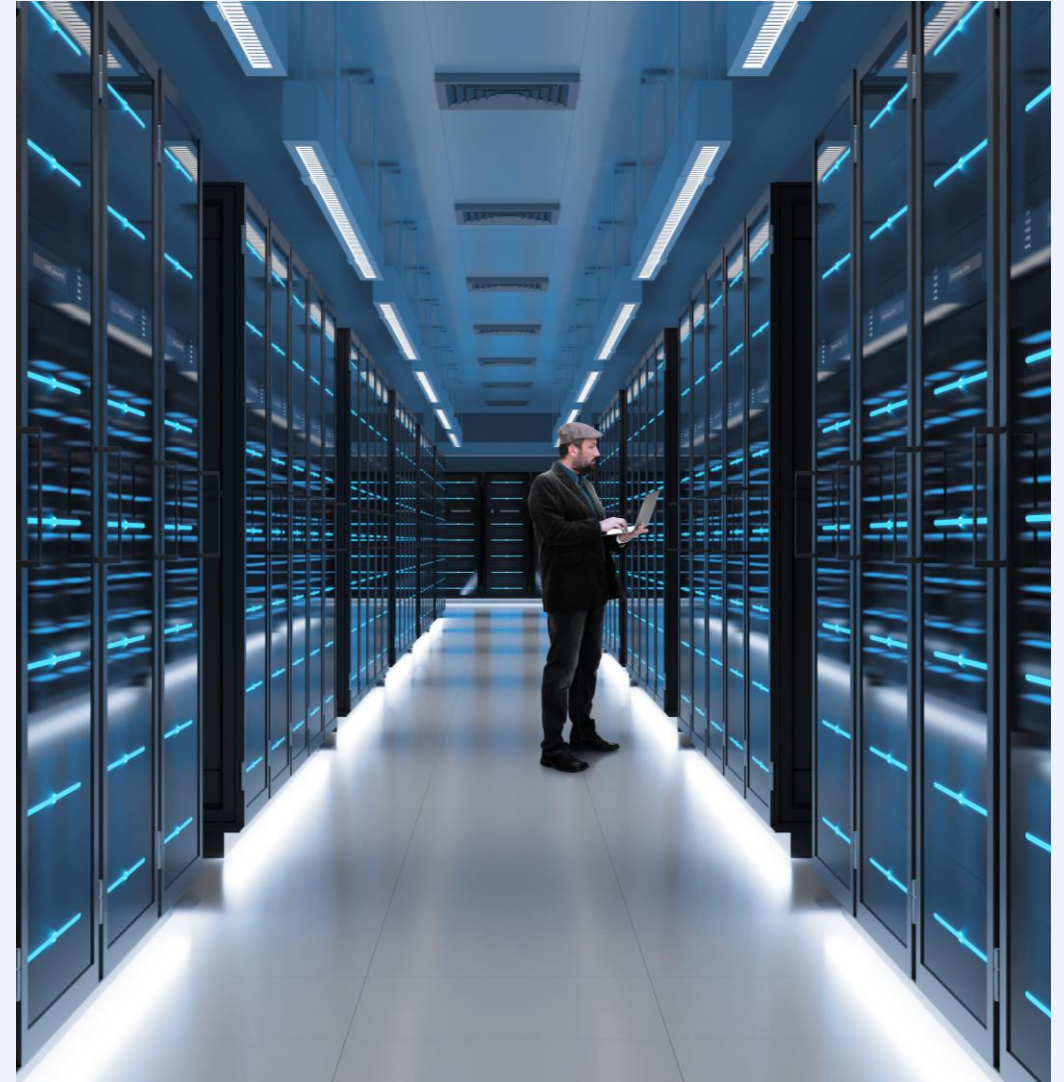
Old SAP Security Conversations



## Myth vs Truth - Round 1

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1. SAP security is mainly the responsibility of the IT department
2. SAP security is mainly about protecting against external threats than internal threats
3. Implementing SAP security measures slows down business performance



