

Leveraging GenAI to improve confidence and efficiency in your Firefighter Log Review process

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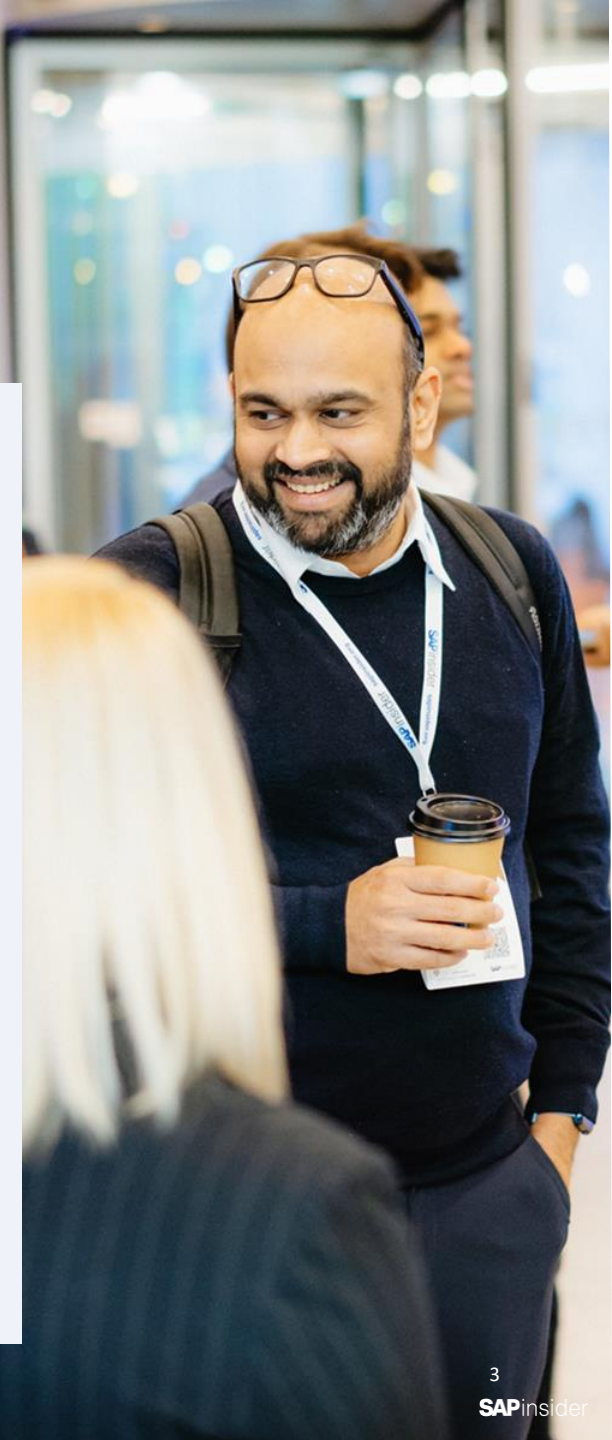


In This Session

- Where GenAI can fit in your existing Firefighter process to help drive efficiency
- What development is required to integrate SAP GRC with GenAI
- What risks to consider before automating your Firefighter review process

What We'll Cover

- Introduction
- Generative AI
- Firefighting with GRC Access Control
- Integrated Solution
- Wrap-Up



About me



Solving SAP Security & GRC challenges at PwC for 17 years



Live in Omaha, Nebraska



Notre Dame alum



Proud father of 5 (4 girls and 1 boy)

