

How McCormick & Co. Optimized Emergency Access Management (EAM) as part of their SAP S/4 HANA Program

Serena Meenan, SAP Security Manager
McCormick and Company Inc.

Ray Mastre, SAP Platform Security
Accenture LLC

SAPinsider
Las Vegas

2023

SAPinsider

About the Speakers



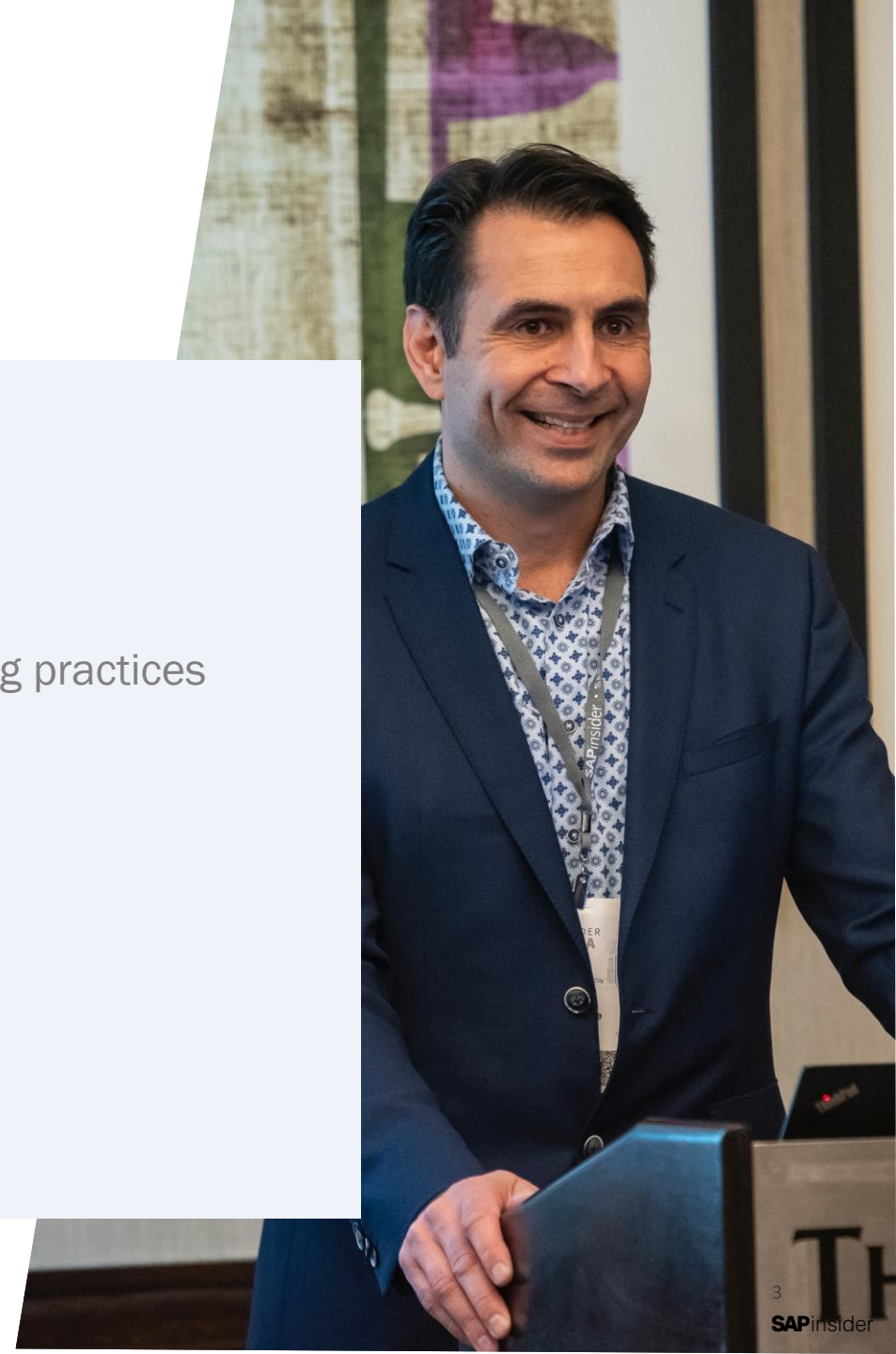
Serena Meenan
SAP Security Manager
McCormick & Company, Inc



Ray Mastre
SAP Platform Security
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What We'll Cover

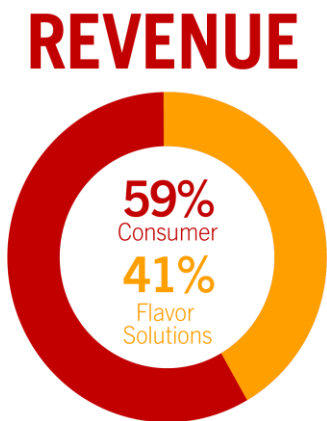
- **Overview of McCormick and SAP Initiatives**
- Legacy Emergency Access Process
- McCormick's EAM Strategy
- Challenges when implementing EAM and leading practices used to address issues
- Wrap-Up



McCormick Company Profile

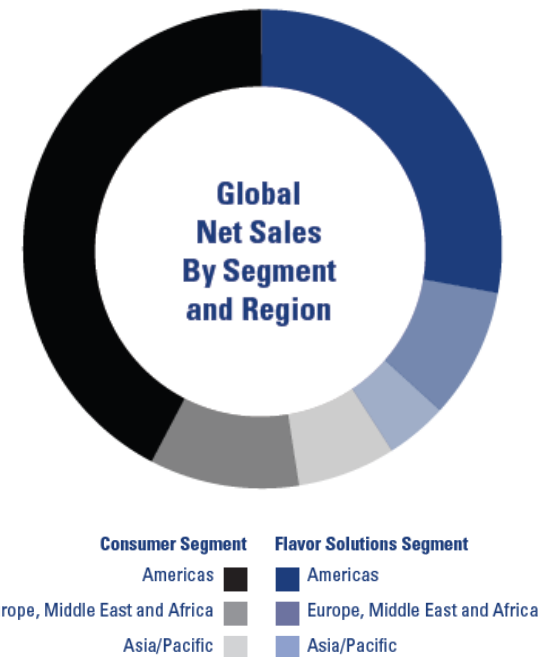
\$6.35 BILLION
Annual Sales in 2022

37 YEARS
of consecutive increased dividends



OVER
14,000

EMPLOYEES



Founded in
1889



Operations and
joint ventures in
27 countries

McCormick Brands are Iconic Across the World



McCormick S/4 Transformation – Program LEO

The WHY

We are replacing our obsolete legacy systems and processes with SAP S/4 to support McCormick's continued growth and drive our business into the 21st century



Single source of truth for the enterprise



Integration of acquisitions (e.g., Growth)



Collaborations + Connections with the business



Foundational enabler to data-driven transformation

WHERE we are headed



Our goal is to transform McCormick business by aligning the way we work, simplifying business processes and growing business at speed – improving the experience of employees, customers, and business partners.