# SAP security is mainly the responsibility of the IT department

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	Company A	Company B
Board Members		
C staff level and business unit managers		
Business Processes		
Risk mapping and ownership		

# SAP security is mainly the responsibility of the IT department

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	Company A	Company B
Board Members	<u>do not understand</u> that information security is in their realm of responsibility and focus solely on corporate governance and profits.	
C staff level and business unit managers		
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# SAP security is mainly the responsibility of the IT department

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	Company A	Company B
Board Members	<u>do not understand</u> that information security is in their realm of responsibility and focus solely on corporate governance and profits.	<u>understand</u> that information security is critical to the company and demand to be updated regularly on security performance and breaches.
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C staff level and business unit managers	think information security is the responsibility of the IT department and the other <u>business units do not get involved</u> .	
Business Processes		
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Business Processes	Business processes are <u>not documented</u> and not analysed for potential risks that can affect operations, productivity, and profitability.	
Risk mapping and ownership		

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Risk mapping and ownership		



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Business Processes	Business processes are <u>not documented</u> and not analysed for potential risks that can affect operations, productivity, and profitability.	Critical business processes are <u>documented</u> along with the risks that are inherent at the different steps within the business processes.
Risk mapping and ownership	Risks <u>not assigned</u> to business objectives. Therefore <u>unclear</u> risk ownership.	

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Business Processes	Business processes are <u>not documented</u> and not analysed for potential risks that can affect operations, productivity, and profitability.	Critical business processes are <u>documented</u> along with the risks that are inherent at the different steps within the business processes.
Risk mapping and ownership	Risks <u>not assigned</u> to business objectives. Therefore <u>unclear</u> risk ownership.	Risks <u>assigned</u> to business objectives. There is <u>clear</u> business risk ownership.

# SAP security is mainly about protecting against external threats than internal threats

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**81%** of breaches used lost, stolen or weak passwords.

**Three-quarters (75%)** of breaches were perpetrated by outsiders, which, of course, means that **one-quarter (25%)** involved internal actors.

# Implementing SAP security measures slows down business performance

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*“Without brakes we would be driving really, really slowly.”*

	Privileged Access Management
Instead of...	Overly complicated workflows to request temporary emergency access
Companies are adopting...	Pre-approved emergency access management with activity logs monitoring and approval.

# Implementing SAP security measures slows down business performance

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*“Without brakes we would be driving really, really slowly.”*

	Privileged Access Management	Access Controls
Instead of...	Overly complicated workflows to request temporary emergency access	Removing risky permissions from users to remediate segregation of duties violations.
Companies are adopting...	Pre-approved emergency access management with activity logs monitoring and approval.	<ul style="list-style-type: none"><li>- Reveal-on demand with activity logs monitoring</li><li>- Dinamically Allow/Disallow permissions based on previously performed activities</li></ul>



# Implementing SAP security measures slows down business performance

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*“Without brakes we would be driving really, really slowly.”*

	Privileged Access Management	Access Controls	Continuous Security Monitoring
Instead of...	Overly complicated workflows to request temporary emergency access	Removing risky permissions from users to remediate segregation of duties violations.	Over restricting sensitive access from users to avoid critical incidents.
Companies are adopting...	Pre-approved emergency access management with activity logs monitoring and approval.	<ul style="list-style-type: none"><li>- Reveal-on demand with activity logs monitoring</li><li>- Dinamically Allow/Disallow permissions based on previously performed activities</li></ul>	Monitor suspicious activities and implement system auto-reactions to block users when surpassing certain risk thresholds

# Coffee and Networking

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...or personal time...



## **Myth vs Truth - Round 2**

OnPrem vs Cloud Security



## Myth vs Truth - Round 2

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1. SAP systems, on-premises, are inherently more secure than their cloud counterparts
2. Securing data in SAP cloud systems presents greater challenges compared to on-premise solutions.
3. The security advantages of SAP Cloud solutions are undeniably clear.



