ISACA

Do we finally experience the breakthrough of Continuous Auditing and Continuous Monitoring?

ISACA SQUARE TABLE

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With you

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Why we will experience a breakthrough

01

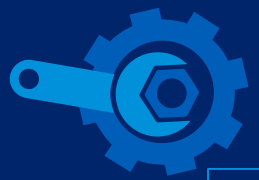
History and future of auditing

The shift to a more digitized Audit

History

1600s

VOC first formally listed public company. Need for Auditors

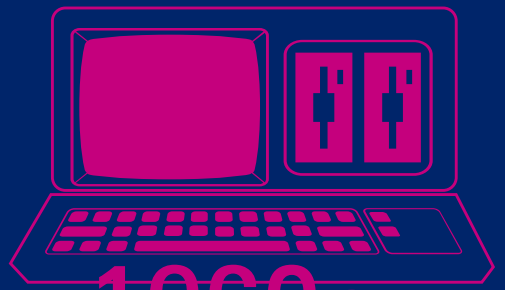


1800s

Mechanization: Steam, water, mechanical production equipment

1900s

Mass production: Division of labor, electricity,



1960s

The Information Age: Electronics, IT, Mass Communication, Internet

ISACA founded in 1969

Today

Artificial Intelligence, Intelligent Automation, nanotech, biotech, cyber-physical systems, digital labor

Biggest change in Audit profession

The audit profession at risk?

Accounting is at the top of a list of professions expected to fall victim to digital disruption, along with insurance, personal assistants, real estate agents and sales assistants

AUSTRALIAN FINANCIAL REVIEW (AU) | MAY 4, 2015

ACCA Think Ahead

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BIG DATA AUDITING DYNAMITE

Big data is transforming the way audits are conducted, but also posing a major challenge to existing standards and training as well as systems and processes

Nieuws — 03 juli 2015

'Data-analyse gaat accountancy veranderen'

Bring on the personal trainers

Probability that computerisation will lead to job losses within the next two decades, 2013 (1=certain)

Job	Probability
Recreational therapists	0.003
Dentists	0.004
Athletic trainers	0.007
Clergy	0.008
Chemical engineers	0.02
Editors	0.06
Firefighters	0.17
Actors	0.37
Health technologists	0.40
Economists	0.43
Commercial pilots	0.55
Machinists	0.65
Word processors and typists	0.81
Real estate sales agents	0.86
Technical writers	0.89
	0.92
Accountants and auditors	0.94
	0.94
Telemarketers	0.99

Source: "The Future of Employment: How Susceptible are Jobs to Computerisation?" by C.Frey and M.Osborne (2013)

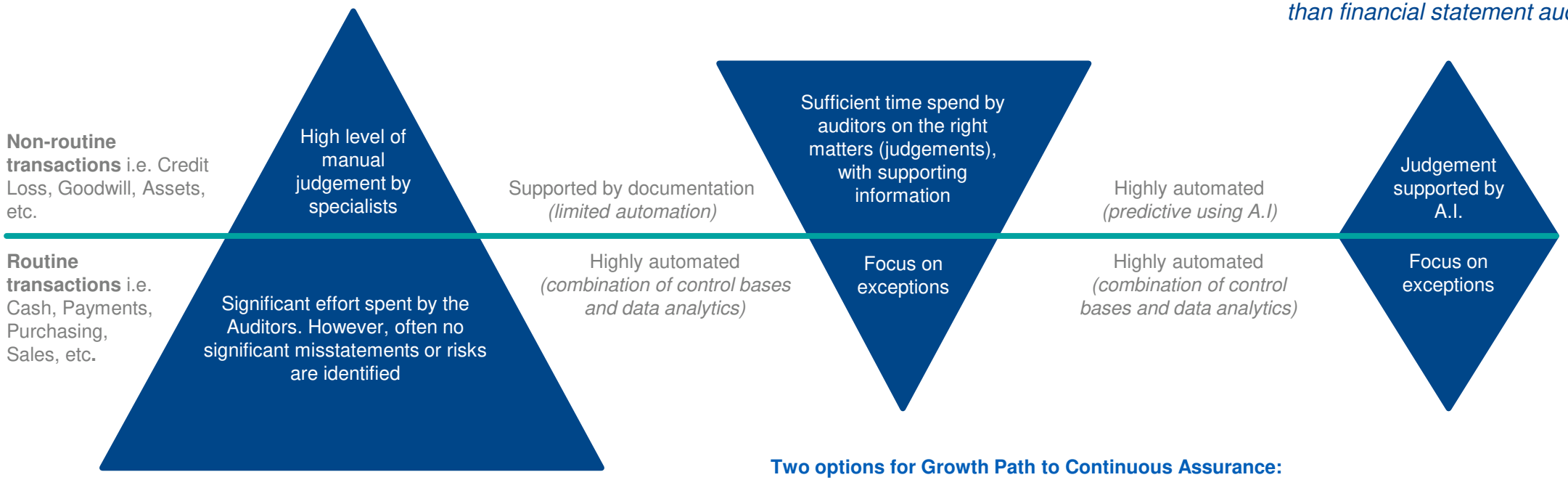
What doesn't kill auditors makes them stronger

