How can technology support remote and analytical audit activities?

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AdaptiveGRC™

20+ More than two decades of experience in serving world's largest companies

60+ Countries all over the globe have businesses executing our programs and projects

420+ Highly skilled and qualified professionals, having both technology and business processes knowledge

24/7 Non-stop support for users, whenever necessary

KEY FACTS ABOUT C&F

For more than 20 years now C&F has been providing solutions for the largest international organizations, including those listed in Fortune 500.

Our 100+ Clients: Leaders in their industries

- Pharma
- Animal Health
- Human Resources
- Financial Services
- Transportation/Logistics

Agenda

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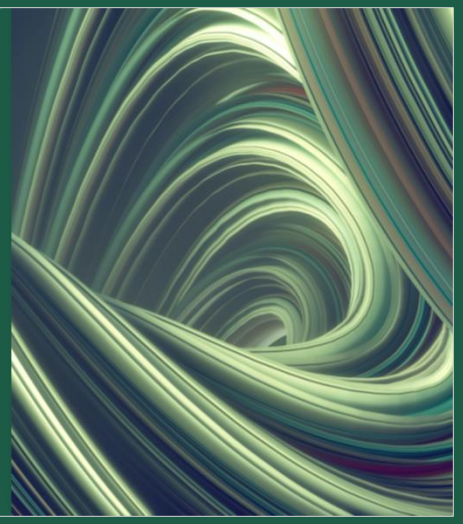
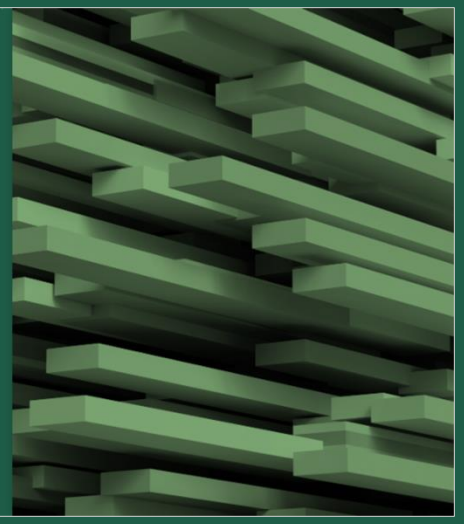
1

The Evolution of Auditing



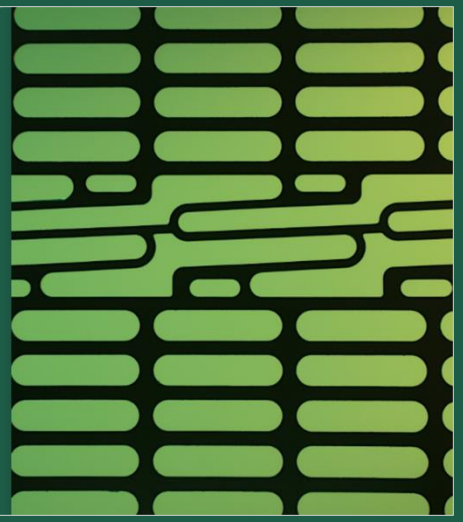
2

Challenges in remote and analytical auditing



3

Audit support with technical solutions



4

Summary

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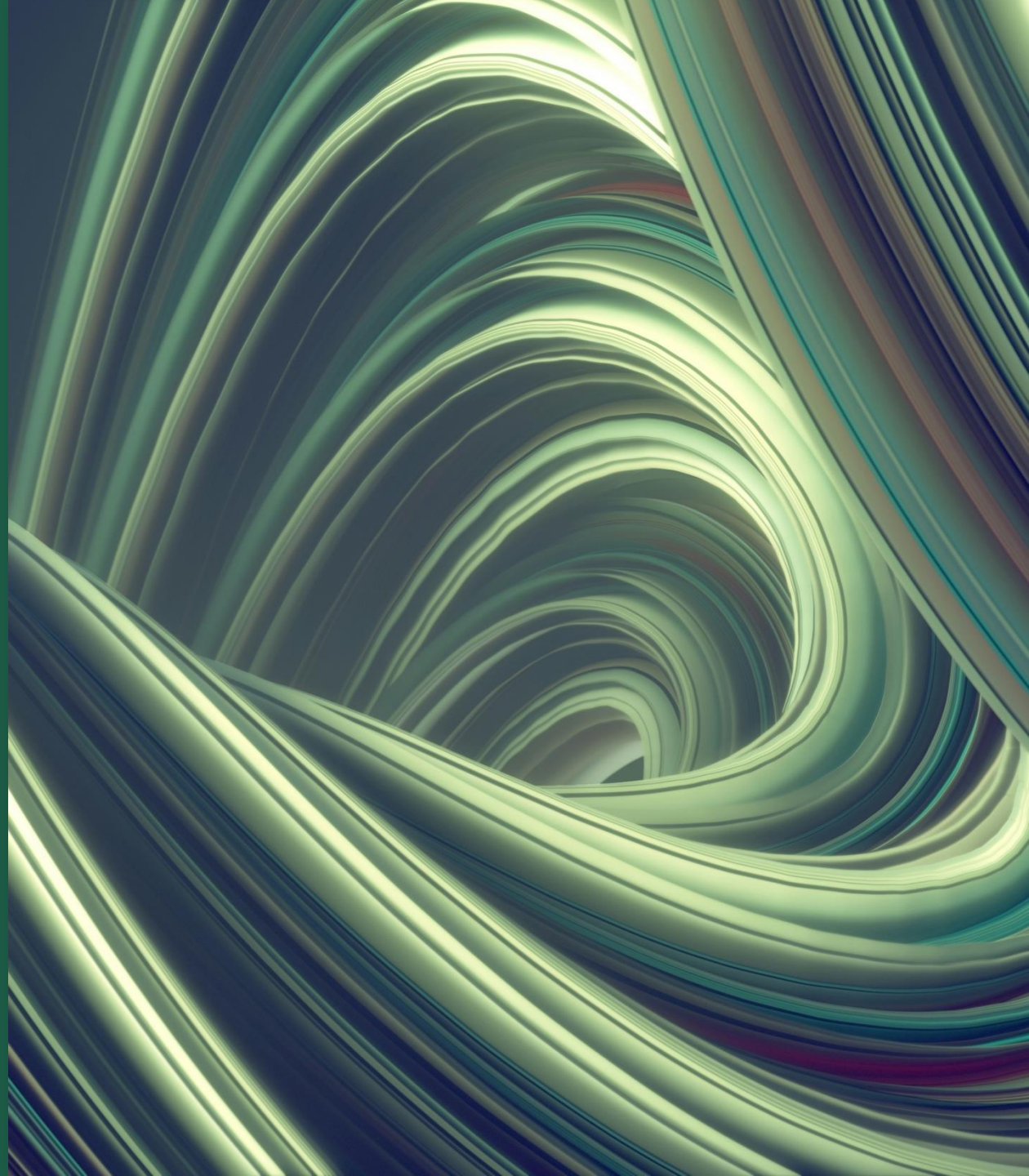
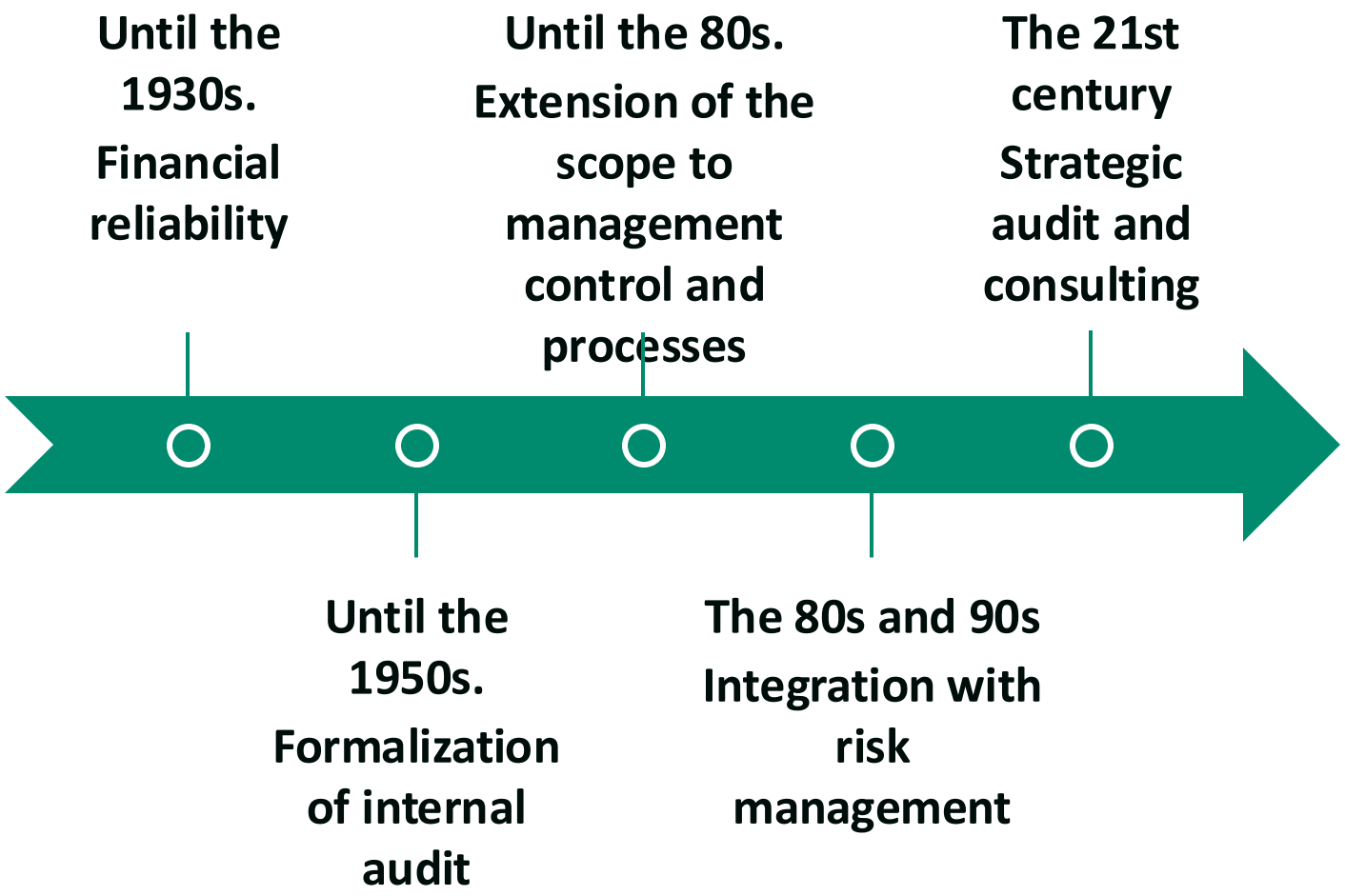
1

The Evolution of Auditing



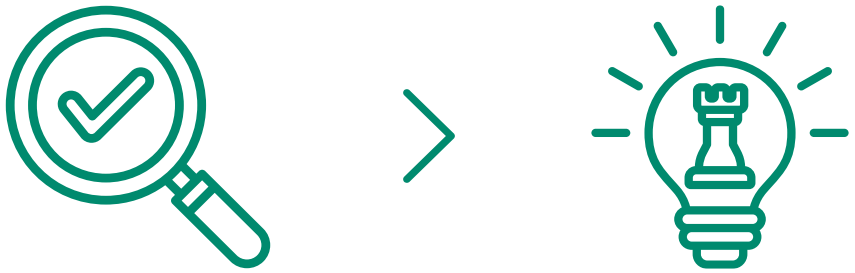
The evolution of auditing over the last 100 years



What happens after 2025?

Synergy between the auditor and artificial intelligence?

What is the main role of audit today?



We have moved from a simple control function to an advisory and strategic operation.

- ❖ Greater responsibility
- ❖ Greater scope of work
- ❖ Higher expectations
- ❖ **The day has still only 24 hours ☺**

This is how AI viewed the 40-year-old auditor in 2023...

This is how AI views a 40-year-old auditor in 2025...