# SAP systems, on-premises, are inherently more secure than their cloud counterparts

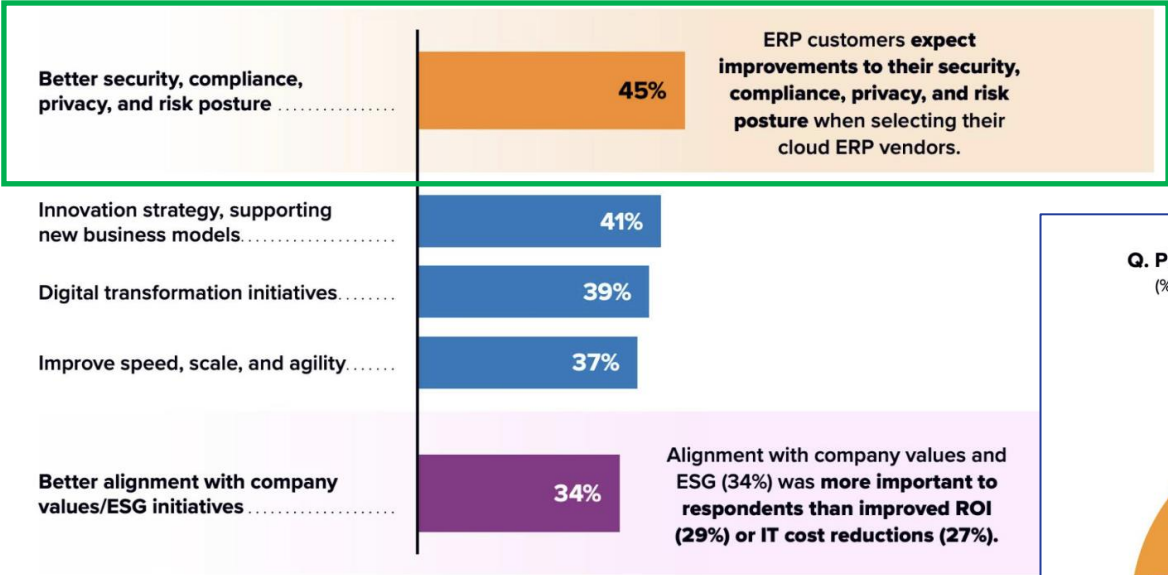


Parameters	Cloud Security	On-premise Security
Cost	Eliminates the necessity for businesses to make costly investments in hardware, software, and IT personnel	Responsible for the expenses associated with the installation, maintenance, and upgrades of hardware and software
Scalability	Can easily scale up or down their security requirements according to their changing needs	Cannot easily adjust their security needs according to their evolving requirements
Reliability	Invest heavily in robust security infrastructure and backup systems	Susceptible to hardware failures, power outages, and other system failures
Control	Limits control over their security infrastructure	Complete control over their hardware and software
Deployment Time	With the advantage of pre-configured security settings, deployment can be achieved much more quickly	Involves the installation and configuration of security infrastructure, which can be a time-consuming process



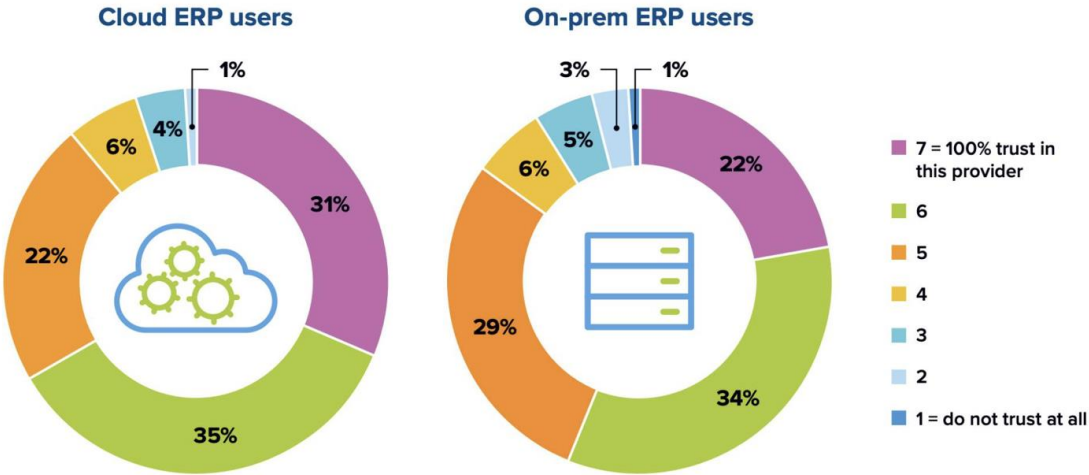
# Securing data in SAP cloud systems presents greater challenges compared to on-premise solutions.