McCormick S/4 Transformation – Program LEO

WHAT's Changing

Transitioning to SAP S/4 HANA will enable McCormick to gain greater speed and agility, drive innovation, scale quickly and thrive in an ever-changing digital environment.

PEOPLE



Increased collaborations across McCormick to best serve our customers



Application of analytical skills and capabilities drive better decision making



Better visibility to real-time performance to monitor and grow our business

PROCESS



Standardized global processes allow everyone to work together



Incorporation of automation into day-to-day tasks reduce manual work effort

TECHNOLOGY



One global technology platform supporting how we perform our work



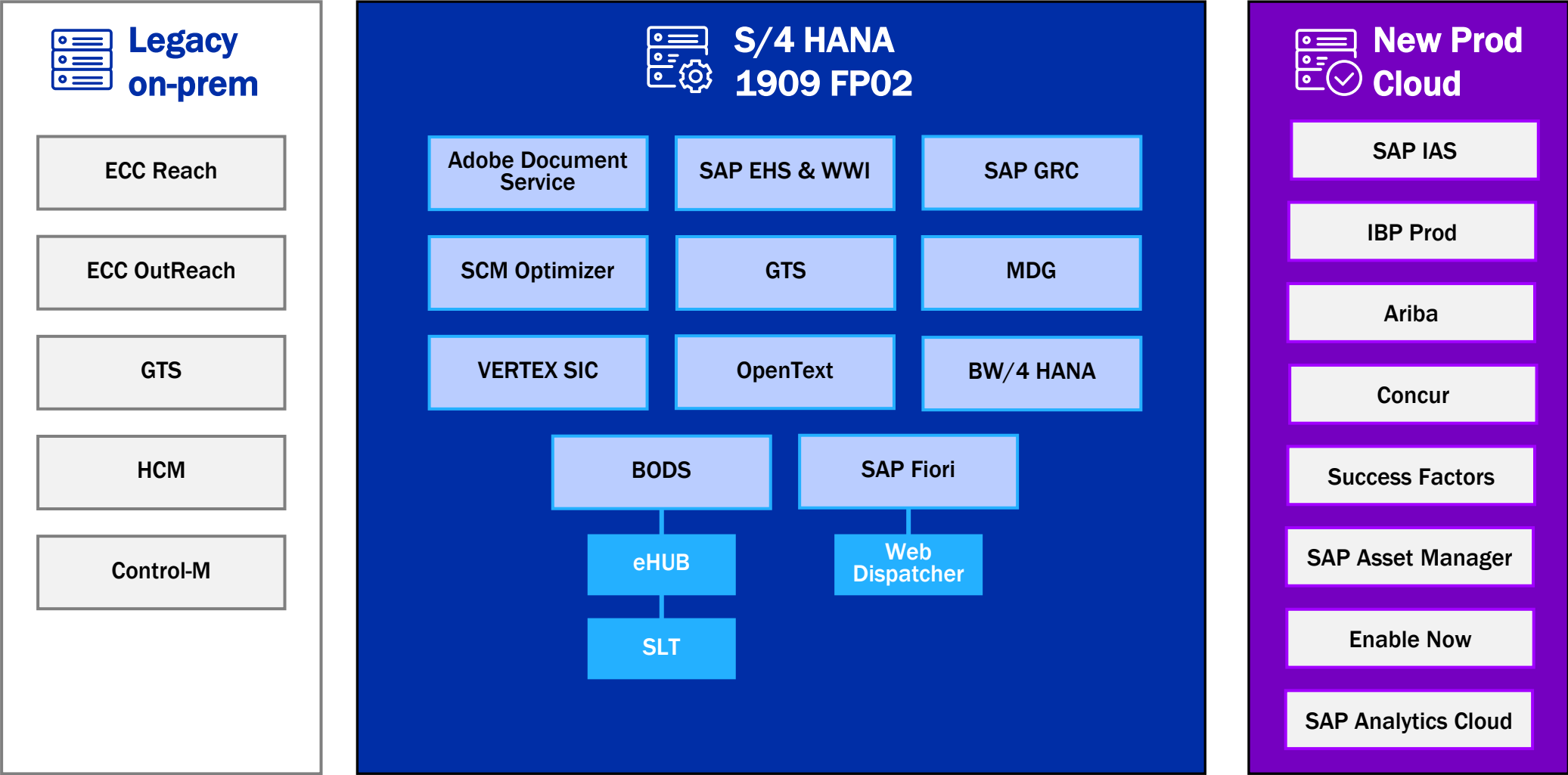
Intuitive navigation to transactions and dashboards