2023

2025

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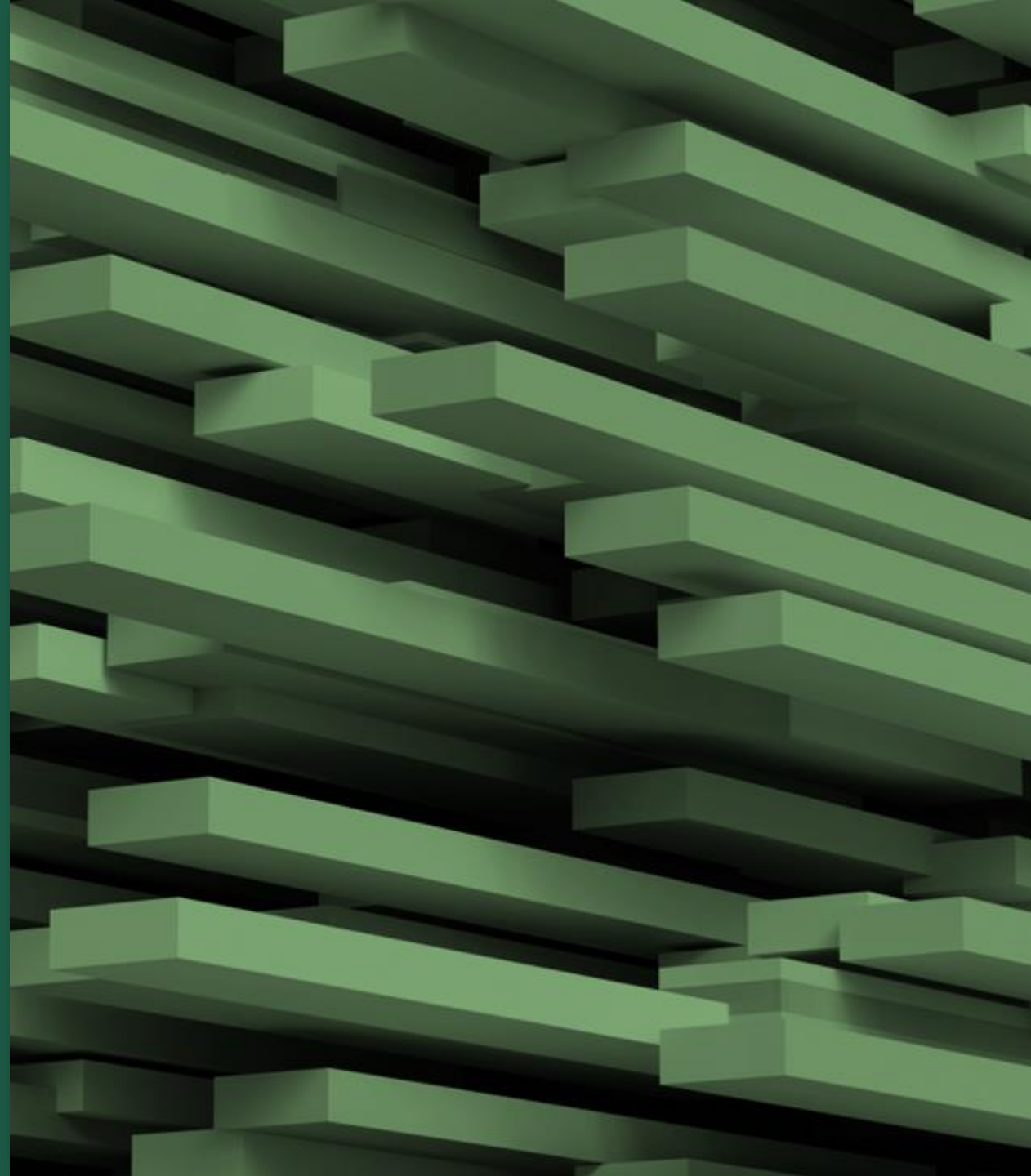
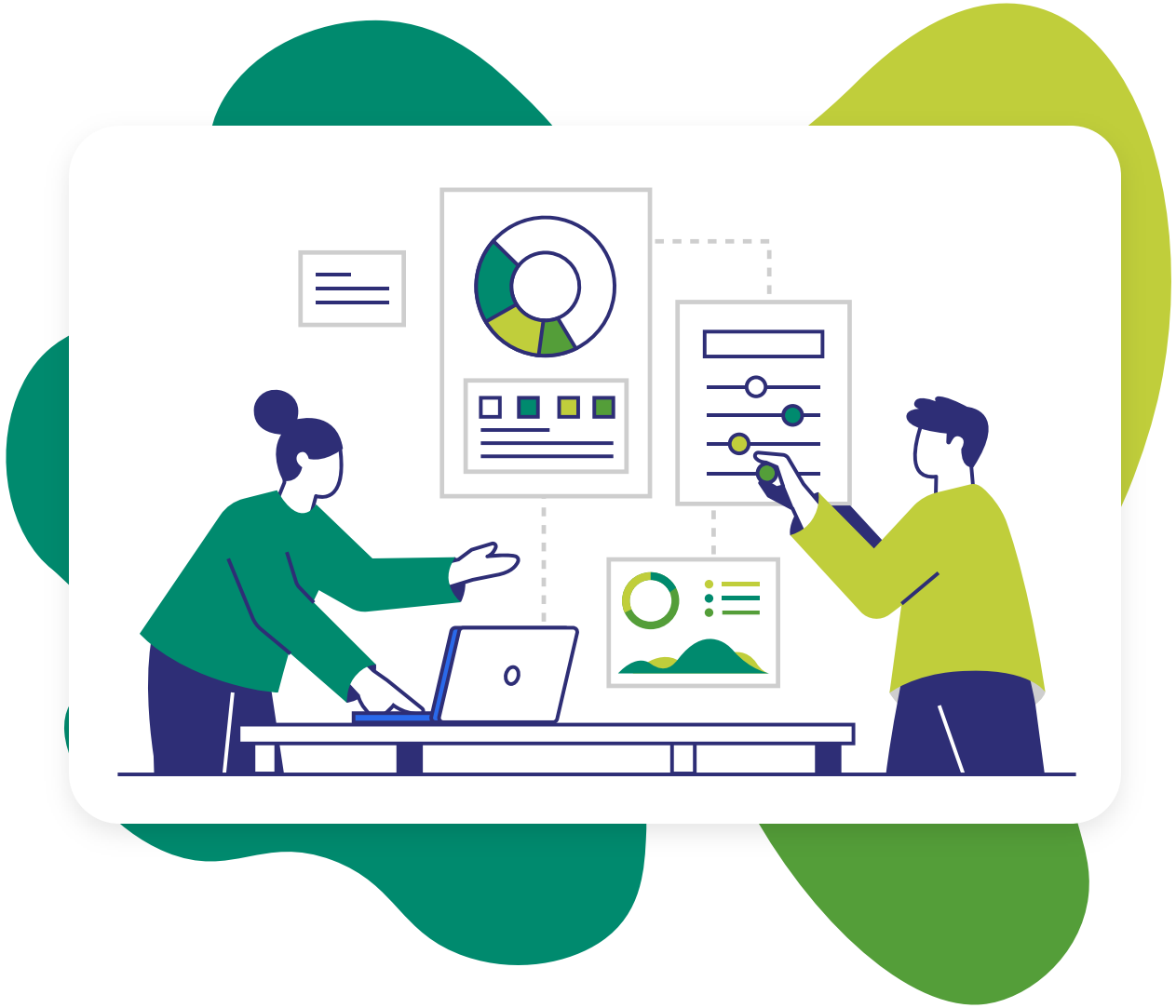
2

Challenges in remote and analytical auditing





Remote audit

It **transforms** your internal audit practice by enabling you to assess your organization's processes and control systems **without the need for an auditor to be physically present** on site.

Shorter time, lower costs, more audits, but **additional tools** are required to support the auditor's work.