Q. Please select your top three strategic and operational reasons for migrating to a new cloud ERP system.  
(% of respondents)



Source: IDC's SAP Global Future of Trust & Security Survey, 2023

Q. Please rate how much you trust your ERP system provider.  
(% of respondents)



Source: IDC's SAP Global Future of Trust & Security Survey, 2023

# The security advantages of SAP Cloud solutions are undeniably clear.

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## **Myth vs Truth - Round 3**

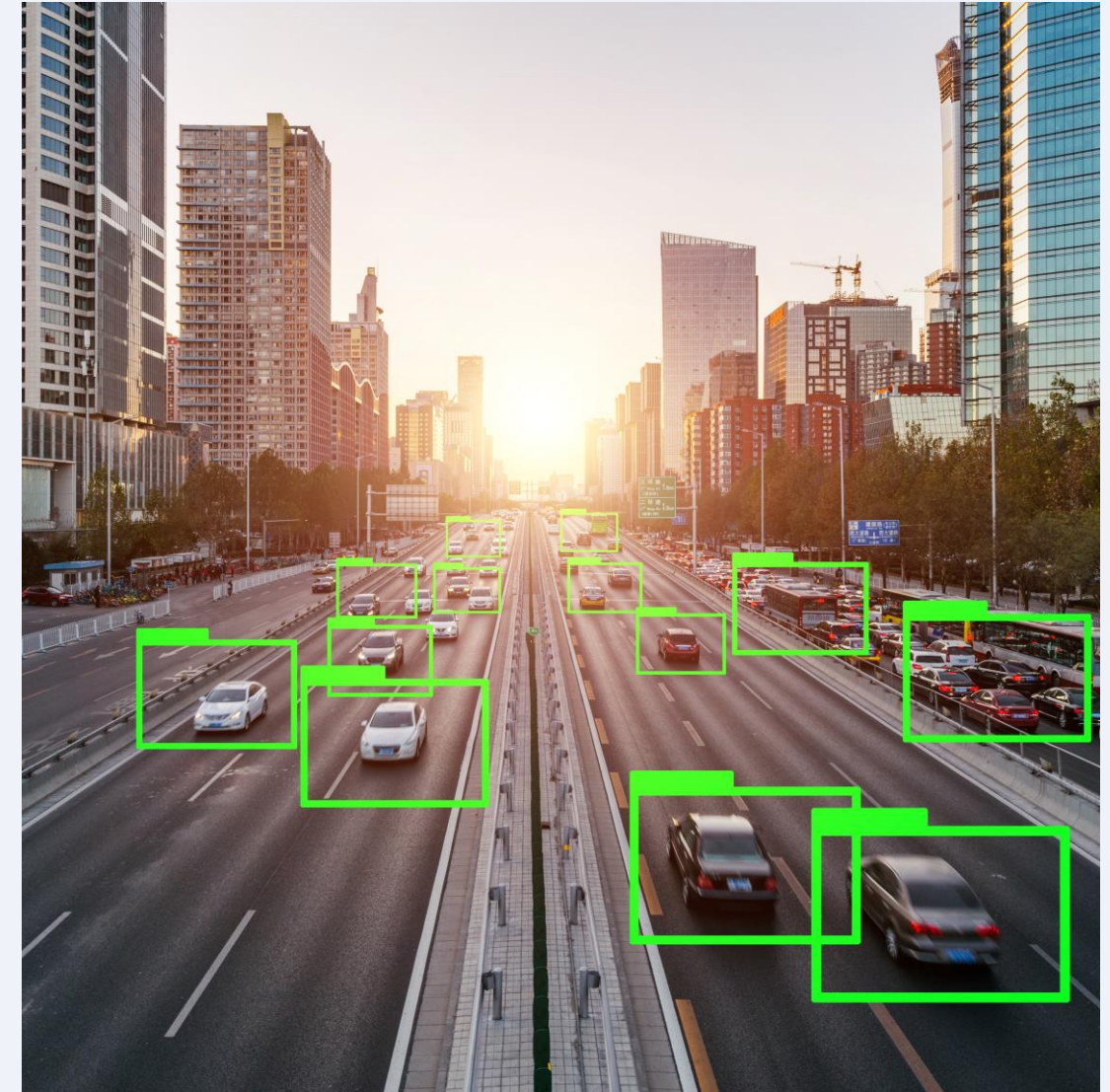
New SAP Security Conversations