Integrated data and reporting for improved analytical/insights

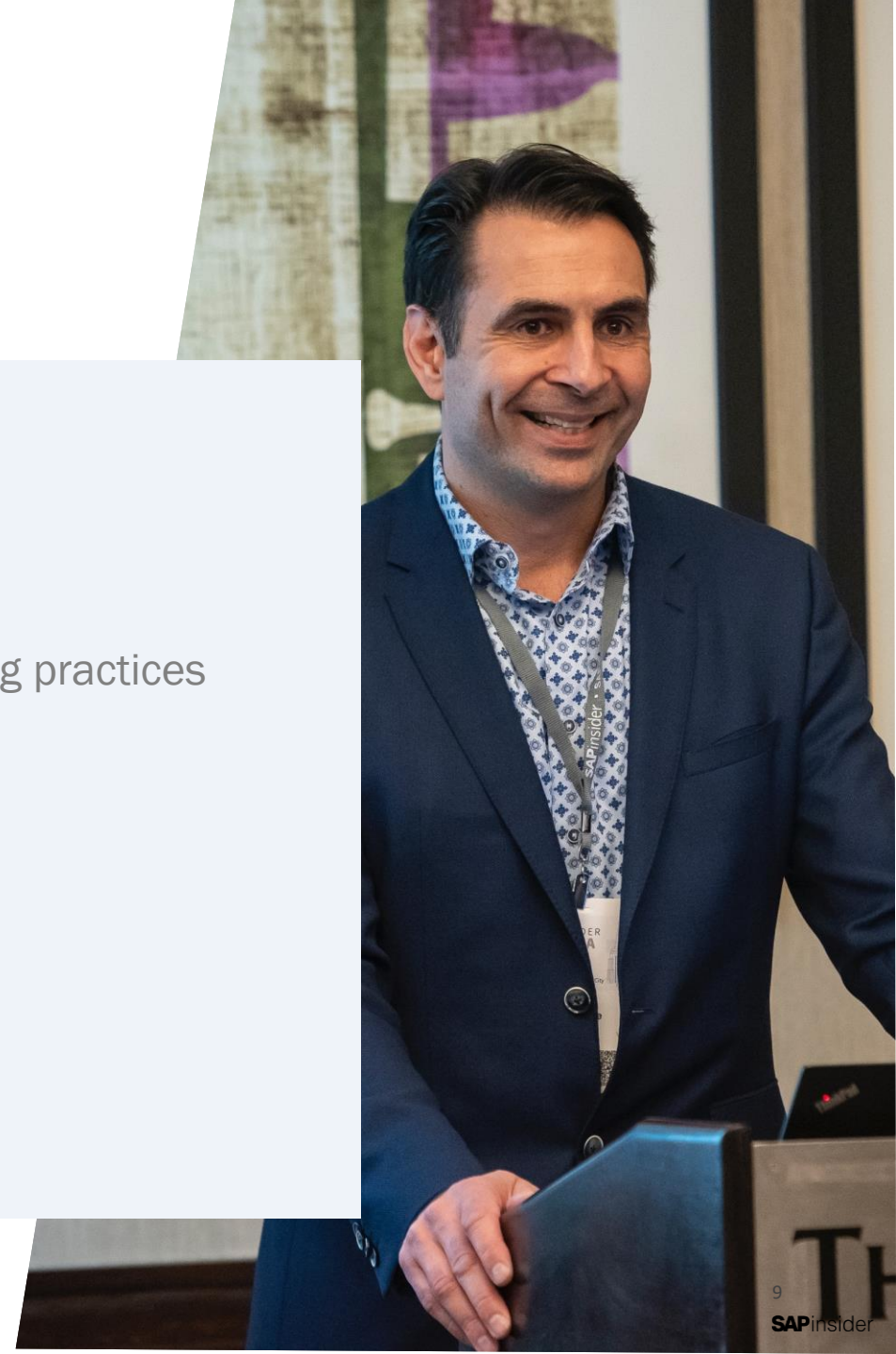
S/4 Transformation Production Solution

- Key
- Legacy on-prem
 - New Prod Cloud
 - New Prod Systems



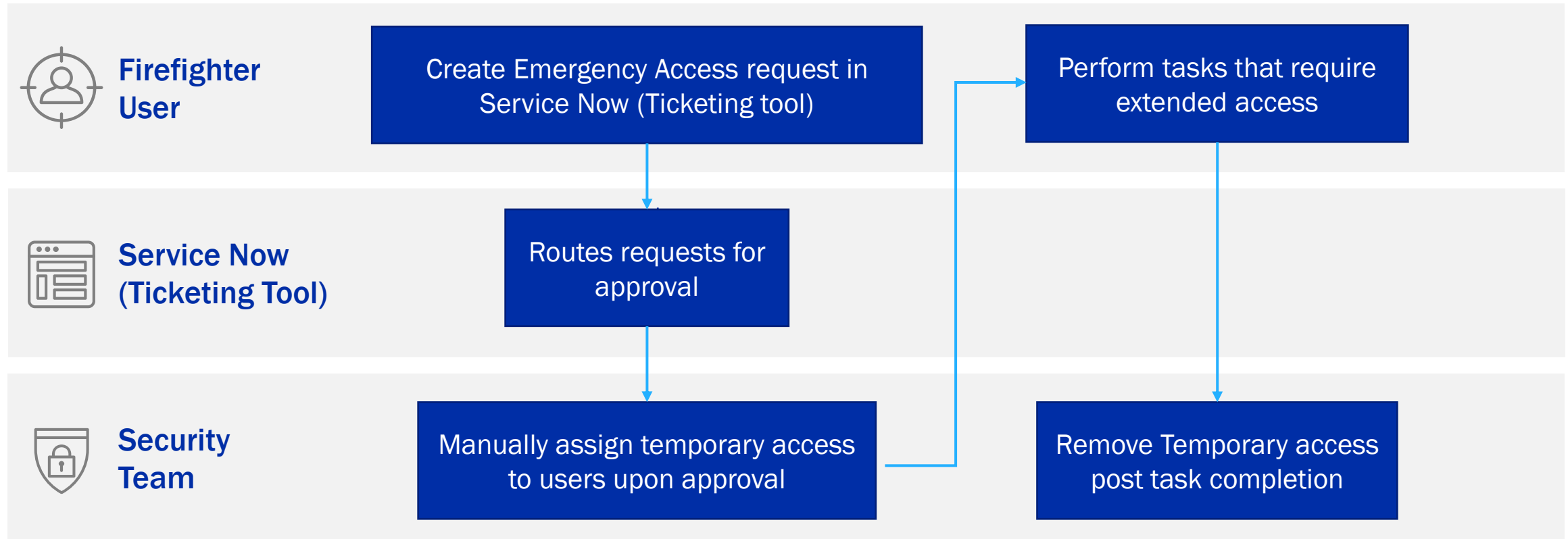
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Legacy McCormick EAM process

Below is the overview of legacy emergency access management process:



Emergency Access Management (EAM)

EAM manages access of superusers when troubleshooting unplanned IT emergencies



Advantages:

- Administrators can control what access can be assigned to user based on the activity
- Emergency access is approved by authorized owners before assignment