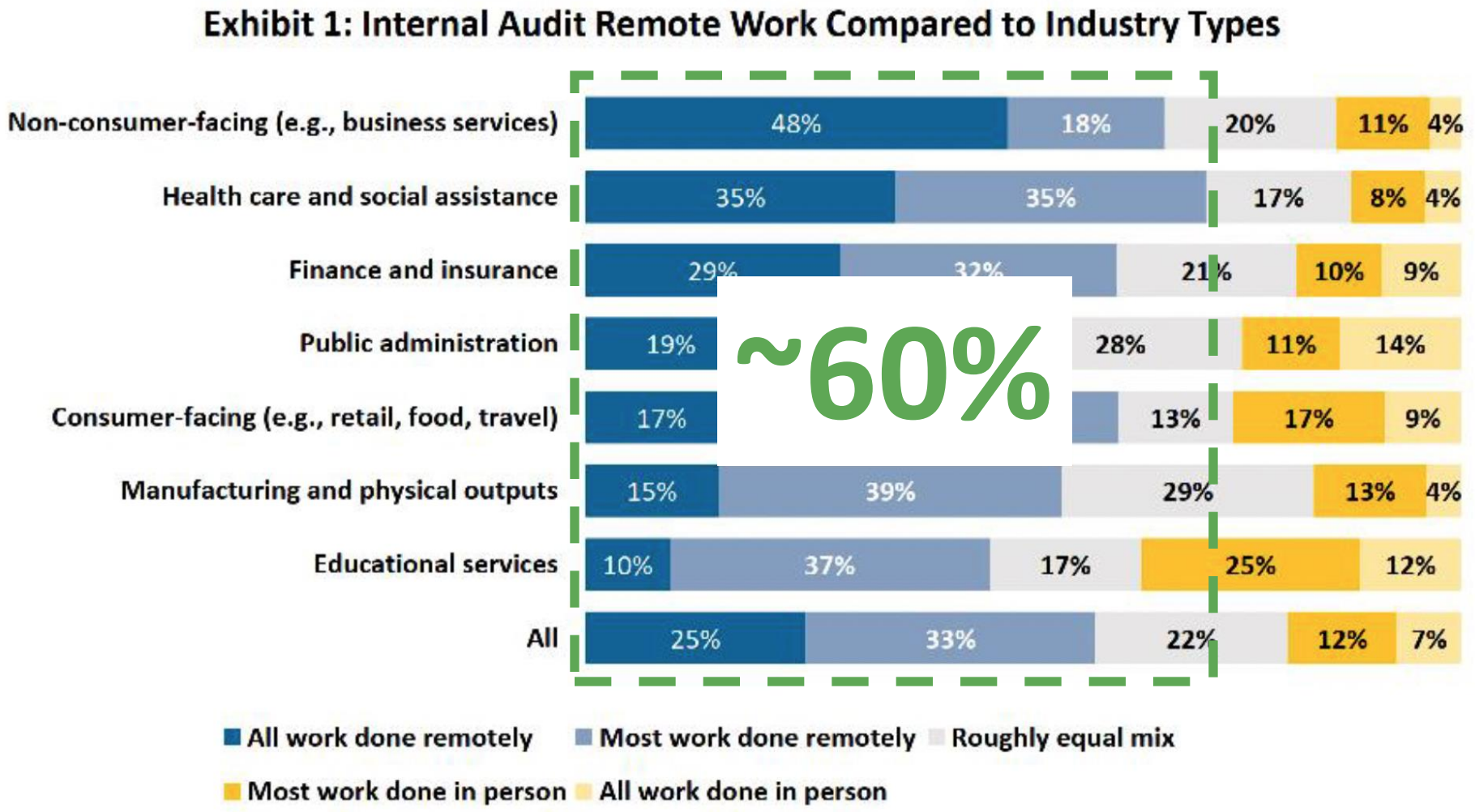
Remote audit

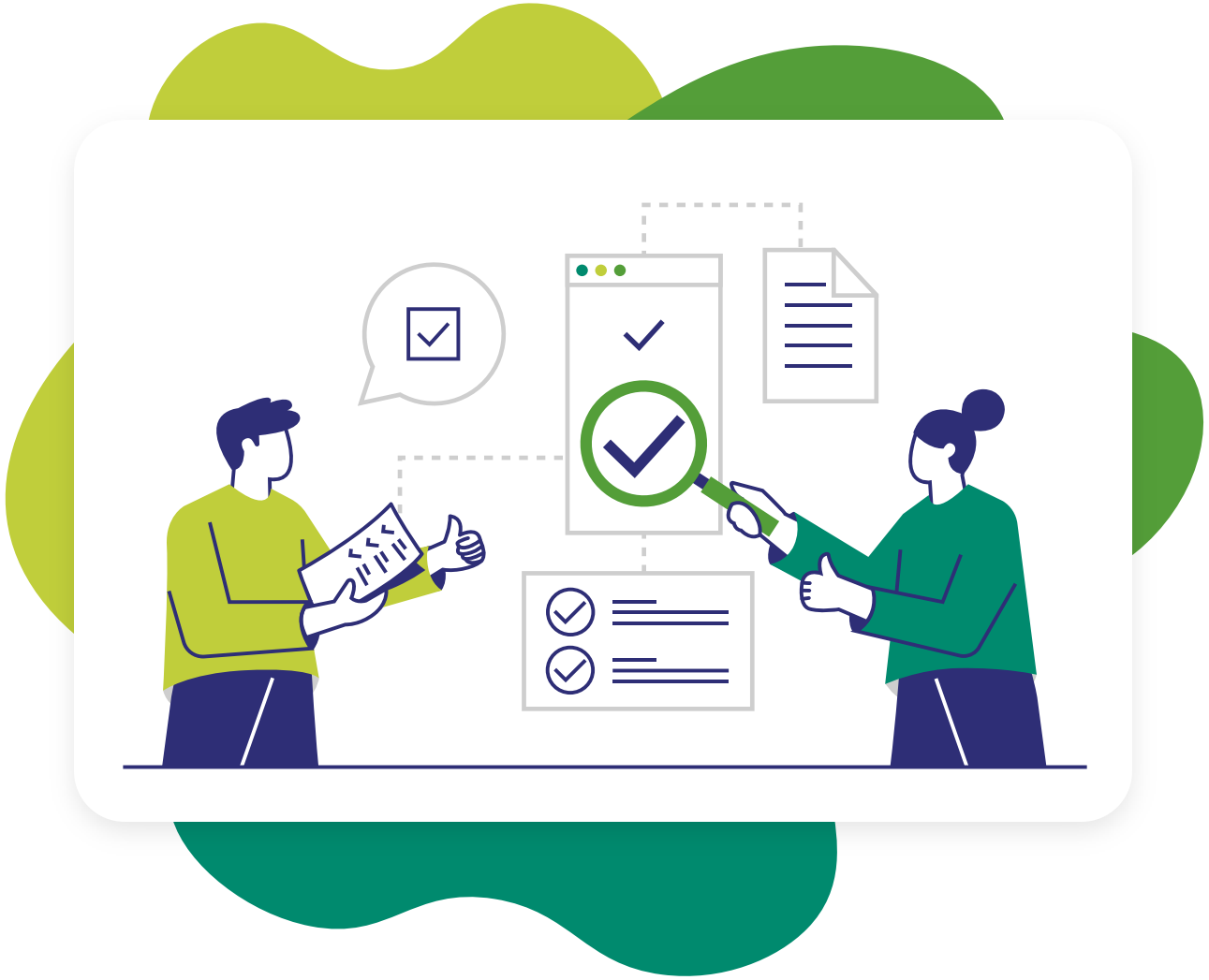
Data for the US market:

- Before the COVID-19 pandemic – less than 2% of remote audits
- During the pandemic, a significant decrease in the number of audits and an average of 38% remotely
- Post-pandemic situation – over 79% of audits in remote or hybrid form

(*) Study by the Independent International Certification Organization (IIOC)

Remote Audit





Analytical audit

Analytical auditing uses advanced analytical methods such as **predictive algorithms and big data analysis tools**, identifying trends and anomalies that may indicate potential areas of risk or non-compliance.

Analytical and remote audit – a successful implementation example

Abu Dhabi National Oil Company (ADNOC)

Challenges facing this organization before change:

- ❖ Dispersion of audit functions
- ❖ Technology challenges (multiple technologies)
- ❖ Limited remote and analytical audit capabilities

https://www.pwc.com/m1/en/services/assurance/perspectives-in-risk-series/adnoc-case-study-internal-audit-transformation.html

Analytical and remote audit – an implementation example

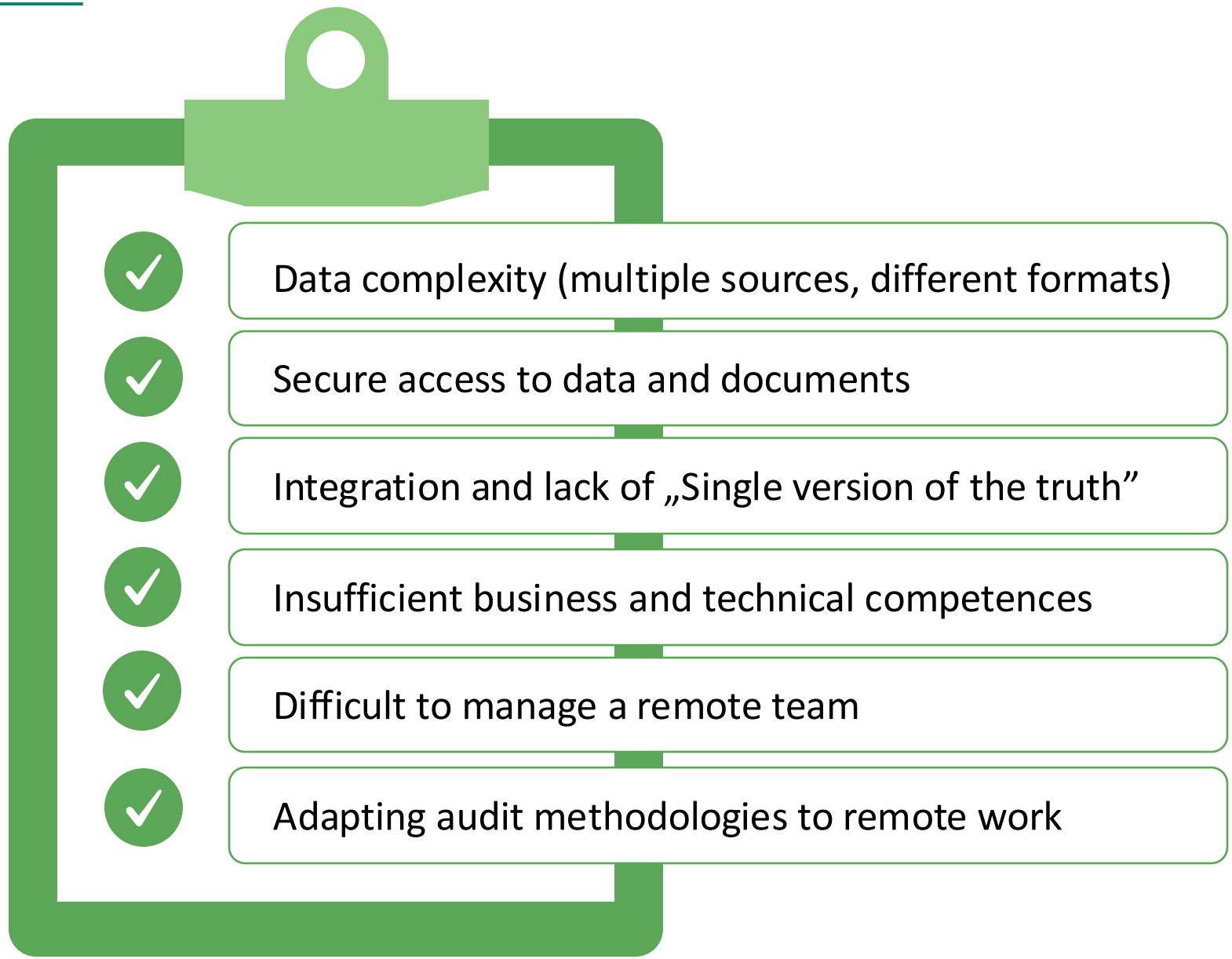
Abu Dhabi National Oil Company (ADNOC)

5 steps:

1. Standardization of the approach to Audit function
2. Digitization of business processes and staff training
3. Integration of platforms and systems
4. Technology optimization and new BI solutions
5. **New goal added: Ready for "AI in IA"**

Transformation took ...
5 years!

What are the challenges of conducting an analytical and remote audit?



… and more …

What are the challenges of conducting an analytical and remote audit?

YOU ARE SAFE ☺

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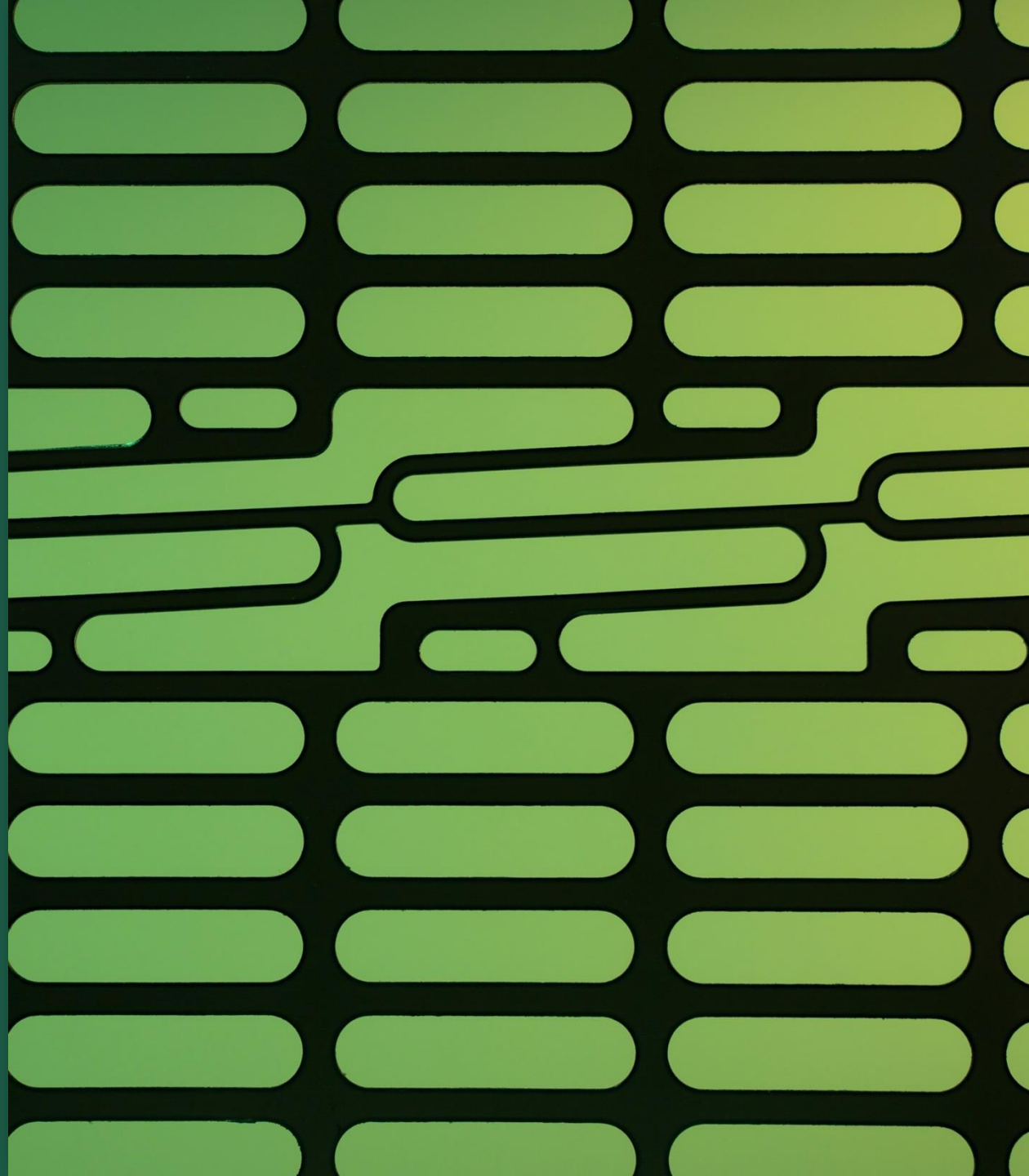
3

Audit support with technical solutions



Four key areas of technology support

01

Audit management tools

02

Integration and data quality

03

Analytical and reporting capabilities

04

Artificial intelligence as an assistant

Master Yoda, why do we need technological support in audit activities?