## Myth vs Truth - Round 3

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1. Security audits are necessary for compliance; they don't significantly improve overall SAP security.
2. Every cyber threat facing the company must be effectively mitigated through the implementation of robust controls.
3. AI and LLMs provide attackers with powered offensive capabilities, significantly surpassing traditional hacking methods





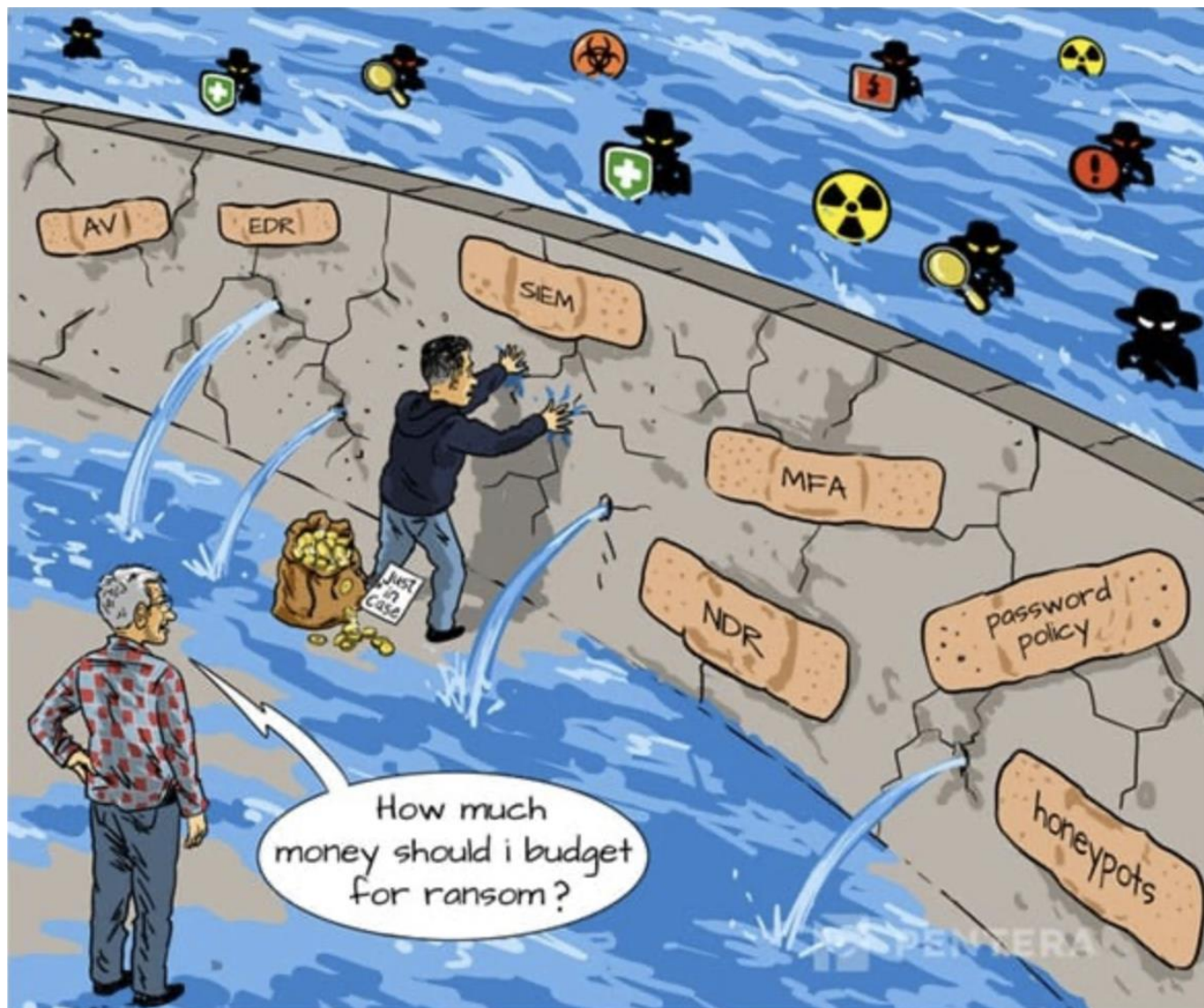
# Security audits are necessary for compliance; they don't significantly improve overall security