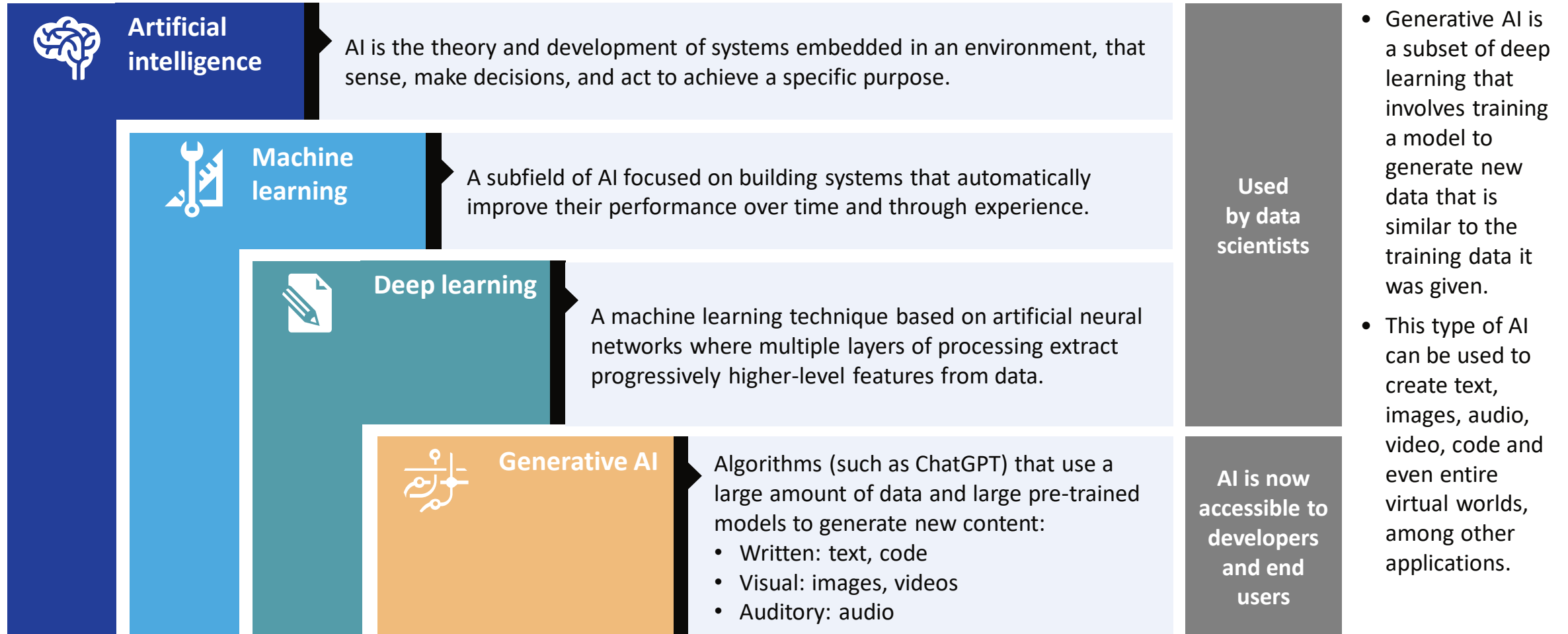


Enjoy cycling, running, and photography

Generative AI



What is Generative AI?



GenAI Today

**Generative AI is
already
outperforming
people...
...and it is
accelerating.**

Generative AI Platforms Boost Worker Productivity by 14%¹

Productivity is much higher in key areas across a company's value chain

MSFT has invested \$10B in OpenAI

GPT-4 production in Azure will **accelerate growth** in Data and AI Services²

ChatGPT has the largest, fastest user base than any other technology in history³

100M user in 60 days, and 1B monthly views in third month

ChatGPT gets an "A"

- LSAT 163 (88%)
- Bar exam 298 (90%)
- SAT score of 1410 (>90%)
- 99% GRE score
- AP Macroeconomics 84 (100%)⁴

In 4 years, AI language systems advanced 10,000x...

...at **lower costs**; 67% drop in Aug 22, 90% drop in Mar 23 and 25% drop in June 23⁵

AI training costs are declining 60% YoY

By 2030, AI training costs will be **\$500 for the same output that cost \$5M in 2020⁶**

1. Per National Bureau of Economic Research for customer service roles
2. *Bloomberg*, Microsoft Invests \$10 Billion in ChatGPT Maker OpenAI, 1/23/2023
3. *Ars Technica*, ChatGPT sets record for fastest-growing user base in history, report says, 2/1/2023
4. *Businessinsider.com*, AI models like ChatGPT and GPT-4 are acing everything from the bar exam to AP Biology, 6/23/2023
5. Hugging Face, *Large Language Models: A New Moore's Law?*, Oct. 26, 2021
6. The AI Economy and future of AI Natives <https://newnative.ai/news/the-ai-economy-and-future-of-ai-natives>

The impact

What it is

ChatGPT and Bard are user interfaces that make it easier for anyone to interact with a large language model (LLM) like a chat message. To the user, it appears that AI is answering complex questions with the same knowledge as an intelligent individual — with good grammar.

What it is NOT...

LLMs do not understand what they say. They are not self-aware. They can not replace people, but people who are able to use GenAI to do their work can be better positioned to replace those who can't.