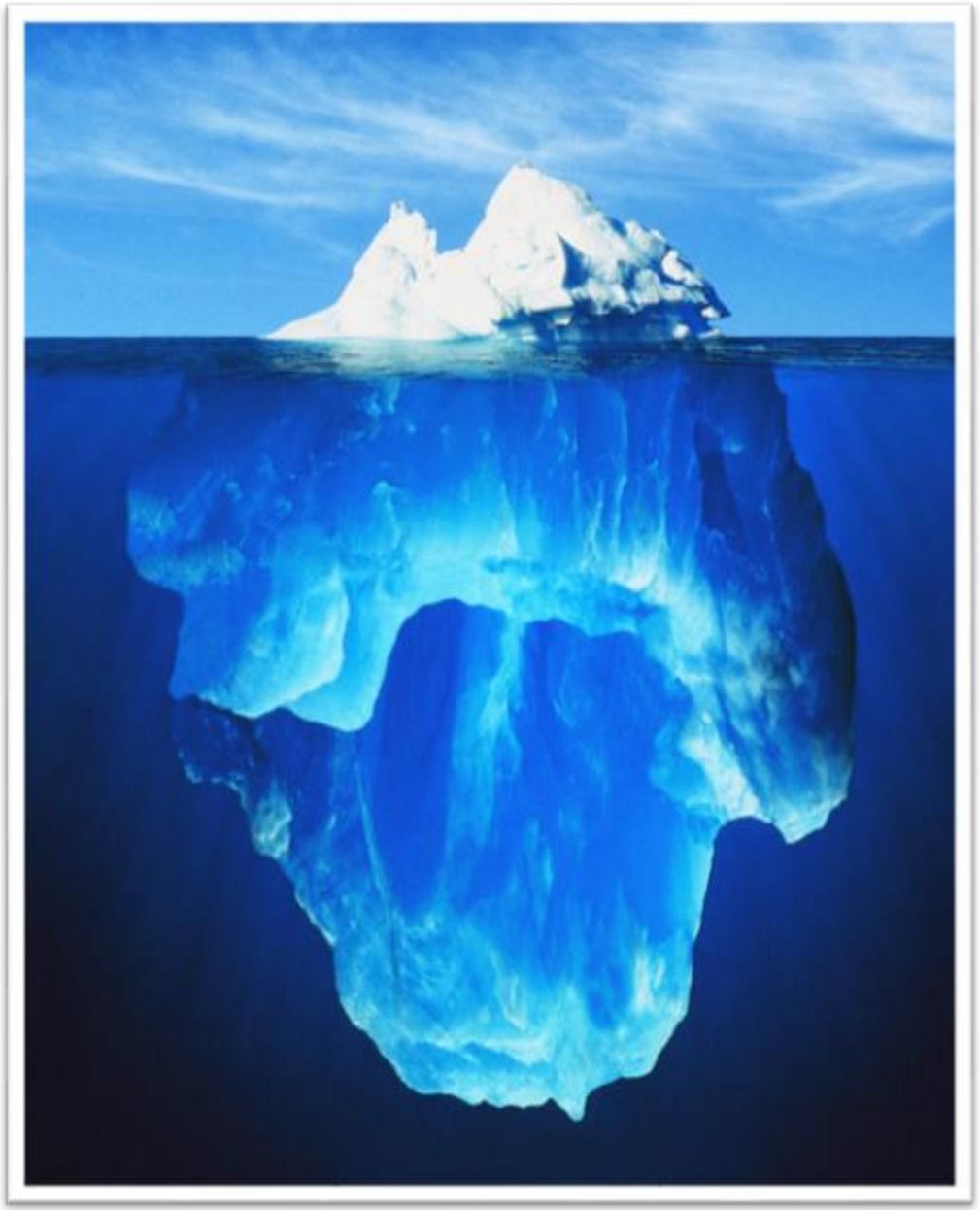
ORGANIZED APPROACH, THE KEY TECHNOLOGY IS.

SOLUTIONS THAT INTEGRATE AUDIT, RISK, COMPLIANCE, SECURITY, THEY MUST BE.

WORK AUTOMATION, DATA MANAGEMENT, CONTROL MECHANISMS, AND THE 'SINGLE VERSION OF THE TRUTH' IMPORTANT ARE!

May the force be with you!

What can be affected by the lack of supporting solutions…



The area known (more or less…)

Who knows…

Consolidated GRC functions (Audit, Risk, Compliance, Control)

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INTERNAL AUDIT

Managing the audit process, including remote and analytical audits

RISK MANAGEMENT

Managing the risk assessment and mitigation process

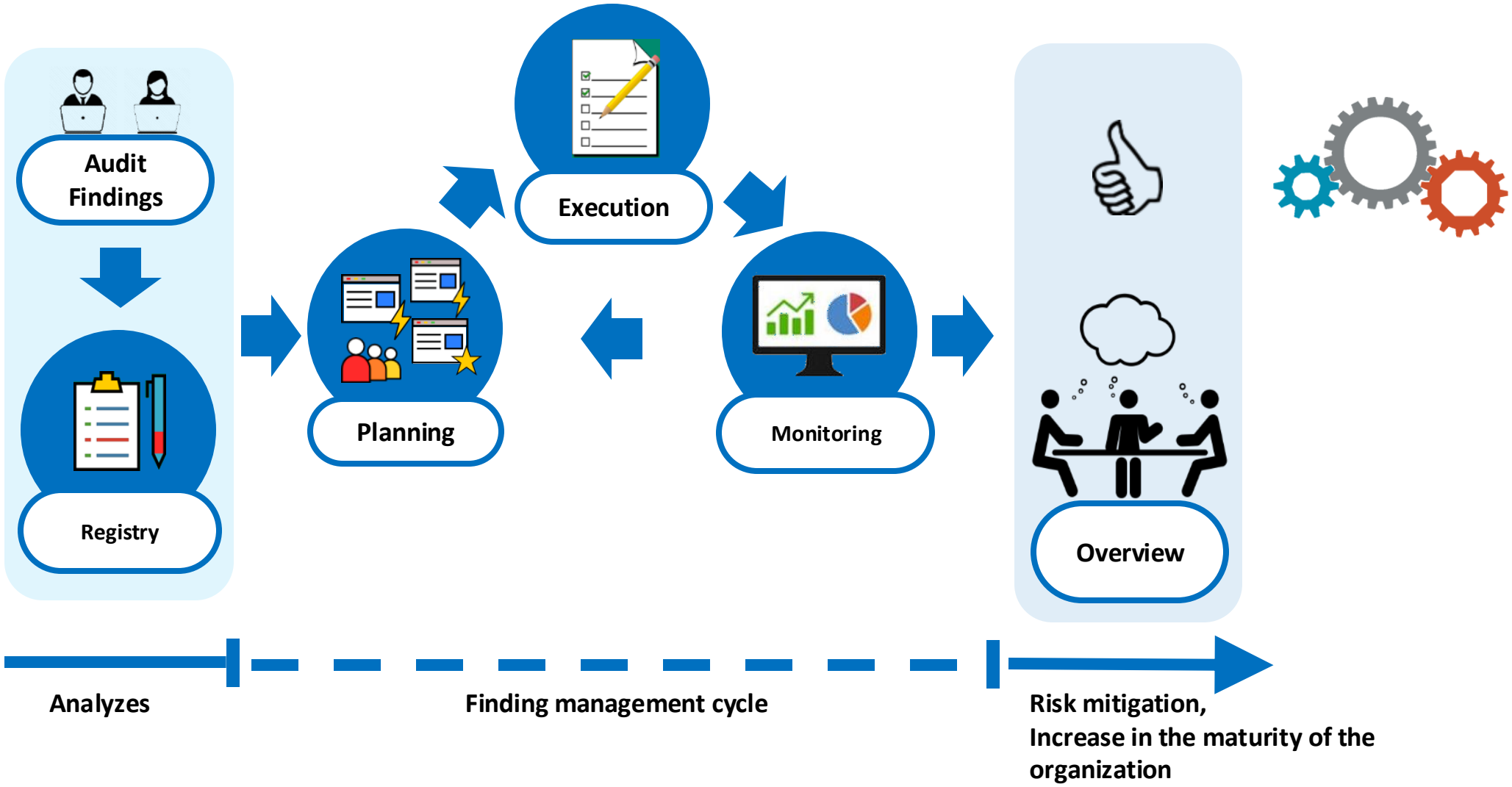
COMPLIANCE

Managing compliance assurance and verification processes

INTERNAL CONTROL

Control mechanisms related to risk mitigation and audit processes

Managing audit recommendations (example of an important function)



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Data Lake Integration and Quality

Data for internal Audit purposes aggregated in a Data Lake – AI proposal

Data Lake Integration and Quality

Transactions

ESG Data

Files

Risks and corrective actions

Process

Data Lake

Space for integrated
and cross-sectional analyses

Key Benefits of Data Lake for Auditing

❖Centralize and consolidate data.

It allows you to collect and store large amounts of data from different sources in one place. This allows internal auditors to easily access the information they need without having to search through different systems and databases.

❖Improved data accuracy and quality.

It enables the integration of data from different systems, which minimizes the risk of errors and inconsistencies.

❖Faster and more efficient data analysis.

With the ability to store raw data in a data lake, auditors can quickly process and analyze large amounts of information using BI tools and advanced analytical algorithms and machine learning techniques that can help identify patterns that indicate abnormalities.

❖Flexibility and scalability.

A data lake offers great flexibility in storing and processing data of different types (structured and unstructured). Can grow with your organization's needs. Possible baseline for **continous auditing.**

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ANALYTICS DASHBOARD
Last Updated:
3 min ago
92%
Data Availability
More info
95%
Actual vs Target
More info
Evolution
Metric
Actual vs Target
Actual
Target
Revenue
$3.4M
82.0%
Profit
$1.2M
108.7%
Avg. Order Size
$850.3
71.0%
On Time Delivery
96.0%
96.0%
New Customers
15432
145.0%
Cust. Satisfaction
98.3%
Market Share
46.9%
Products positioning
6.0
4.5
3.0
1.5
65
70
75
80
85
Sales per countries
Top 10 products
430

What can analytical and reporting capabilities look like in an organization ...☺

Challenges in automating the reporting process in analitical audit

Challenge

- 200 slides Power Point requires constant changes
- Time-consuming process of ppt creation
- Low level of cooperation
- Low level of confidence in data due to the number of errors in the data

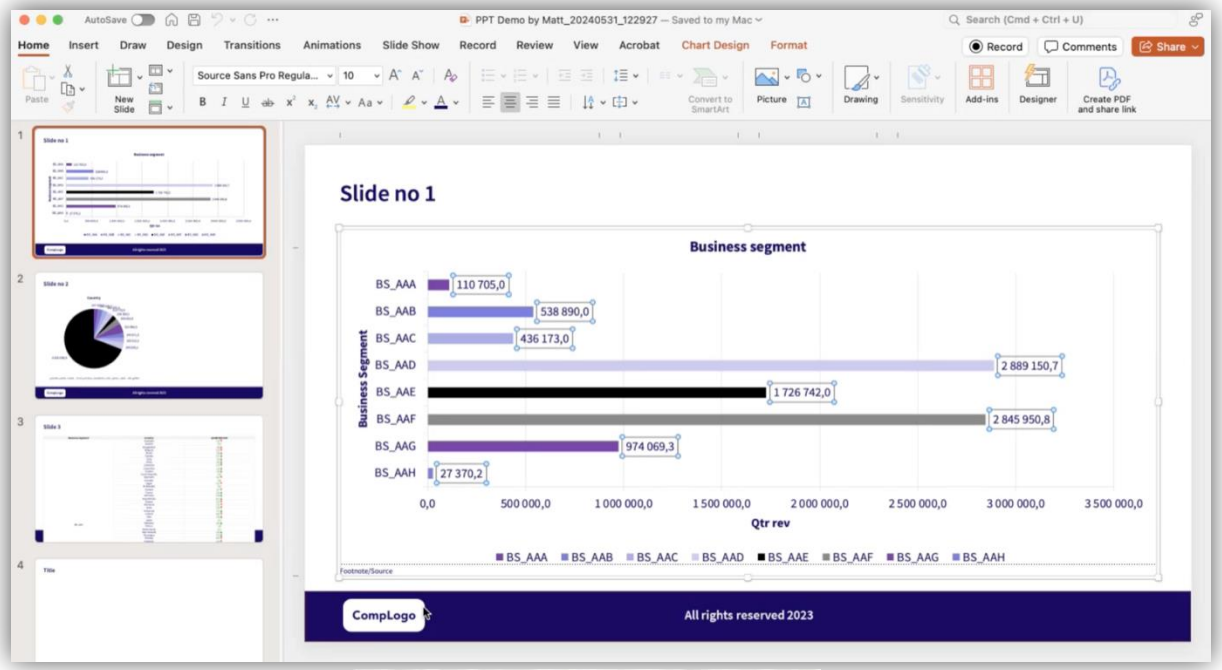
Goal

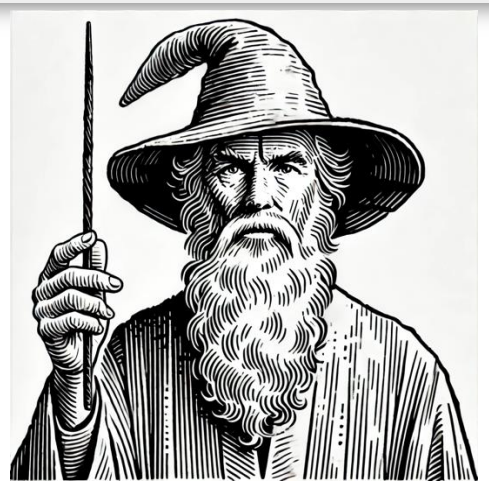
- Standardize and optimize the process of building an analytical slide deck
- Process automation, time reduction
- Re-use of content, exchange of information between auditors
- Improve cross-team collaboration