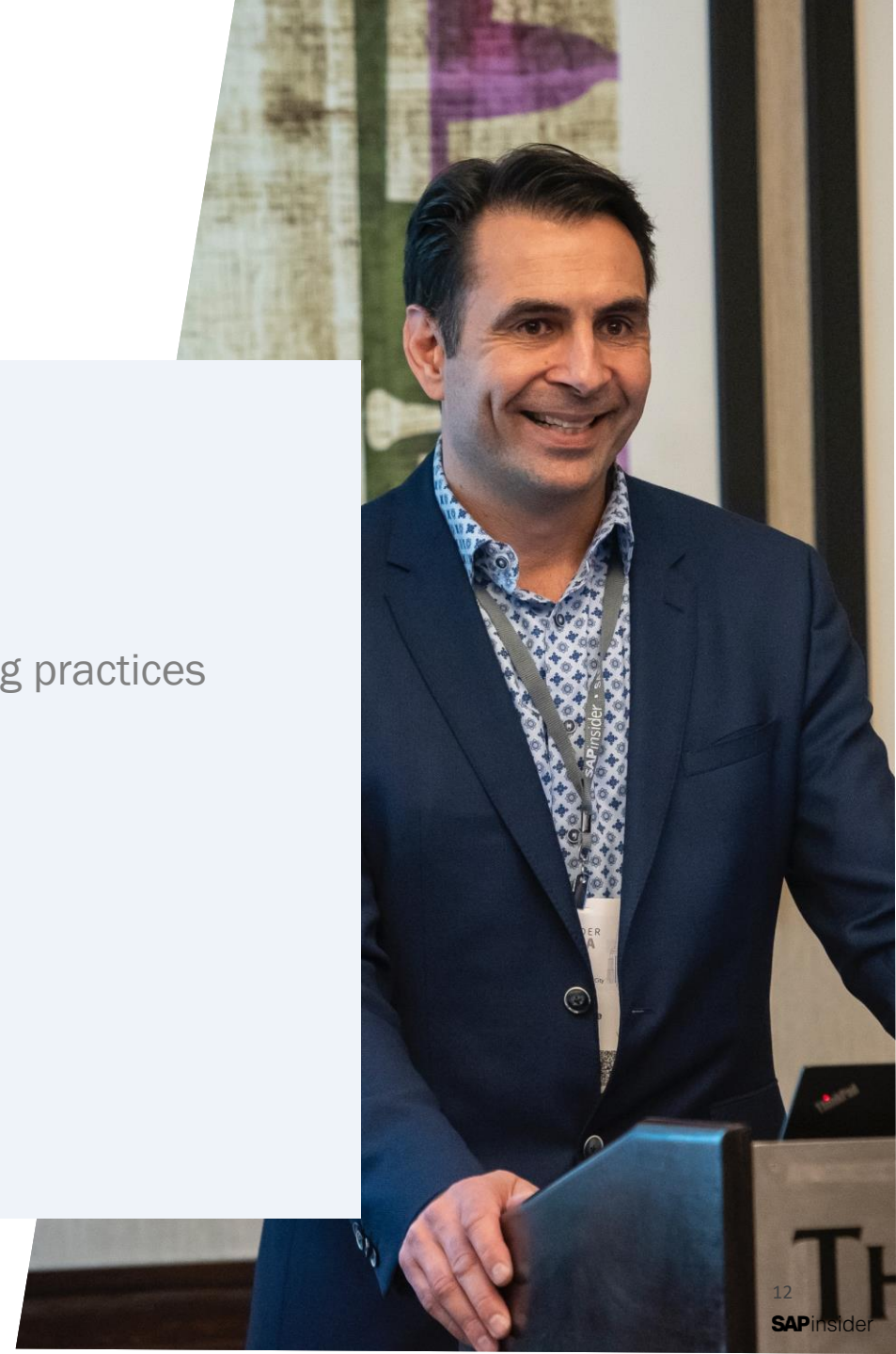


Drawbacks:

- Assignment and removal of temporary access is manual, which is inefficient
- Manual processes may result in errors
- Limited ability to track changes made during FF activity