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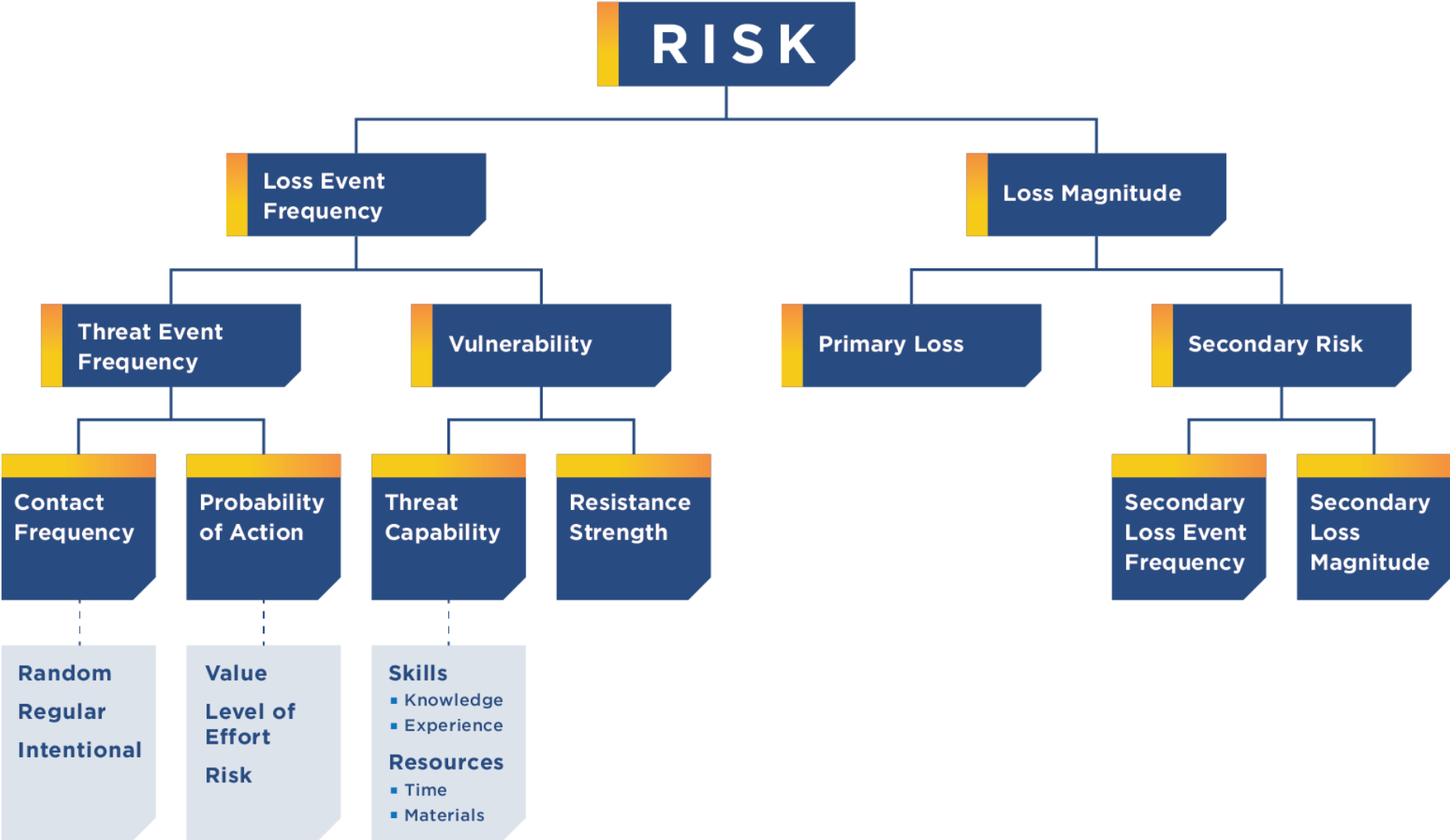