Automation of analysis and preparation of the summary (visual form)

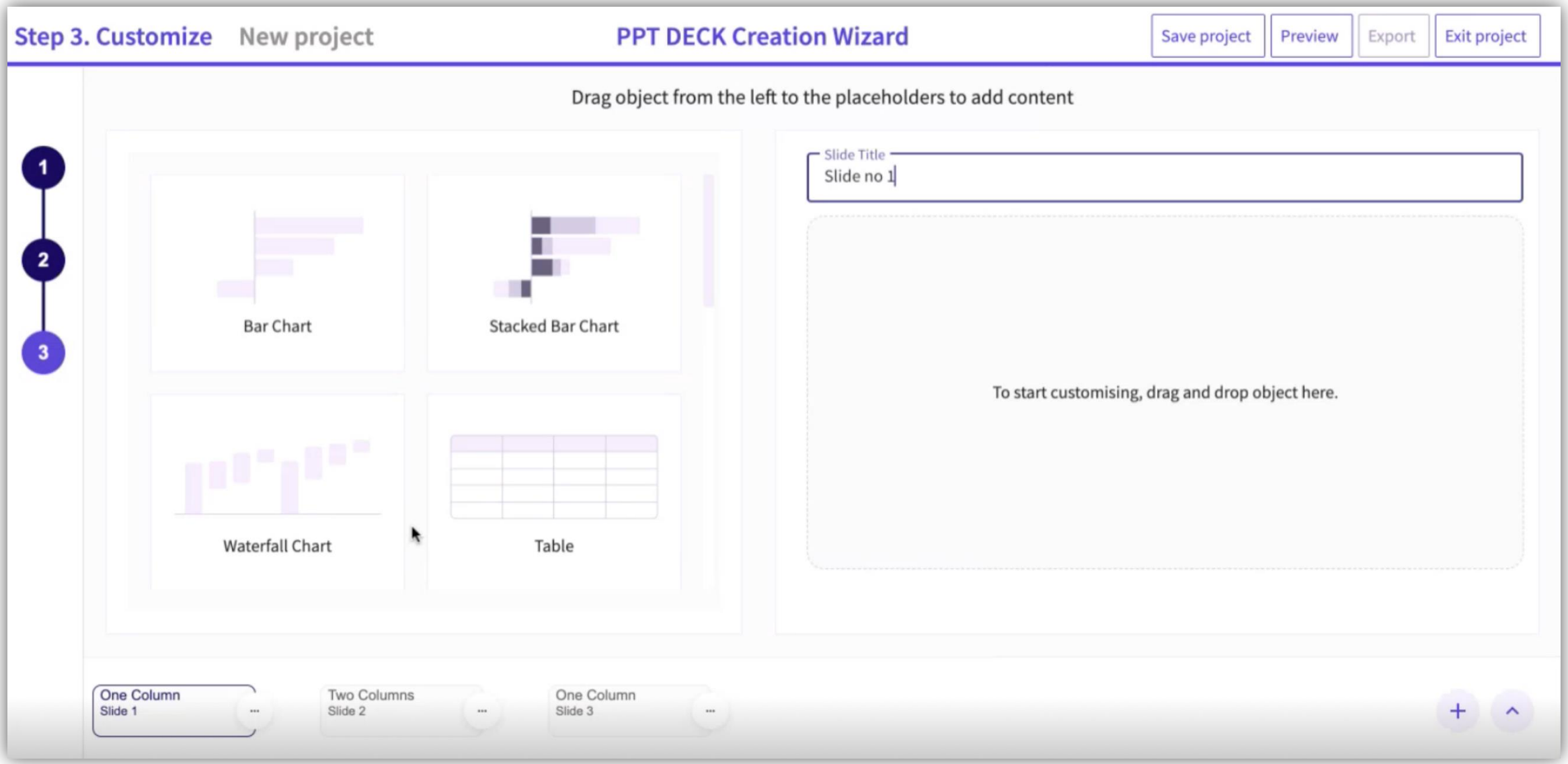
Audit system

Data Lake
(Data)





Automated PPT Preparation Solution on Analytical Data



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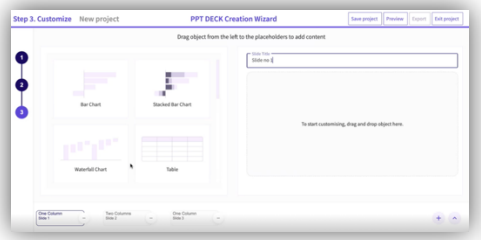

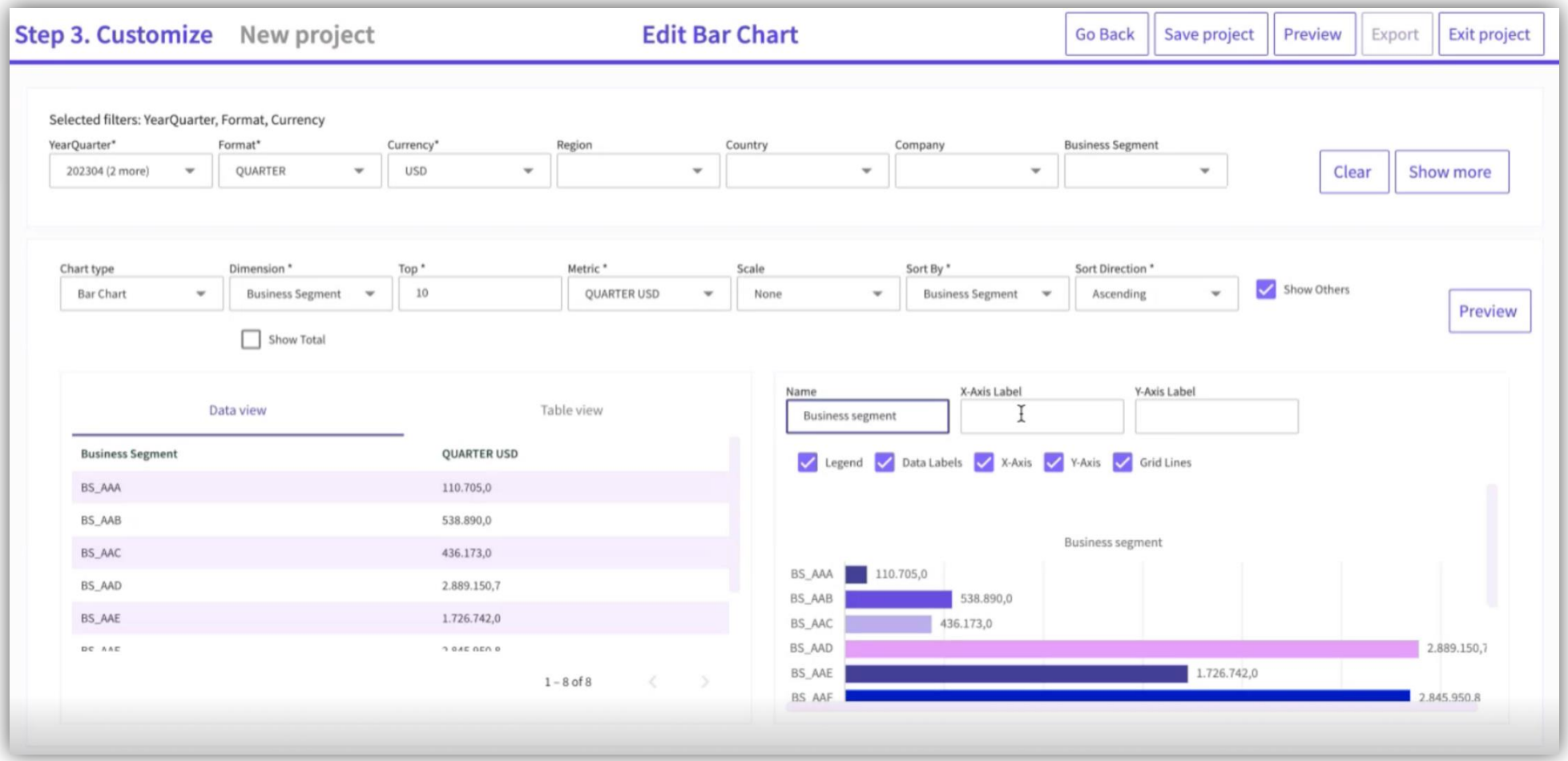

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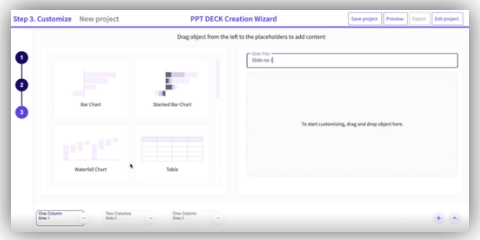