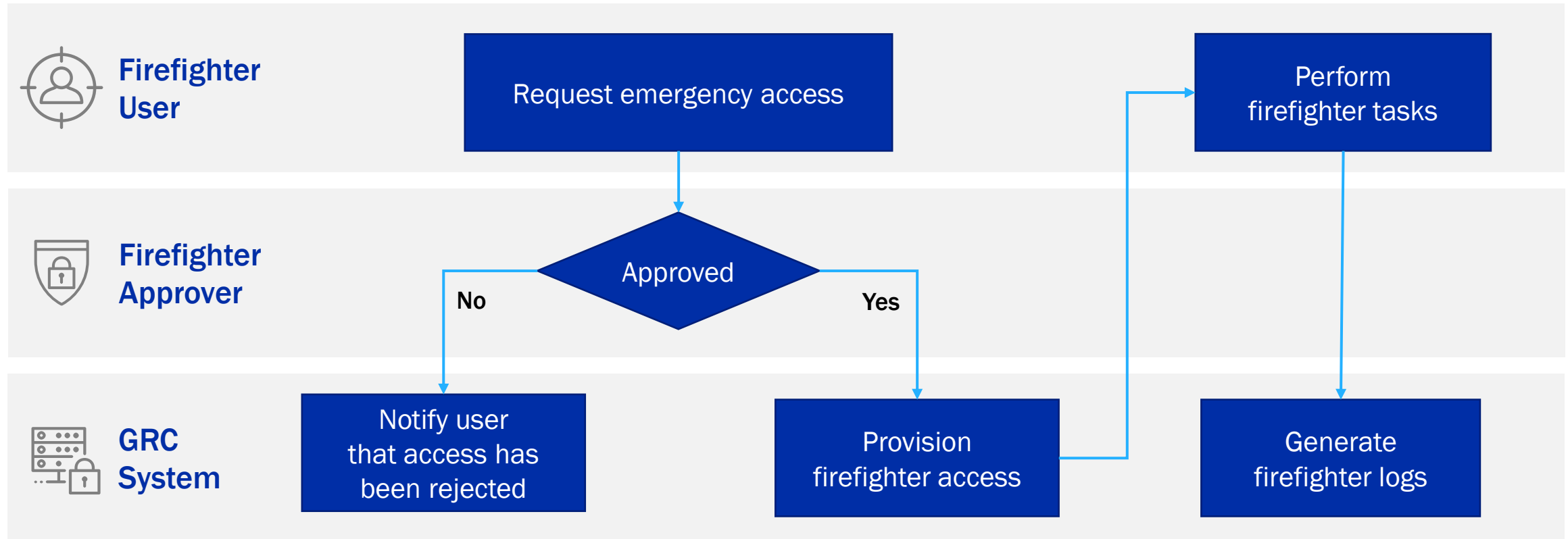
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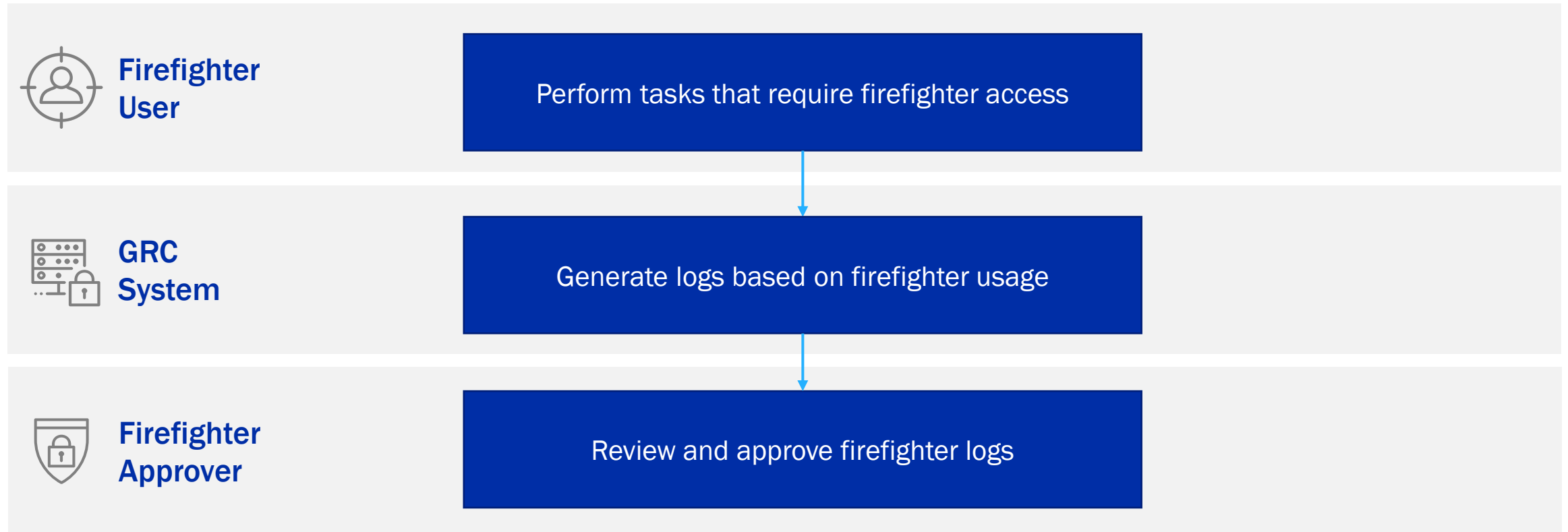
Updated Firefighter Access Request Process