Popular generative AI task categories:



Text



Code



Generative
interfaces



Speech
& audio



Visual
media



Generative AI
can...

Create
Improve
Summarize
Q&A



Example capability

Text



Use cases

- Contact center dialog
- Improve marketing content
- Produce product documentation
- Test plan creation
- Summarize service requests
- Analyze customer feedback

Code



- Generate Python code
- Improve and enhance SQL
- Explain and document code
- Update code to new standards and platforms

Data



- Validate data
- Generate sample and test data
- Understand differences in data
- Fill in missing data points

In summary

GenAI is:

- One type of artificial intelligence
- Capable of producing content including text, code, images, and video based on large language models (LLMs)
- Ready to create new markets and revolutionize industries
- Available to many types of users, not just data scientists
- A solution that can position people who know how to use it to work more effectively and productively than those who do not



Firefighting with GRC Access Control



GRC Emergency Access Management

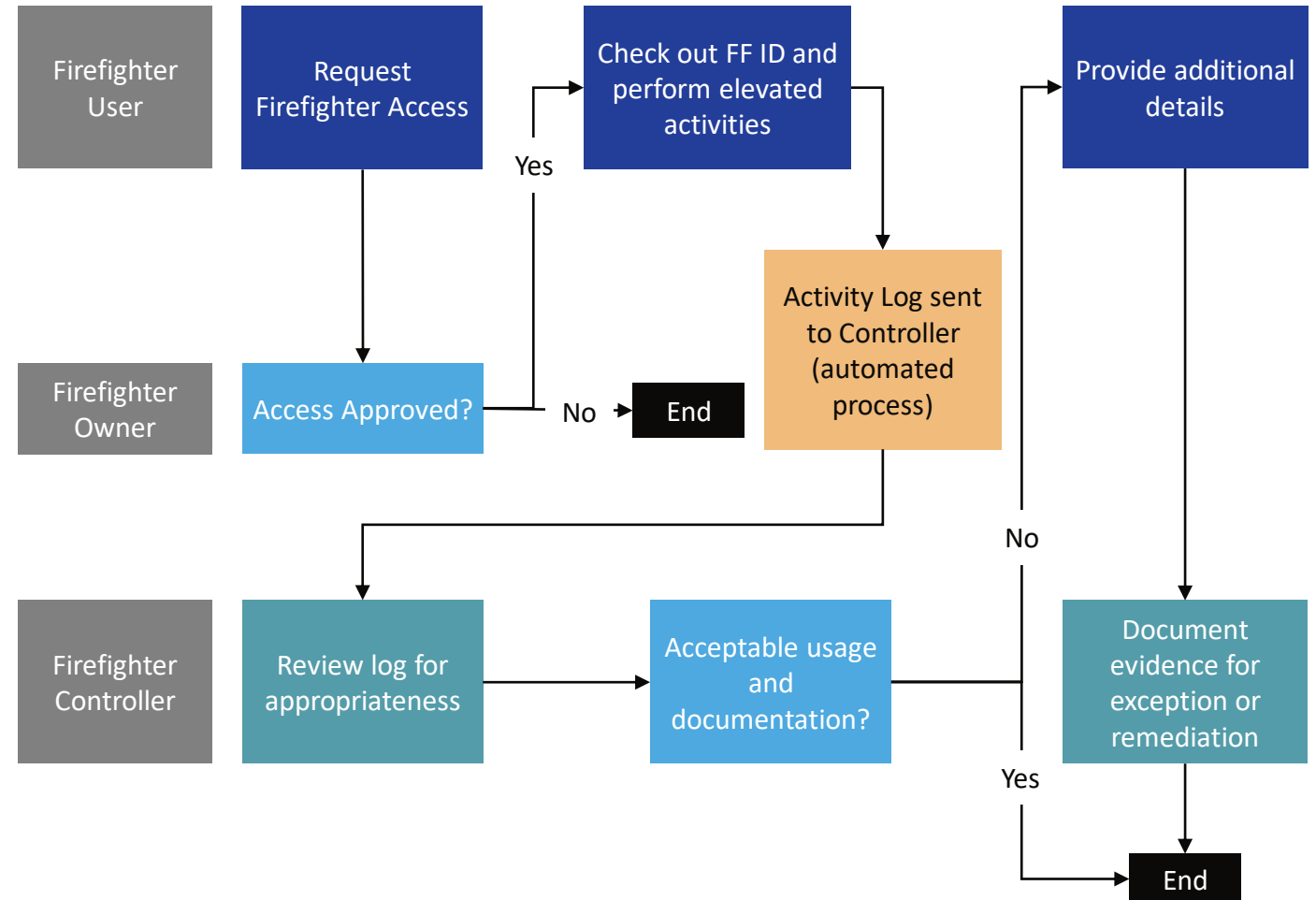
With the Emergency Access Management module, also known as Firefighter, GRC Access Control offers an automated, request-based process for elevated access.