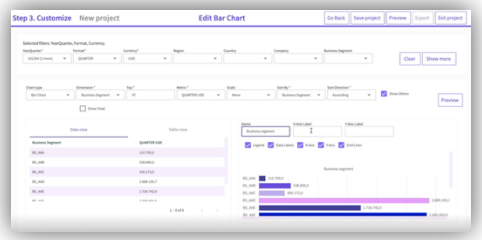

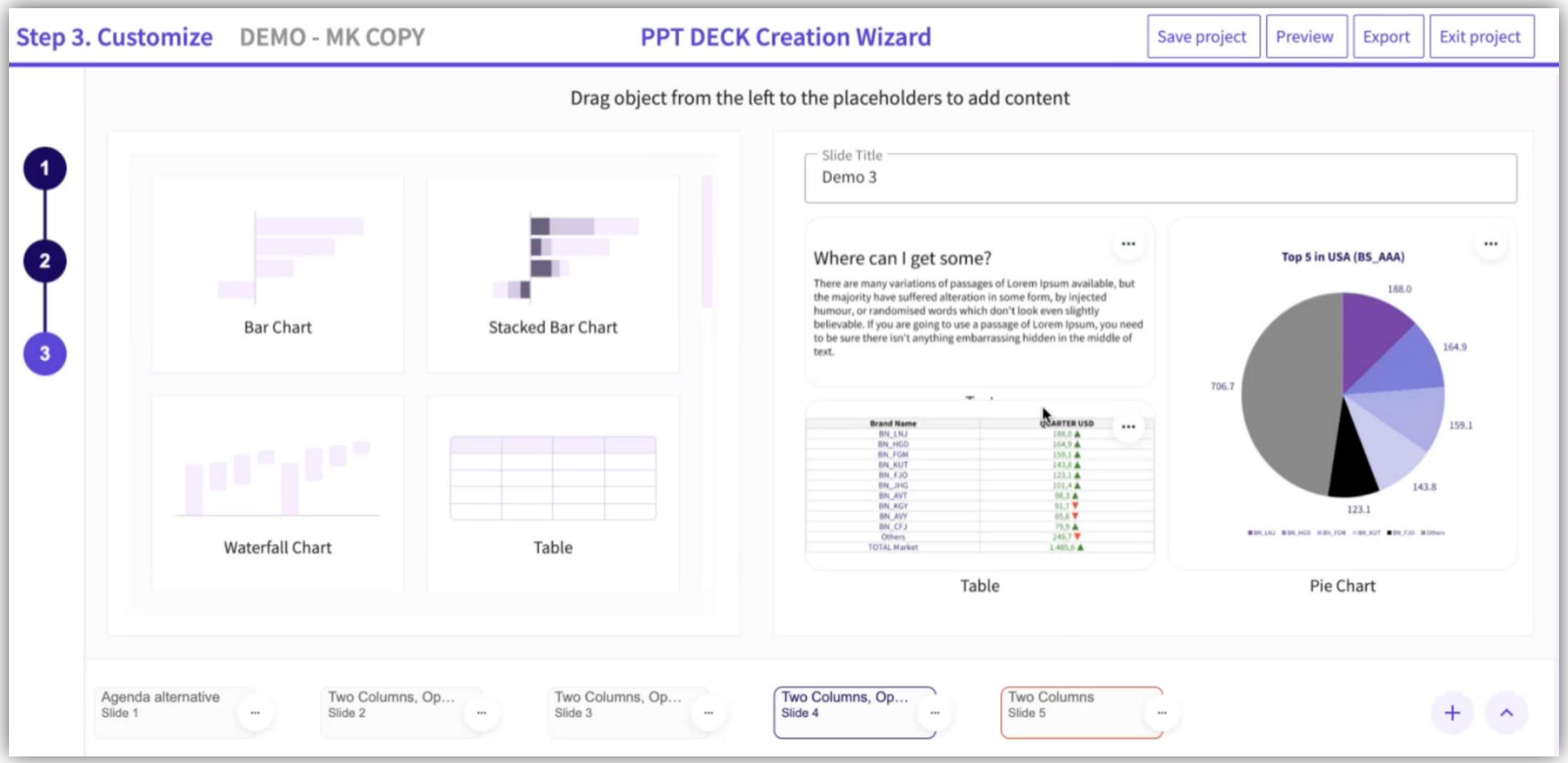

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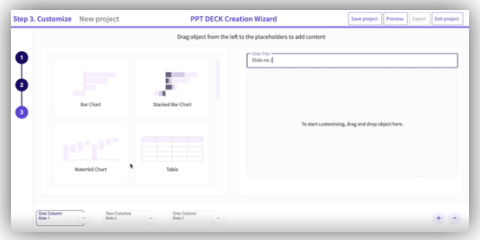

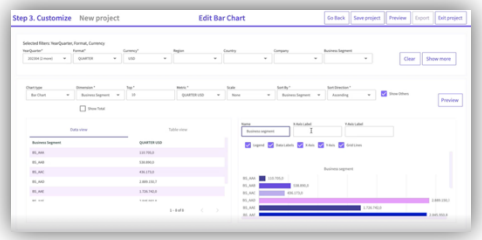

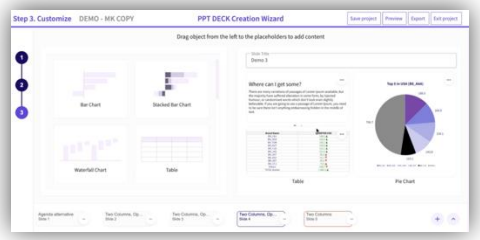

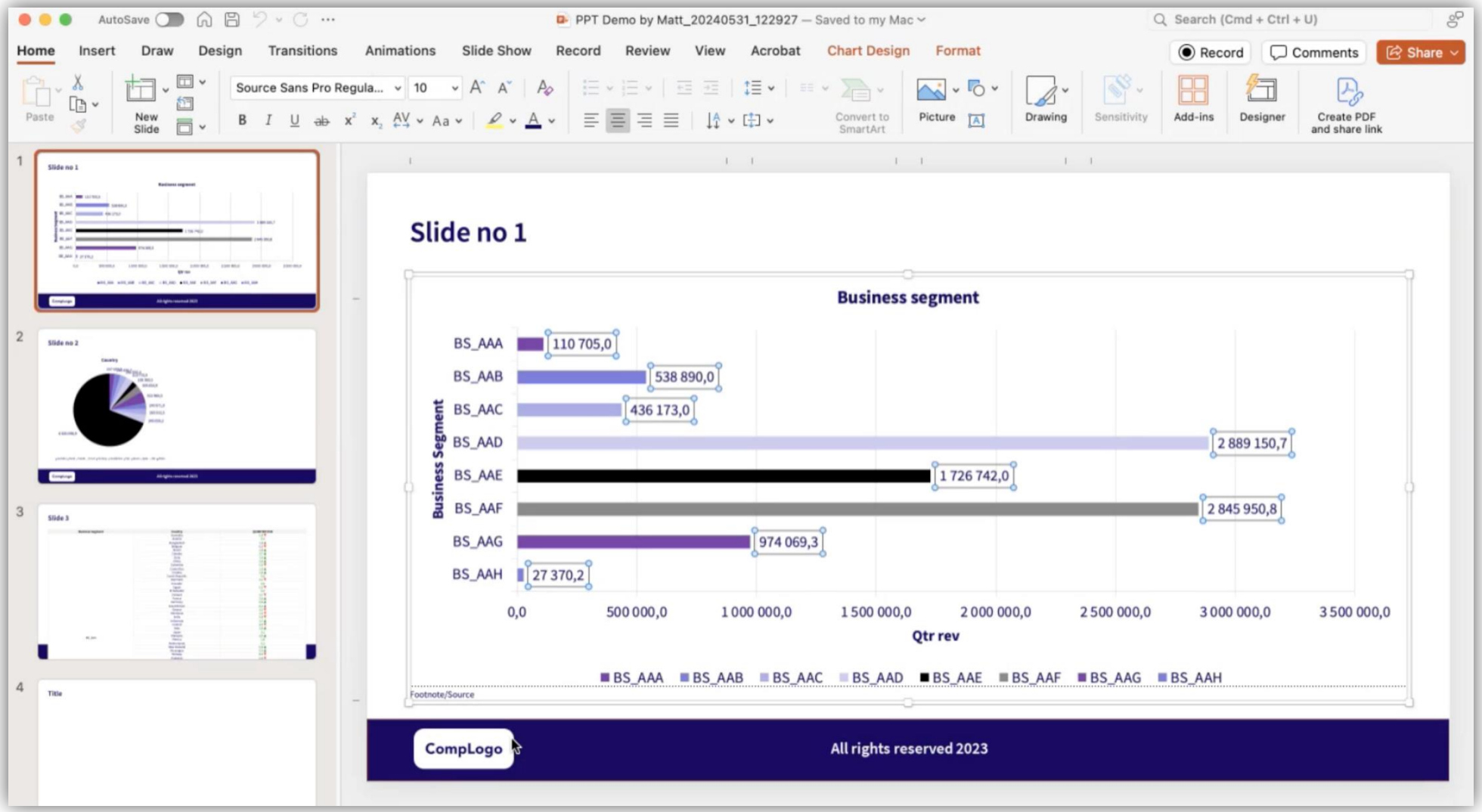

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Artificial intelligence as an assistant

Potential AI support

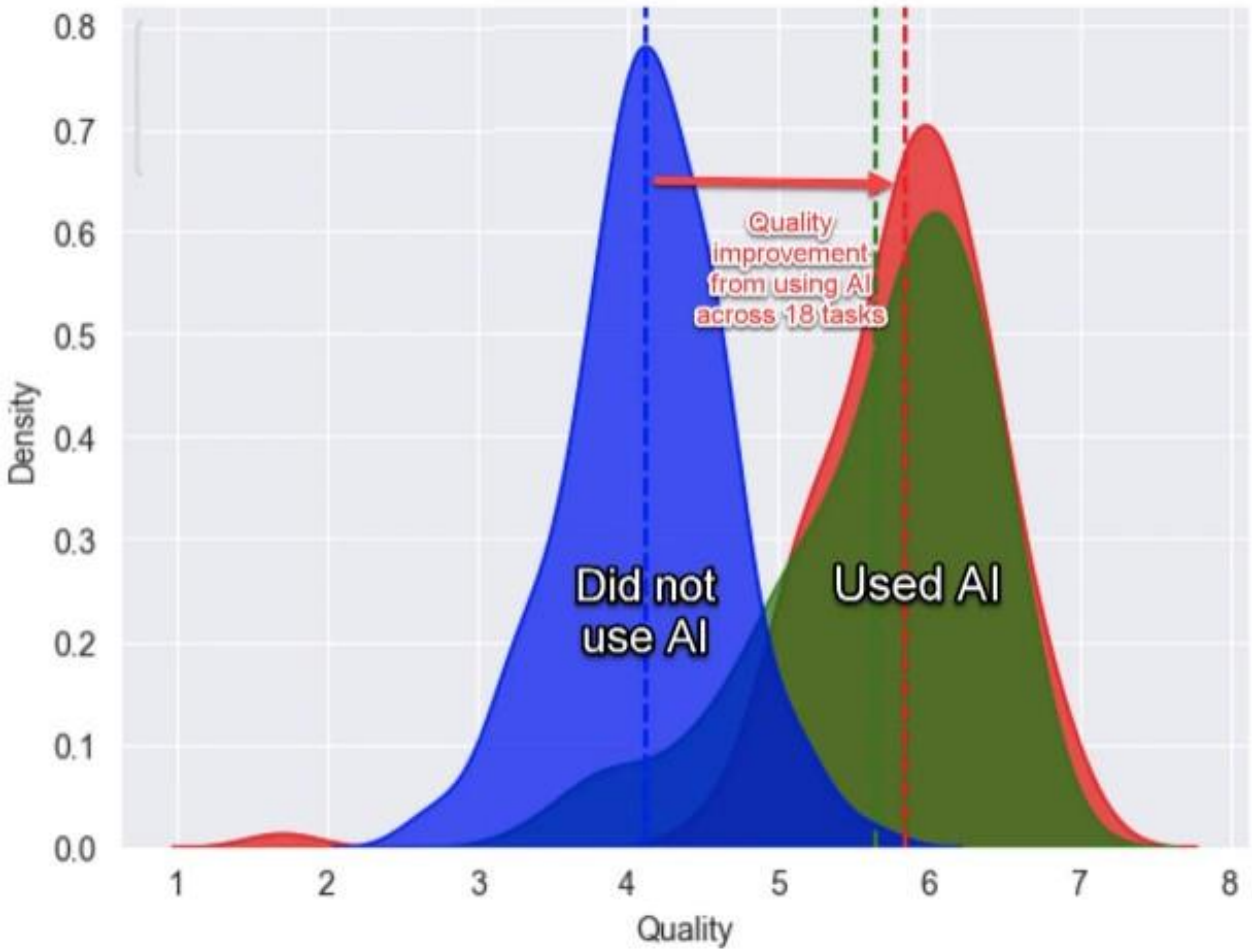
Variety of options:

- **AI Assistant (chat)**
- Search documents
- **Content creation**
- **Content Summary**
- **Translation**
- Data analysis
- Image/Video Analysis and Creation
- **…**

Key benefit:

Increased productivity

Potential AI support – observations from the study



Distribution of output quality across all the tasks. The blue group did not use AI, the green and red groups used AI, the red group got some additional training on how to use AI.