Firefighter access request process is described below:



Firefighter Log Approval Process

Firefighter Log review process is explained below:



Advantages and Initial Challenges of EAM Deployment



Advantages:

- EAM process is fully automated and “Touchless” for SAP Security team
- EAM tracks all activities performed by user using elevated access
- Generated logs are sent to appropriate controllers for approval. An audit trail and detailed documentation is generated after the logs are approved



Initial Challenges:

- Firefighter access assigned was too broad and not task based
- Log generation issues due to size of logs and background job failures
- Inappropriate or not fully trained users were made firefighters and approvers
- High volume of firefighter logs made thorough review of logs difficult
- Reviewers failed to meet the SLAs defined in review process

Firefighter User – Access assignment/review



Firefighter User Access:

- All SAP IT Support and project team members get access to request firefighter by default
- GRC self-paced training guides are sent to project and support team members as part of onboarding process
- As an exception, users outside the IT organization that require access to firefighter IDs follow the standard role request process to get access to assigned to Firefighter request creation role

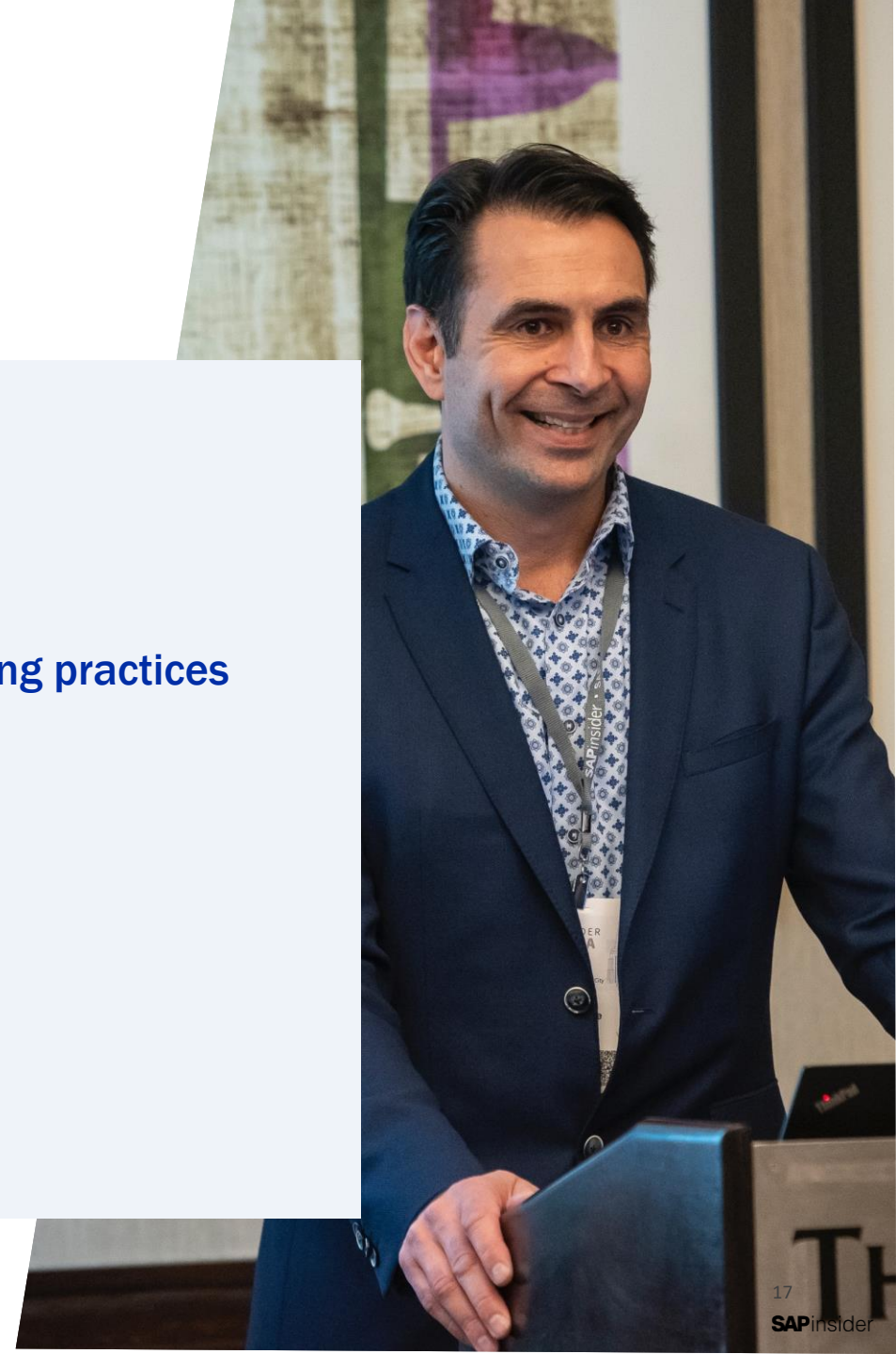


Annual Control firefighter review

- *“Management performs a semi-annual review of users assigned to Firefighter IDs, Firefighter ID Approvers, and Firefighter Controllers. No generic or shared user IDs are assigned Firefighter ID responsibilities and the abilities to assign and request Firefighter IDs are segregated.”*

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Challenges of Implementing EAM

01

Firefighter
access too
broad

02

Issues with
generation of
logs

03

Firefighters or
reviewers not
appropriate

04

Logs not
reviewed in
detail due to
high volume

05

Logs not
reviewed on
timely basis

Challenge #1: Firefighter Access too broad



Challenge: All Firefighter ids were assigned SAP_ALL (kind of) access irrespective of task being performed during firefighting which led to excessive access being assigned to users



Fix: Tiered access approach has been implemented to fix the issues. This access targets FF roles to what is required

- **EAM ID Level 1** – Functional specific transaction codes (defined by process/security team)
- **EAM ID Level 2** – Cross-Functional Access Across Workstreams and Process areas
- **EAM ID Level 3** – Cross Business and IT Access in SAP

Access	Technical							
L3	Cross-Business and IT Access (SAP_ALL restricted from User Admin and Core Basis)							
L2	Cross Functional(IT)				Cross Functional (Business)			
L1	Basis	Security	Development	BW	Order to Cash	Quality	Record to Report	Purchase to Pay

Challenge #2: Issues with Log Generation



Challenge: Firefighter logs were not generated and/or routed appropriately due to size of logs and background job failures



Fix: Below are the steps taken to resolve the issue with generation of firefighter logs:

- Ensure that all firefighter background jobs are scheduled and running appropriately. Any failed jobs should be corrected and rescheduled
- Do not use Firefighter access for mass activities. This can result in logs not being generated or routed due to the size. Some activities include:
 - Data conversion / load
 - Cutover tasks w/mass changes
 - Mass business partner updates
 - Etc.
- Consider removing transaction MASS, its derivations from Firefighter roles where possible

Challenge #3: Firefighters or Reviewers Not Appropriate



Challenge: Inappropriate or not fully trained users were made firefighters and approvers which led to usage and log review issues.



Fix: Below are the steps taken to resolve issues due to firefighters and reviewers not being appropriate:



Firefighters not appropriate:

- Restrict ability to create firefighter requests to users who are entitled to firefight in the system
- Train users on how to use firefighter ids
- Train users on how to document the reason for using firefighter access



Reviewers not appropriate:

- Perform periodic review of firefighter approvers
- Train reviewers and approvers on how to approve firefighter logs
- Consider the impact of Owners / Controllers / Firefighters leaving the company and how this will be handled with EAM

Challenge #4: Logs Not Reviewed Timely Due to High Volume



Challenge: High volume of firefighter logs made it difficult for reviewers to review and approve them in timely manner



Fix: Below are the steps taken to resolve the log review delays caused due to high volume

- Discourage excessive FF usage by adding senior leadership approval (where appropriate)
- Because FF access should be limited to emergency usage, blanket Firefighter approvals should be avoided (ex. approving access for multiple days).
- Each Firefighter login should require an incident # and contain specific details about changes being implemented
- FF approvers should be high in the organization, even outside of the business process based on the usage of the Firefighter id
- Education to requestors and approvers should be delivered annually reenforcing proper firefighter requesting procedures and the impact of high Firefighter usage
- Perform valuation of FF usage to enhance user's daily roles

Challenge #5: Logs not Reviewed on Timely Basis



Challenge: Firefighter logs SLAs were missed due to delays in log review by approvers



Fix: Below are the steps taken to eliminate delays in review of firefighter logs:

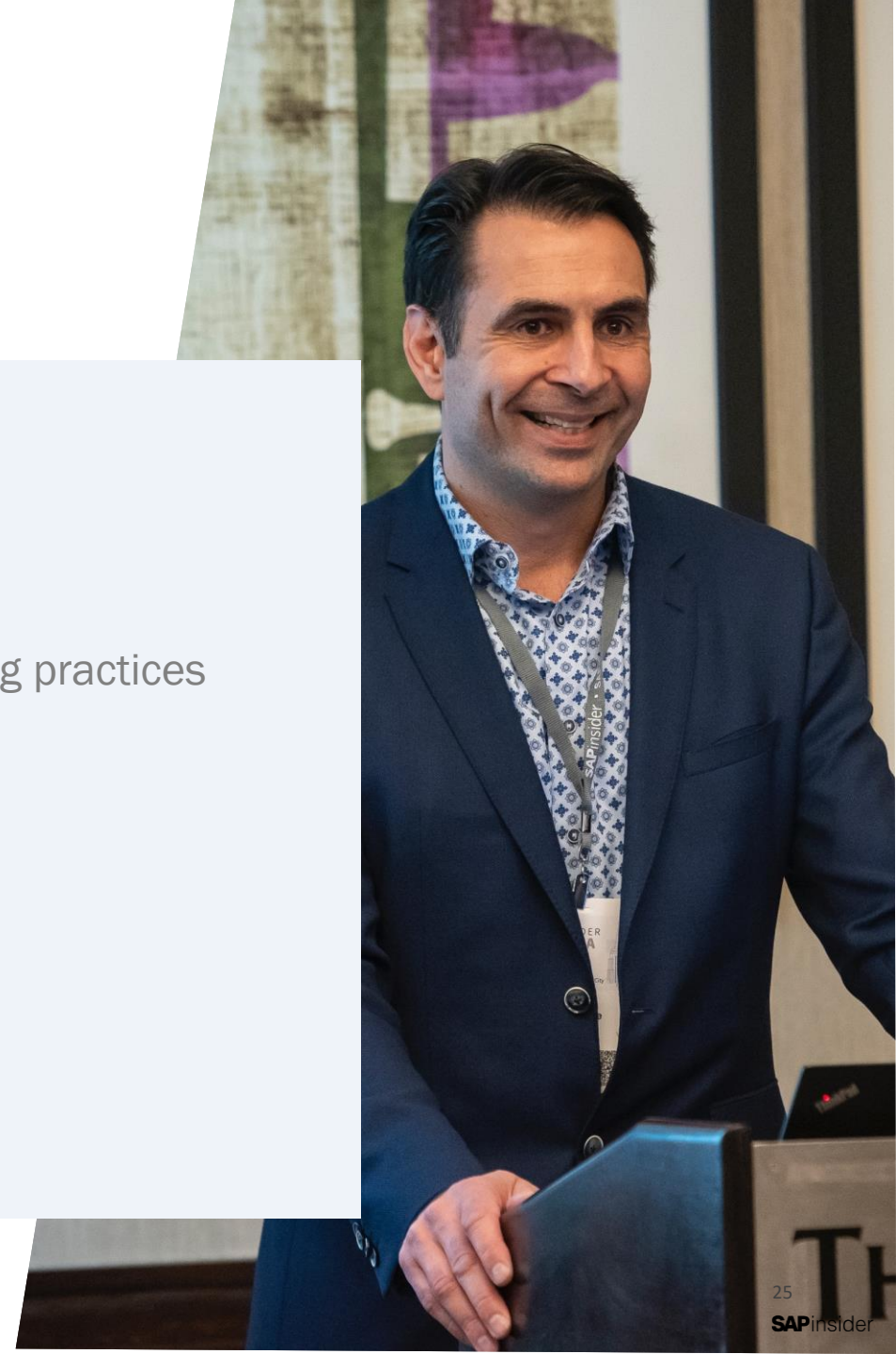
- Create reasonable SLAs for firefighter log review
- Ensure reviewers and approvers have bandwidth to review the logs within SLAs
- Identify backup reviewers and approvers w/notification functionality enabled
- Create executive status dashboards on the status of log reviews showing controllers that are out of compliance (i.e. Power BI, Tableau, etc.)
- Additional thought: Consider linking Firefighter log review / SoX objectives to corporate incentives (ex. Cash bonus, equity, etc.)

Future Enhancements

- Avoid sending empty firefighter logs for approval
- Create task-based firefighter ids for recurring critical tasks (e.g. Debug Update, Open/Close client, etc.)
- Optimize SoX controls where possible

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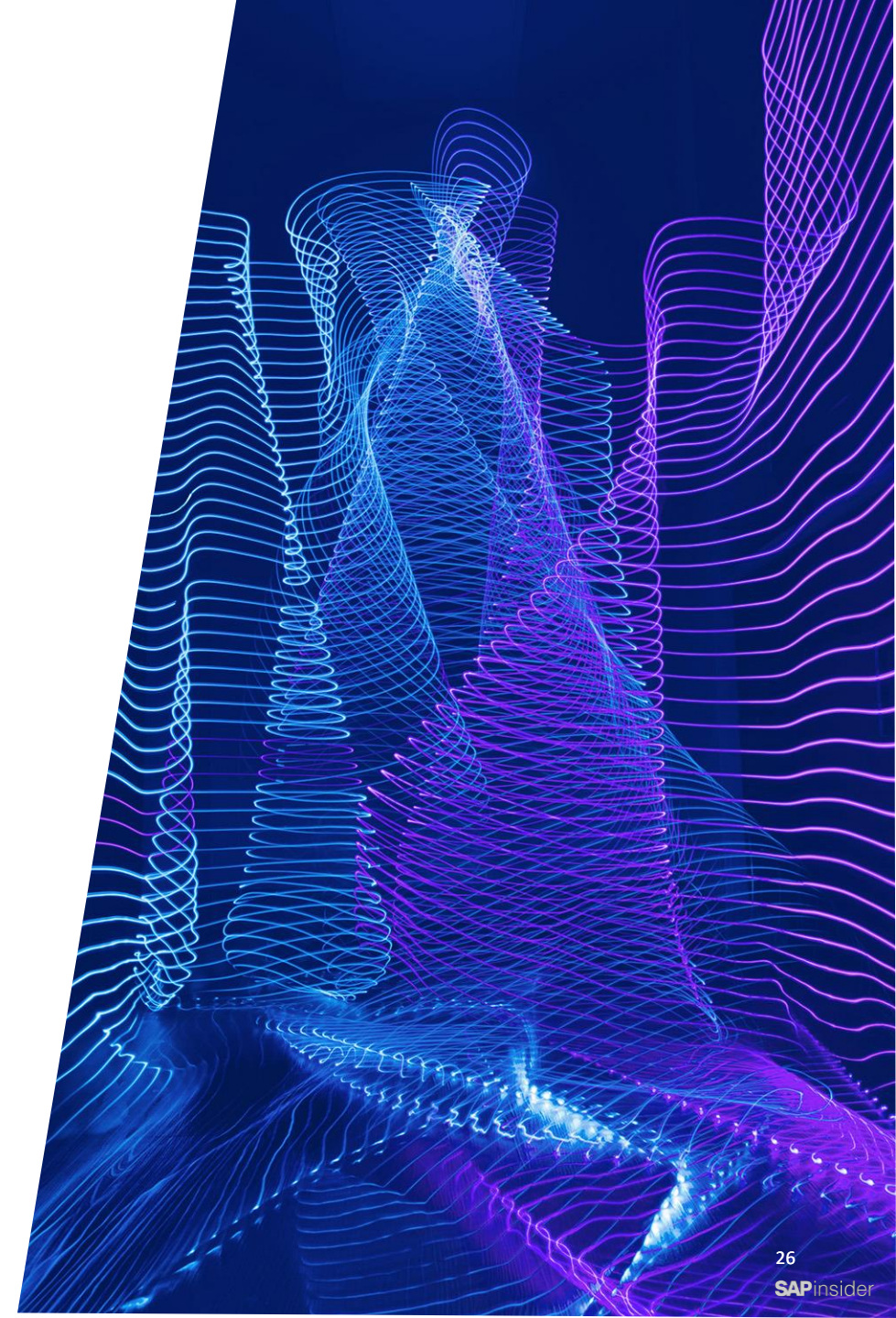
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Wrap Up