Usually checked by Audit	Usually <u>Not</u> Checked by Audit
Switch on the SAP Security Audit Log	Monitoring the SAP Security Audit Log with a formal process
SAP systems are set to not-modifiable	Modifying ABAP code directly in PRD (system does not need to be open to do it)
No users with SAP_ALL	Checking reports and functions with no authorization checks

Every cyber threat facing the company must be effectively mitigated through the implementation of robust controls.



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# AI and LLMs provide attackers with powered offensive capabilities, significantly surpassing traditional hacking methods.

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## USING LLMs TO DEVELOP MALWARE

- Uncertain if LLM-based tools offer advantages over traditional hacking resources
- Potential risk: increase in attackers, decrease in effort needed to develop malicious tools
- Most LLMs trained on easily accessible public resources
- LLMs' generalization may not significantly enhance offensive capabilities

## LLMs FOR SOCIAL ENGINEERING

- Scammers can enhance grammar, prose, and content randomization in phishing emails.
- LLMs streamlines spear phishing attacks, increasing their quantity, if not quality.
- With technologies like voice synthesis and text/image generators, LLMs can impersonate specific speech styles and voices, facilitating social engineering, phishing attacks and manipulation of targets.

# Coffee and Networking

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...or personal time...

We start again in 15 minutes.

# Wrap-up

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Parked questions



## Key Points to Take Home

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To be done together as part of the workshop

# Where to Find more Information

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- [ERP Today Article: From NO to YES, but securely](#)
- [SAP Insights Article on IDC Research: Building Better Trust in Business with Cloud ERP Investments](#)
- [SAP Cloud ERP Security Video](#)
- [RISE with SAP Security Brief](#)
- [GROW with SAP Security Brief](#)
- [Demystifying Cyber Risk: Empowering SAP Organizations to Measure and Integrate Cyber Risks into Business Decisions](#)

# Thank you! Any Questions?

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Please remember to complete  
your session evaluation.



**Arndt Lingscheid**

Global Solution Owner Cybersecurity and  
Dataprotection, Product Management at SA...



**Tobias Keller (莊德凱)**

Product Manager | Transforming customer  
orientation into product innovation and gro...



**Gabriele Fiata**

SAP Cybersecurity Leader | Market Strategy,  
Compliance, Risk



# SAPinsider



## SAPinsider.org

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800,000 members  
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