Productivity: **+40%**

Quality: **+25%**

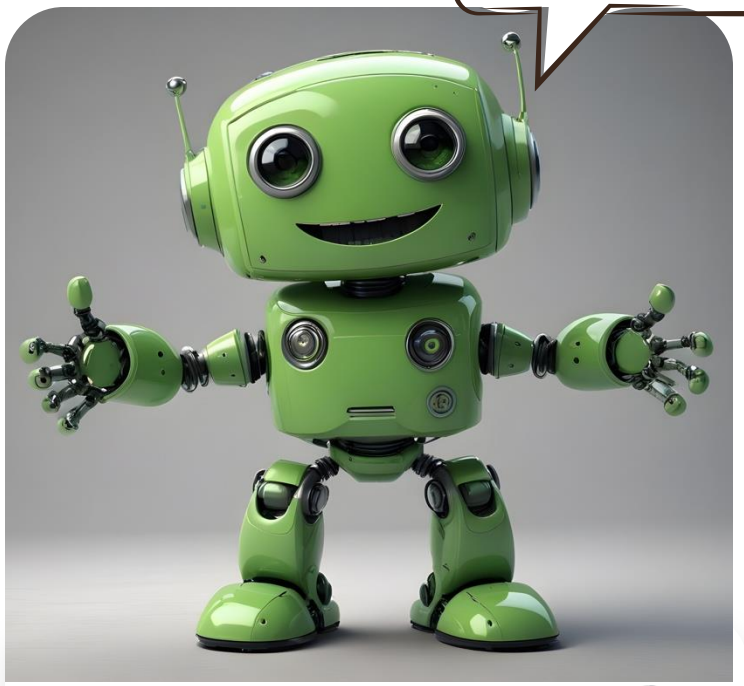
How AI Assistant can support auditors?

AI Assitant

- Secure access to internal systems in the organization
- Real-time interaction
- Scope limited to the business context (audit, risk, etc.)
- Data Ownership and Privacy
- Easy integration with systems in the organization (data lake preferred)
- We must trust Data – AI hallucinations kept to a Minimum
- ISO 42001 and the EU AI Act
- Local LLM’s can be a solution

AI Assistant

Access to systems



AI Assistant

SECURE LLM

chatGPT 4.0

Microsoft

Azure

(Private)

Systems in the organization

In more details - the architecture is quite complex and security-oriented

logs

Logs & usage – stores user activity, queries, tokens used, etc...

Skills engine – provides the bot different abilities based on LLM prompting. Using prompt templates, user input data from external source and history (context) to send prompt, or chain of prompts to the model

AI Assistant platform

UI

Web

Teams

Web widget

REST API

Logging / monitoring

Guardrails

Conversation manager

Identity Management

Skills engine

Skill 1

Skill 2

Skill 3

Skill n

LLM connectors

[*future*] Predictive models connectors

LLMs

...

LLMs – bots can uses different LLM modes based on availability and needs

Predictive models

...

[*future*] Predictive models – with additional predictive models built for data, the bot will be able to answer not only for questions about history, but also about forecasts

Guardrails – making the bot to react and respond in a safe and planned way

Conversation Manager – manages the flow of the conversions, contains fallbacks, smalltalk, personality, etc...

SSO

Vector db

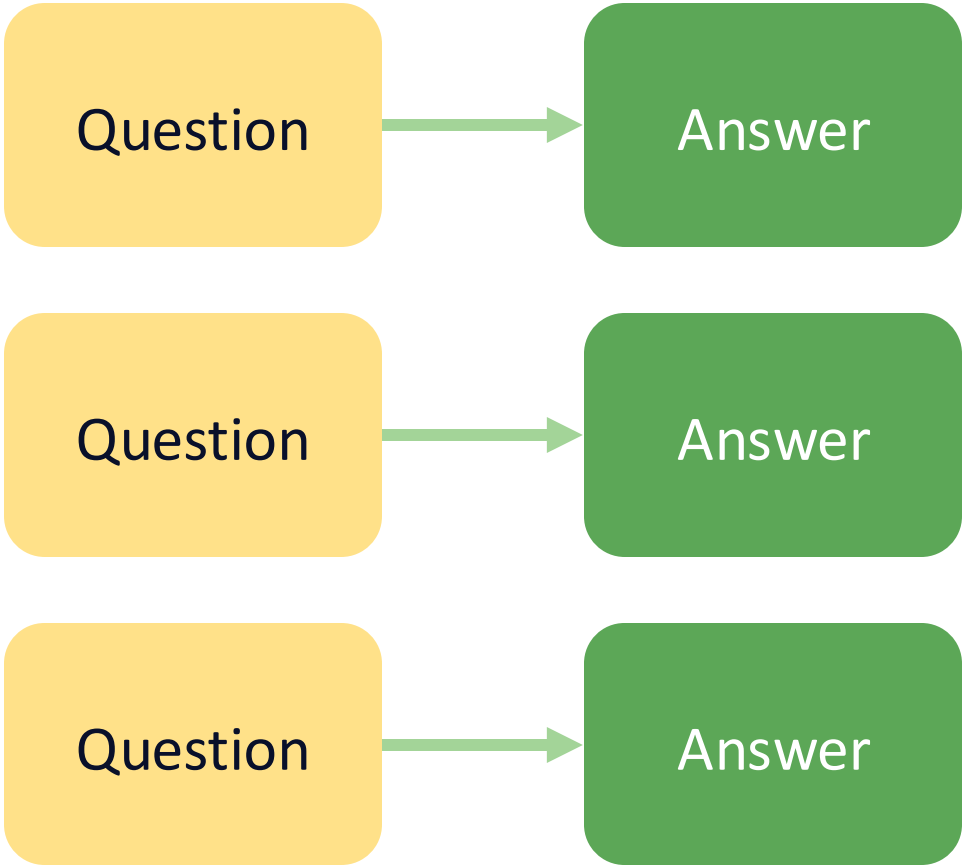
Database

Knowledge base and databases – store company data, external data for retrieval

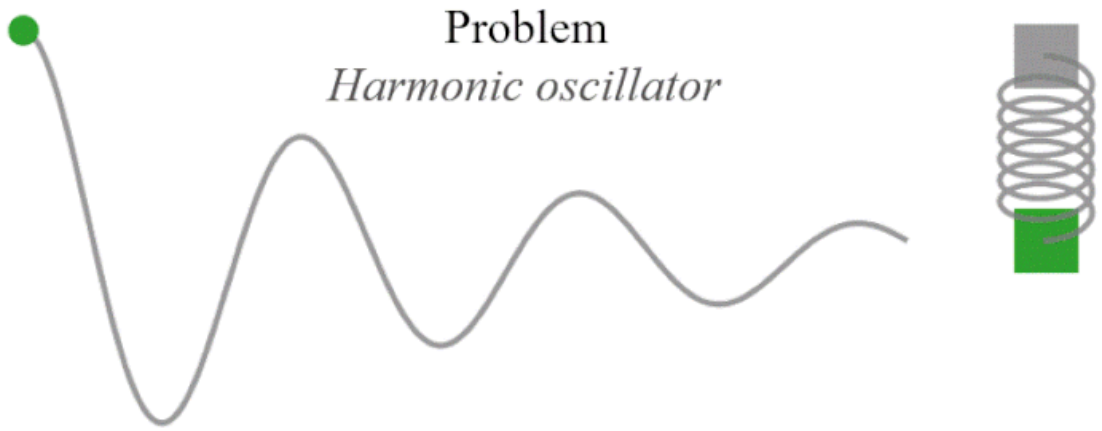
How AI Assistant can support auditors?

AI Assitant

Is this how interaction with generative AI works?



Why good AI interaction is key?



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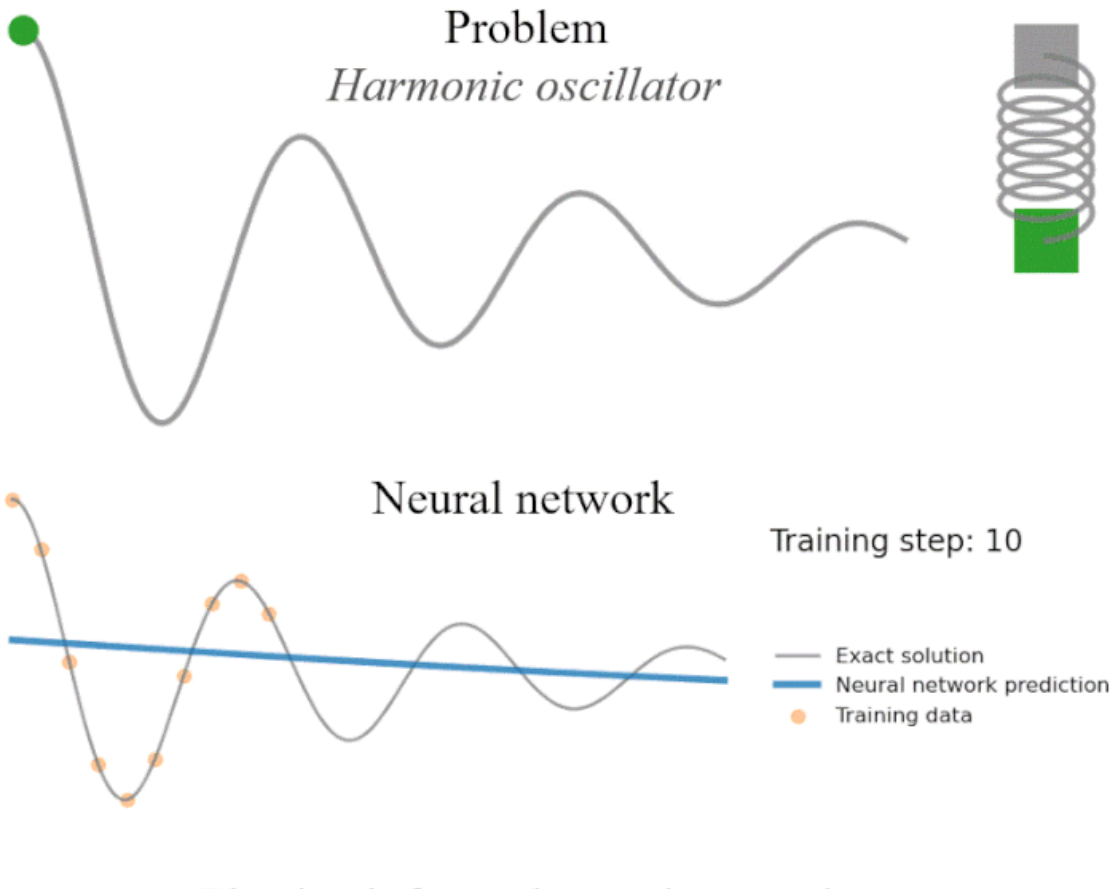

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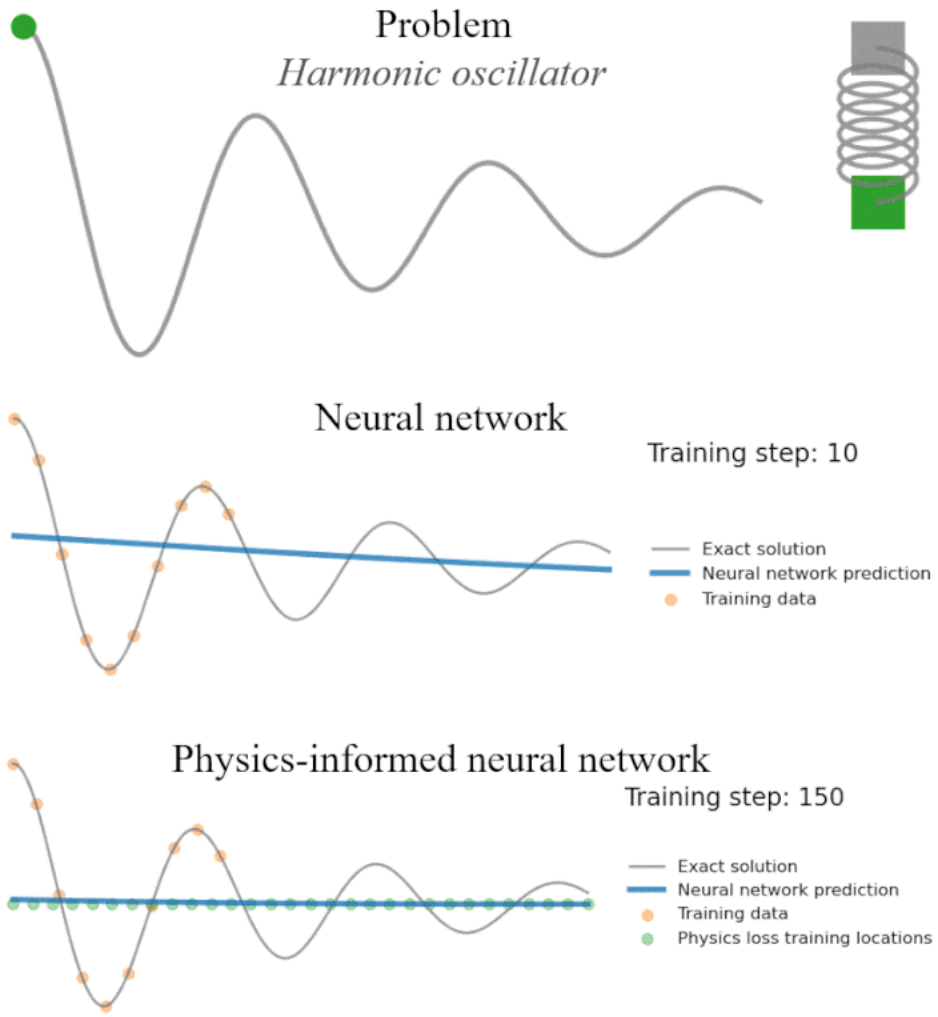


How AI Assistant can support auditors?