- A single interface for requesting, approving, and reviewing emergency activities
- Captures an audit log of actions performed with elevated access
- Integrated with GRC's Segregation of Duties and Critical Access reporting and access provisioning features



Recommended Firefighter Approach

- Clearly define intended use cases (ie. cutover, hypercare, production support, upgrade, etc)
- Assign relevant security access to FF IDs for each specific use case
- Leverage GRC's provisioning workflow to document approvals for FF access
- Do not use FF for display or for activities required for day-to-day activities
- Complete timely reviews of FF logs



Common Firefighter Challenges



High Firefighter Usage

Often used as a crutch when functionality does not work or security access is poorly defined



Technical Knowledge Required

Detailed logs require SAP technical knowledge to understand appropriateness of activity performed



Cumbersome Audit Process

No native link between ticketing systems, Firefighter access requests, and individual session logs

Log Report Description	Table Name

Deep technical knowledge
required to truly understand
transactions executed and
Log Report Description

GenAI Assisted Log Review



GenAI Assisted Log Review Use Case



Background

- Fortune 50 Company with a world-wide SAP footprint undergoing a 5+ year S/4HANA global transformation
- 30+ go lives in 2023 – program to continue through 2027
- GRC Access Control connected to 90+ production clients
- 40,000+ live users
- Firefighter required for Cutover, Hypercare, and Sustain Support processes



Challenges

- Size, scope, and the ongoing nature of the deployment led to compliance requirements driving significant FF usage - ~5,000 sessions per month in 2023
- Several manual steps required for log reviewers to tie FF sessions to support tickets

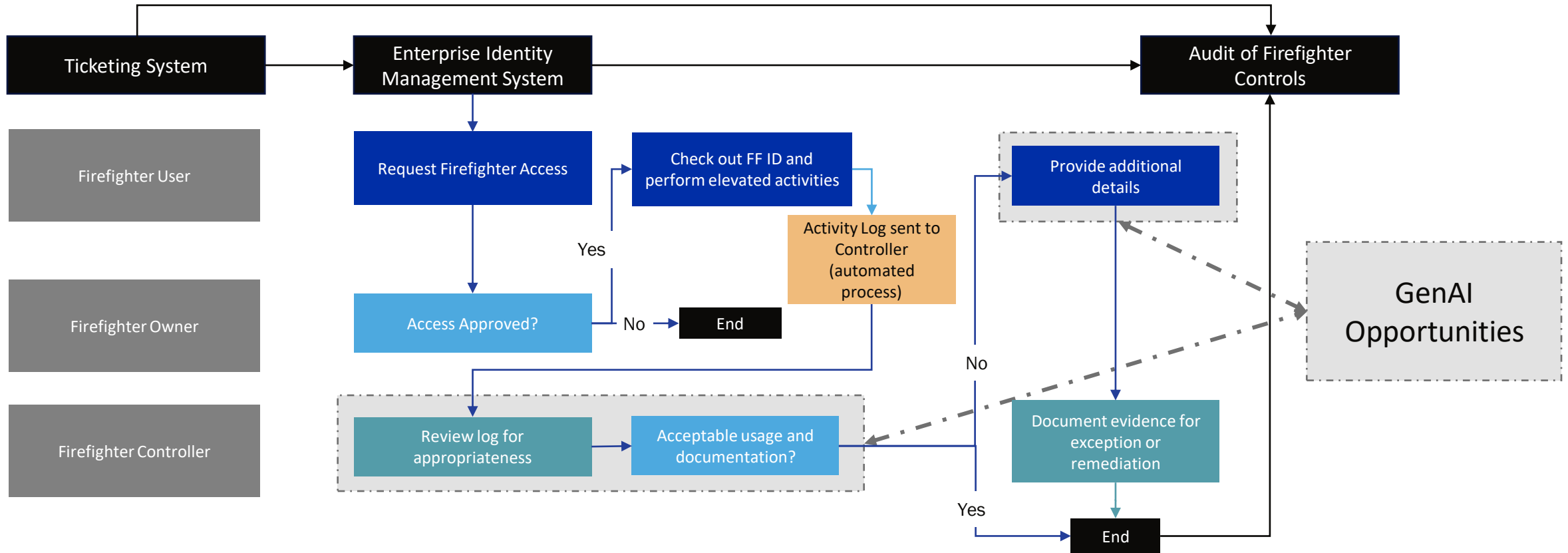


Request

Develop a GenAI-fueled solution to:

- Streamline the log review process
- Reduce number of logs to review
- Reduce back and forth with FF Users
- Automate as much manual effort as possible

Expanded End-to-End Firefighter Process

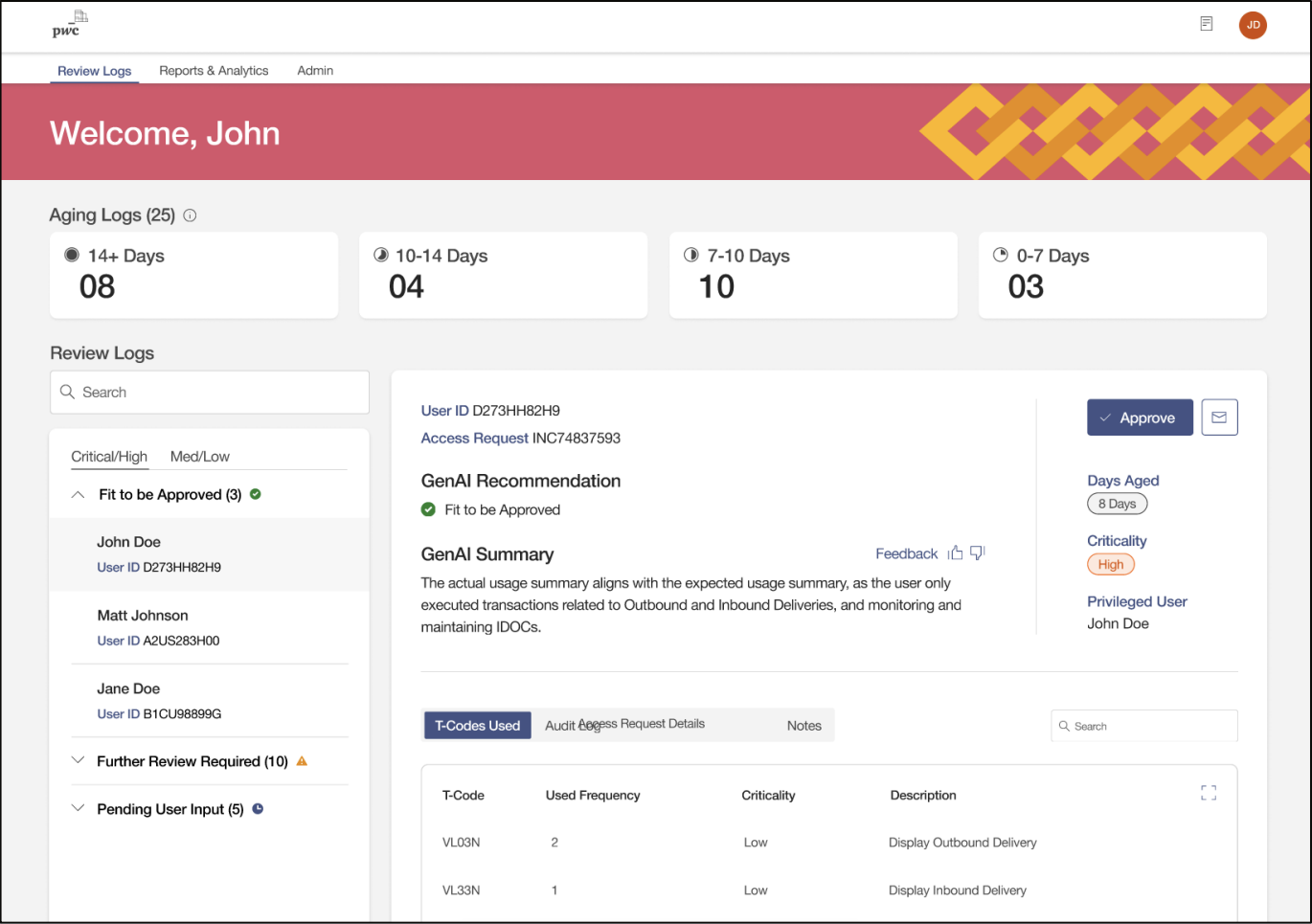


- Reviewers must navigate to multiple systems (IDM, SAP GRC and Ticketing System)
- Time intensive and manual review of IDM, log transaction codes in SAP GRC and ticket details