- **Implementation of Access Control EAM module streamlined the Firefighting request and review processes and enabled compliance**
- **Key to success of EAM success factors:**
 - Identify appropriate approvers and training them to perform the review thoroughly
 - Create a well thought out security role design for FF roles
 - Address people AND system aspects



Where to Find More Information

SAP S/4 HANA Security Guide – 2022

- https://help.sap.com/doc/eec734dbb0fd1014a61590fcb5411390/2.0.05/en-US/SAP_HANA_Security_Guide_en.pdf

2022 Accenture Cyber Security Threat Report

- https://www.accenture.com/us-en/insights/security/cyber-threat-intelligence-report-2021-vol-2?c=acn_glb_brandexpressiongoogle_12906185&n=psgs_0322&gclid=Cj0KCQjwnNyUBhCZARIsAI9AYIERT5yujbID9mzq-k65II5oEd7RJRGg71oeGTs_HJw3zmLksR7zriYaAvfZEALw_wcB&gclsrc=aw.ds

Gartner Magic Quadrant for SAP S/4 HANA Application Services

- <https://www.gartner.com/doc/reprints?id=1-26IYZ4BR&ct=210615&st=sb>

Where to Find More Information

SAP EAM Blog

- [http://blog.sap-press.com/emergency-access-management-with-sap-grc#:~:text=The%20Emergency%20Access%20Management%20\(EAM,manage%20firefighting%20or%20emergency%20access.](http://blog.sap-press.com/emergency-access-management-with-sap-grc#:~:text=The%20Emergency%20Access%20Management%20(EAM,manage%20firefighting%20or%20emergency%20access.)

SAP Official Guide – EAM

- https://help.sap.com/doc/759acdedc98b4997bbba4f9fb15c9b1a/12.0.02/en-US/loio8354d295b56443c1aea86223a78565cf_en.pdf

What's new in SAP GRC 12 Access control

- [Introduction to SAP Access Control | SAP Help Portal](#) – Navigate to Whats New in SAP Access Control 12.0 SP19

SAP GRC Product support

- [SAP Access Control](#)


SAP GRC Upgrade

- [SAP GRC 12 Upgrade – Best Practice, Housekeeping, Upgrade Approach & Plugin Updates | SAP Blogs](#)

Thank you! Any questions?


Serena Meenan

Serena_Meenan@mccormick.com

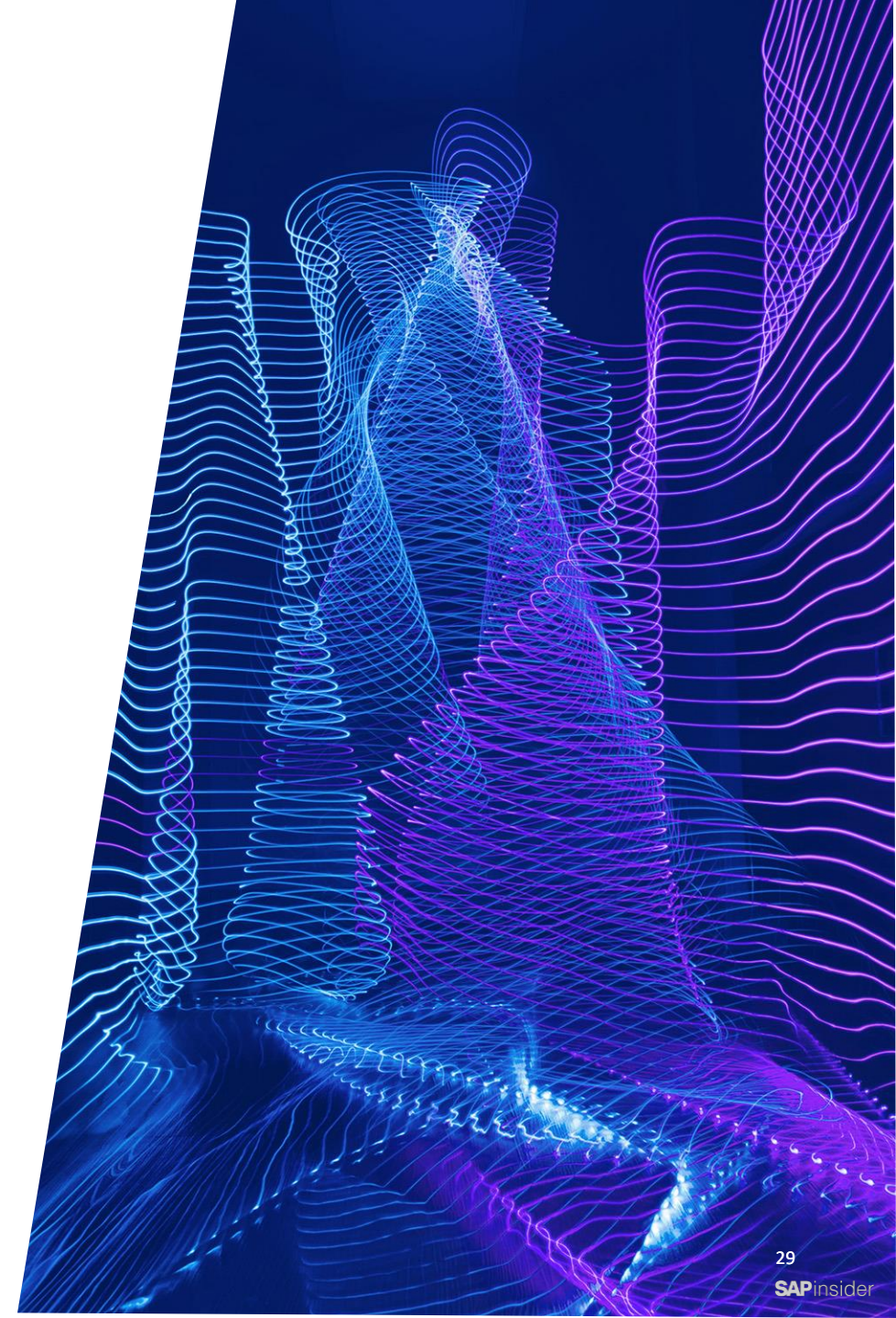
 <https://www.linkedin.com/in/serena-meenan-3940184>

Ray Mastre

Ray.Mastre@Accenture.com

 <https://www.linkedin.com/in/raymastre/>

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