AI Assitant

Scope of the question

- Role
- Context
- Examples
- Question

Answer

Prompt

Scope of the question

Answer

Question

Answer

Question

Answer

Prompt

How AI Assistant can support auditors?

AI Assitant

Scope of the question

- Role
- Context
- Examples
- Question

Answer

Prompt

Scope of the question

Answer

Question

Answer

Question

Answer

Prompt

Context window (AI Memory)

Przykład

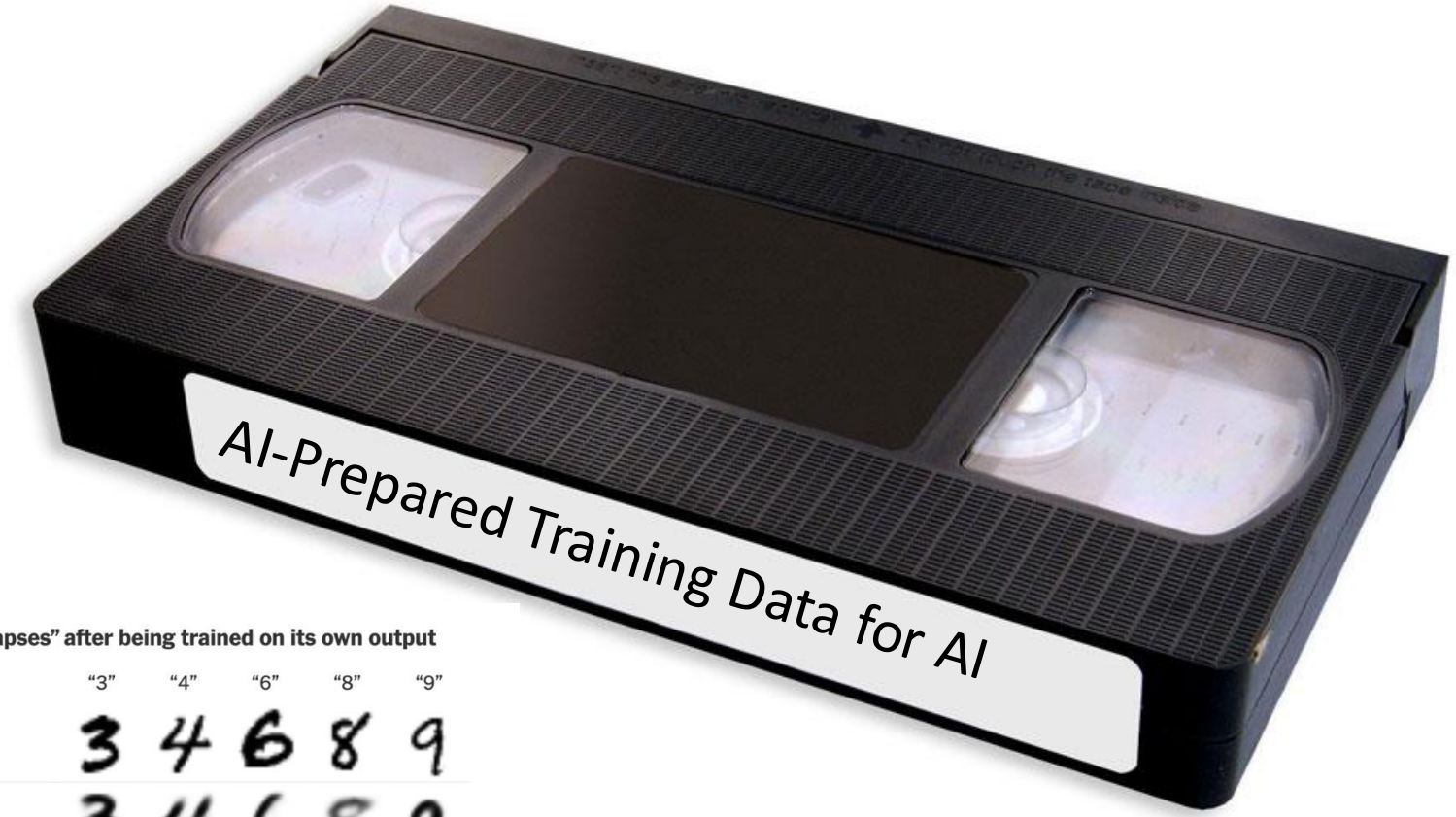
Microsoft Teams

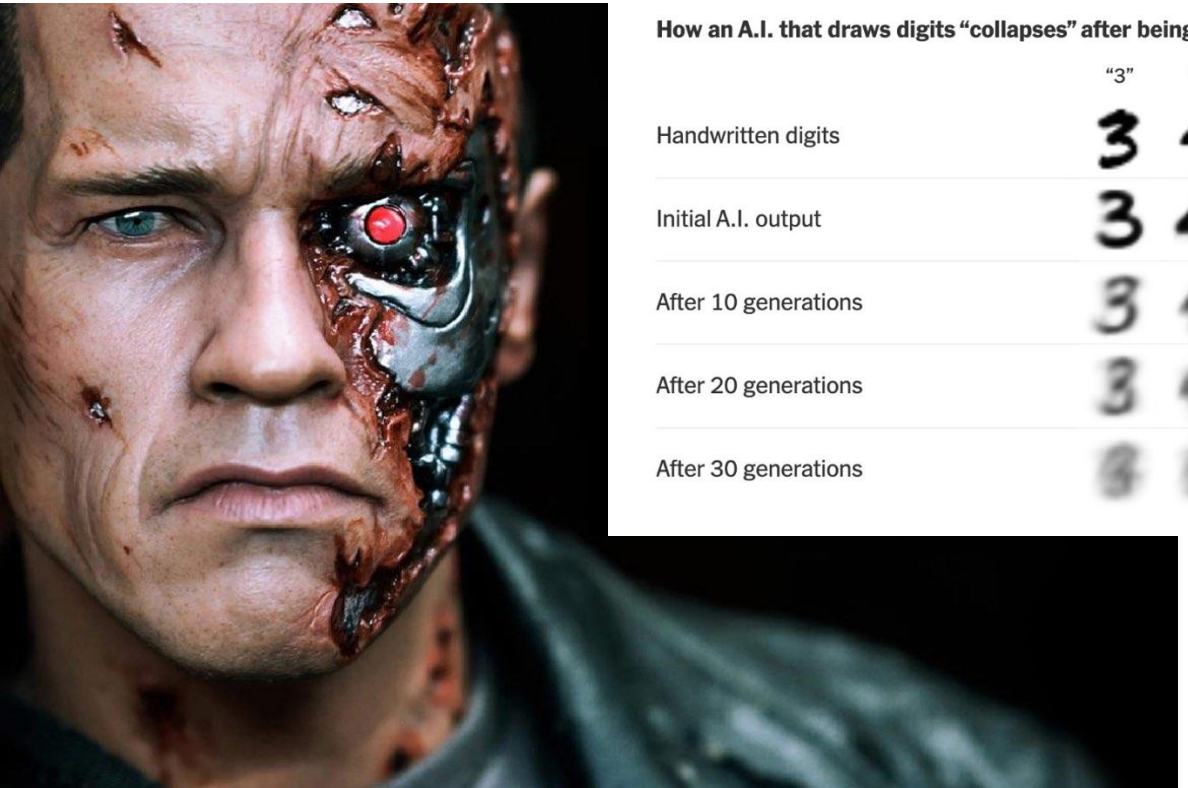
INTERNAL AUDIT

ChatGPT

Why does AI need people?

Why AI Needs People





How an A.I. that draws digits "collapses" after being trained on its own output

	"3"	"4"	"6"	"8"	"9"
Handwritten digits					
Initial A.I. output					
After 10 generations					
After 20 generations					
After 30 generations					

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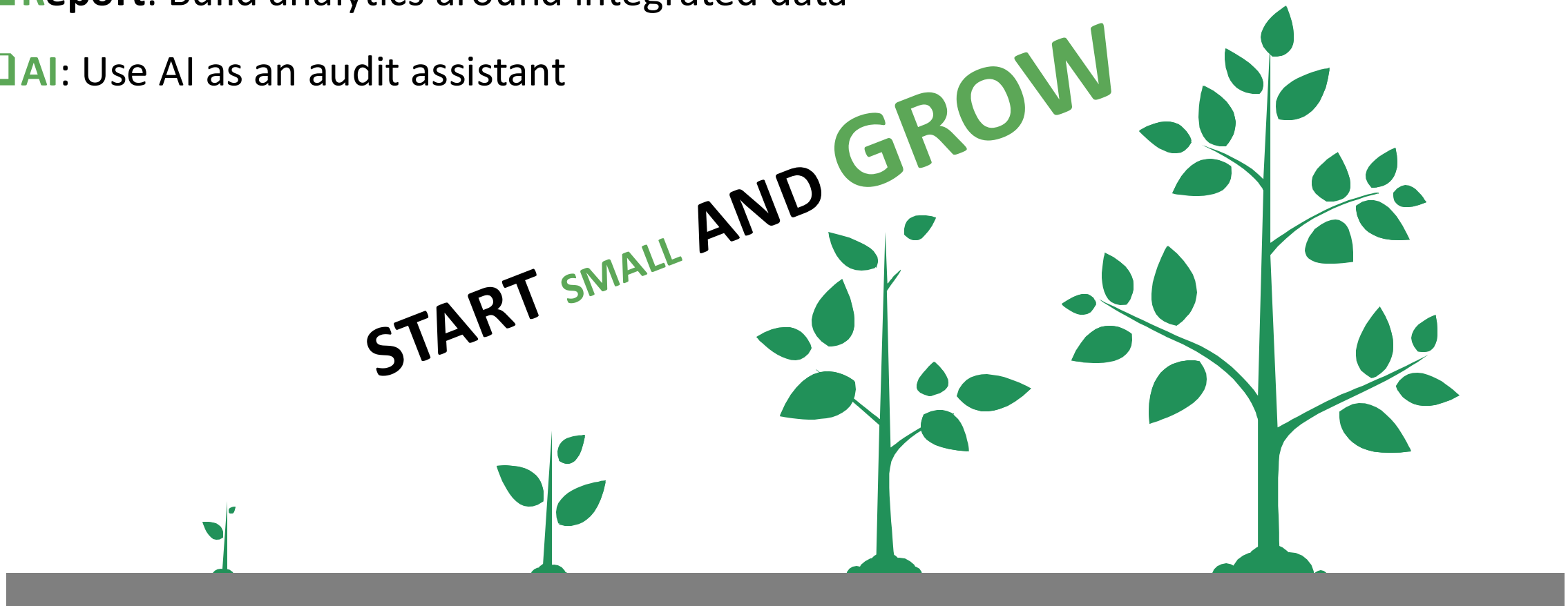
4

Summary

Key takeaways – how to get started? **ADRAI** Approach

- **A**pplication: Get started with integrated auditing tools
- **D**ata: Integrate data across your organization in a data lake solution
- **R**eport: Build analytics around integrated data
- **AI**: Use AI as an audit assistant




THERE'S A DIFFERENCE
BETWEEN KNOWING THE PATH


95%

Webinar Human + AI integration

Thank you for your attention!

Feel free to contact me

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