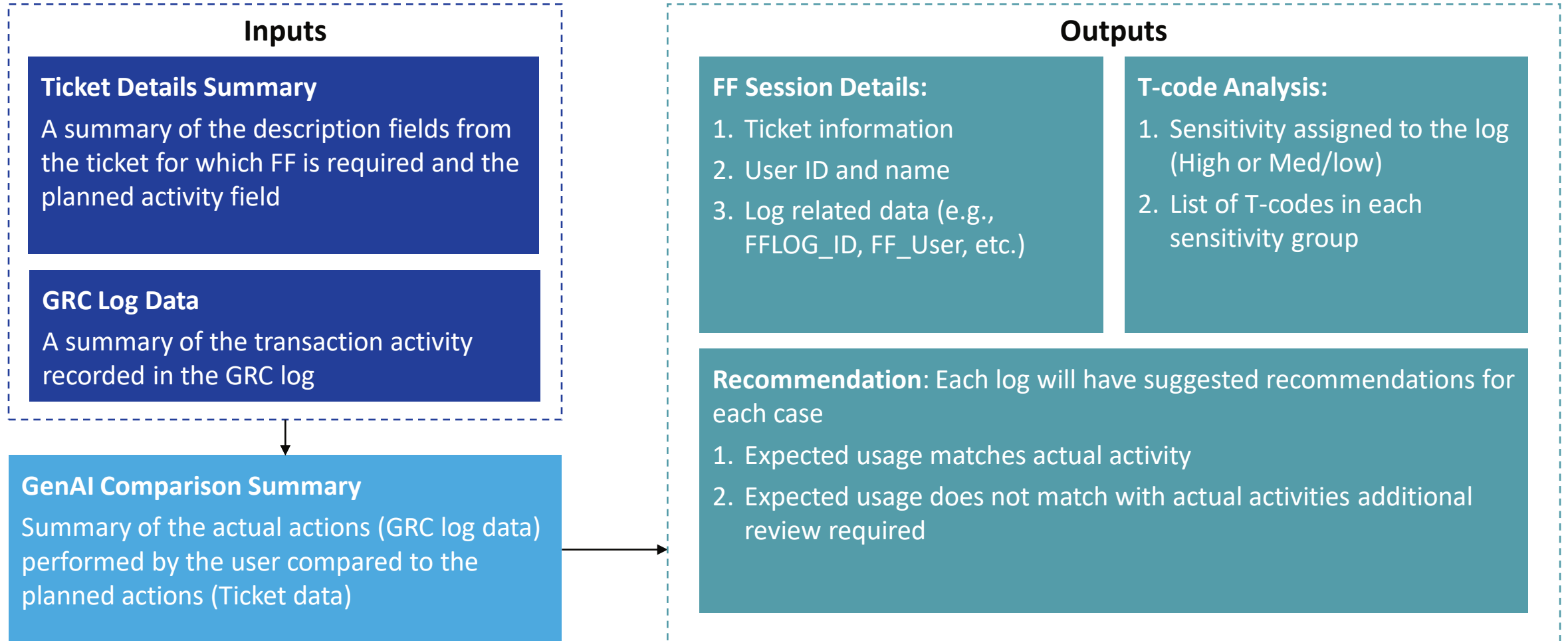
Proposed Solution

Power apps-based application, utilizing a GenAI model to help streamline the current review process for Firefighter IDs requiring less time/manual effort

- Consolidates data from SAP GRC, Identity Management, and the Ticketing System
- Generates a summary (via GenAI) of the access requested and activities performed by the user
- Categorizes the logs based on the criticality of the transaction codes executed
- Provides a recommendation to the reviewer along with the reasoning



Solution Flow



Outcomes and Lessons Learned



Outcomes:

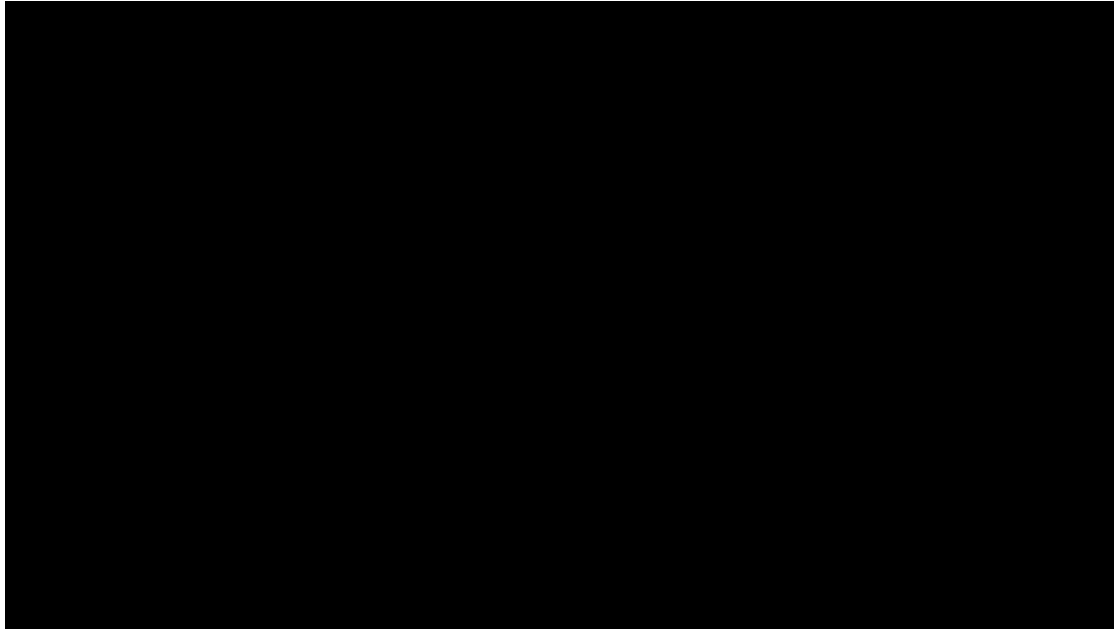
- Integration with multiple production data sources (SAP GRC, Ticketing tool, Identity Management) creating a streamlined single source of truth for reviewers
- Reduced interactions between reviewers and FFID users (e.g. automated follow-ups for missing ServiceNow ticket numbers)
- Auto-approval of low/medium criticality logs
- No changes required to the existing workflows and integrations



Dependencies:

- Transaction code sensitivity based on SAP GRC ruleset
- Development required to expose GRC log data
- All data remains in the client systems
- **Early engagement with auditors to explain the solution and address concerns before going live**

Demonstration Video



Additional GenAI Use Cases

We are currently piloting future use cases including

- Automated SAP Access Request creation based on directory data and user prompts
- Identification of risks and controls during an S/4 implementation by evaluating design documentation
- Automated controls test plan generation
- Developing analytics for continuous control monitoring

Wrap Up



Where to Find More Information

Tanner Stening, “Is ‘generative’ AI the way of the future? Northeastern expert explains the upside of new models, the need for human involvement” (<https://news.northeastern.edu/2023/04/19/generative-ai-usama-fayyad/>)

The Future of ERP Podcast, Episode 21: Talking Generative AI and Its Role in the Future of ERP with PwC's Wim Rymen and Elizabeth McNichol (<https://podcast.opensap.info/the-future-of-erp/2023/09/20/episode-21-talking-generative-ai-and-its-role-in-the-future-of-erp-with-pwcs-wim-rymen-and-elizabeth-mcnichol/>)

"Reinventing Business" with Mohamed Kande, Edition #2: PepsiCo Global CIO Seth Cohen
(<https://www.youtube.com/watch?v=j4duSqZ0YZU>)

LinkedIn Learning, “Generative AI for Business Leaders Online Class” (<https://www.linkedin.com/learning/generative-ai-for-business-leaders>)

<https://www.pwc.com/us/en/services/generative-ai.html>

- PwC’s Generative AI services

Key Points to Take Home

- GenAI is a powerful solution that is able to improve efficiency and productivity
- Firefighter offers a controlled means to elevate access
- High Firefighter usage creates difficulty for log reviews
- Customization leveraging GenAI can reduce the burden on log reviewers by removing back and forth and providing business-level summaries of technical logs
- The SAP Security & Controls space has many more potential GenAI use cases



Thank you! Any Questions?

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