TRADITIONAL AUDIT

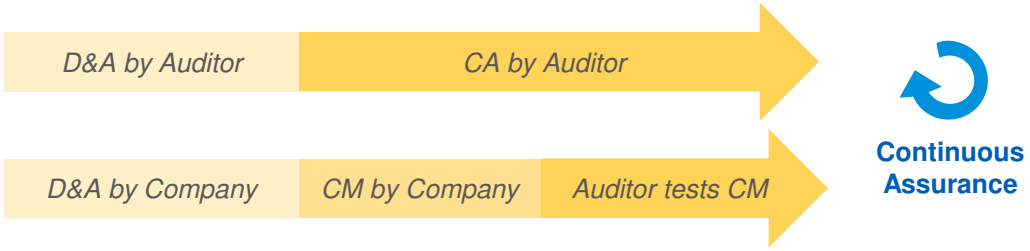
ROUTINE-ENABLED DIGITALIZED

FULLY DIGITALIZED

(can be continuous and on more than financial statement audits)



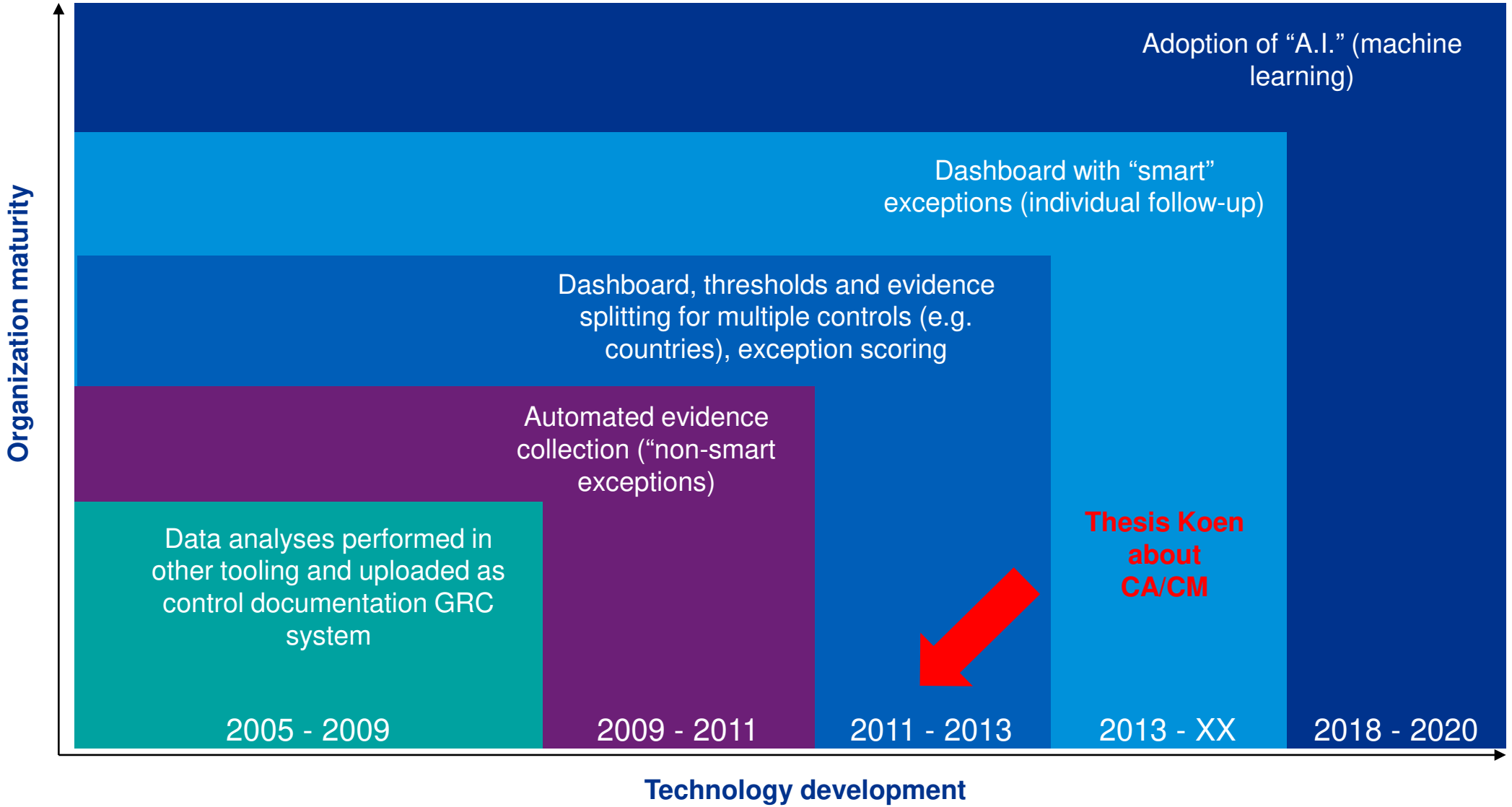
Two options for Growth Path to Continuous Assurance:

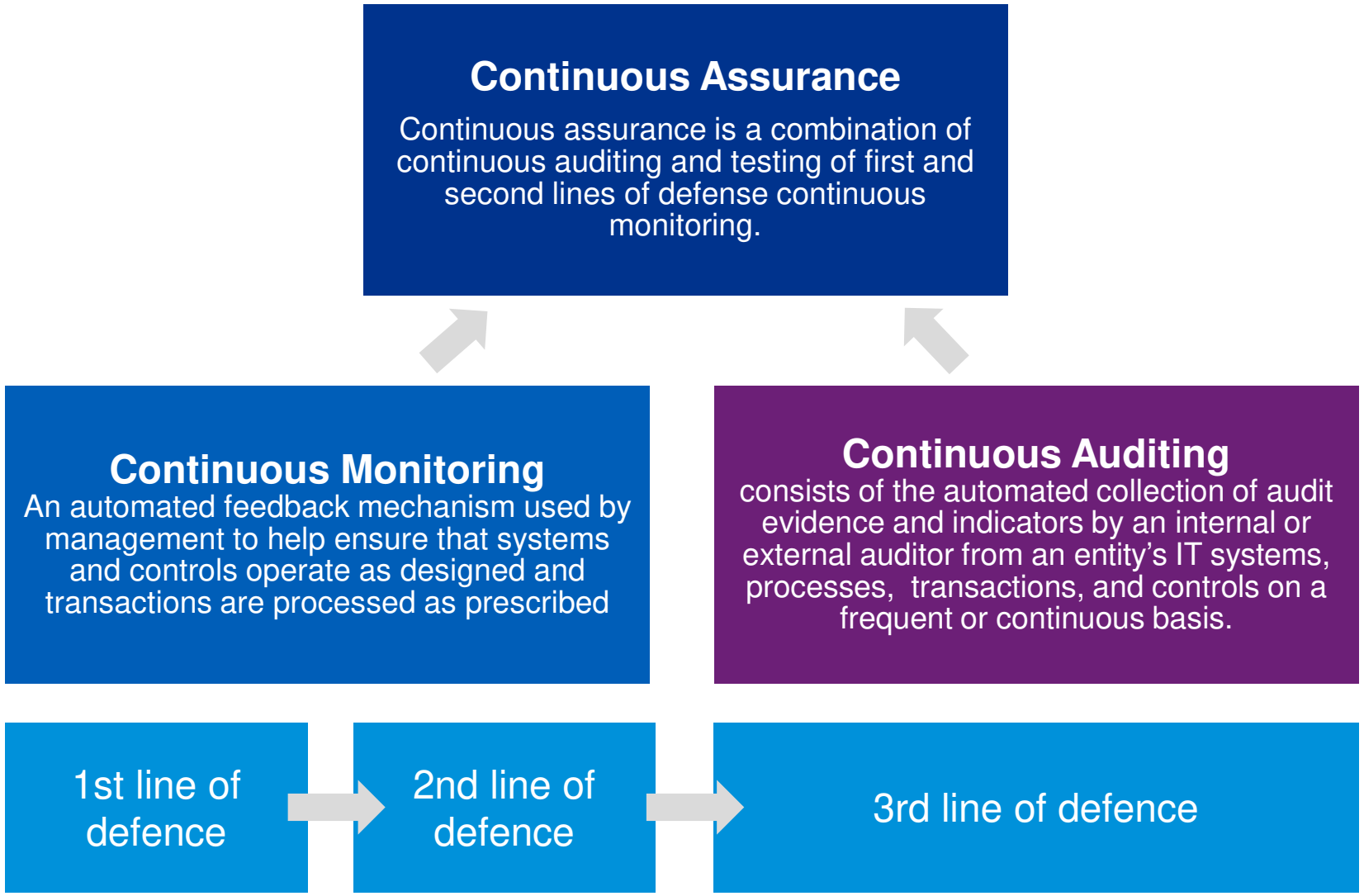


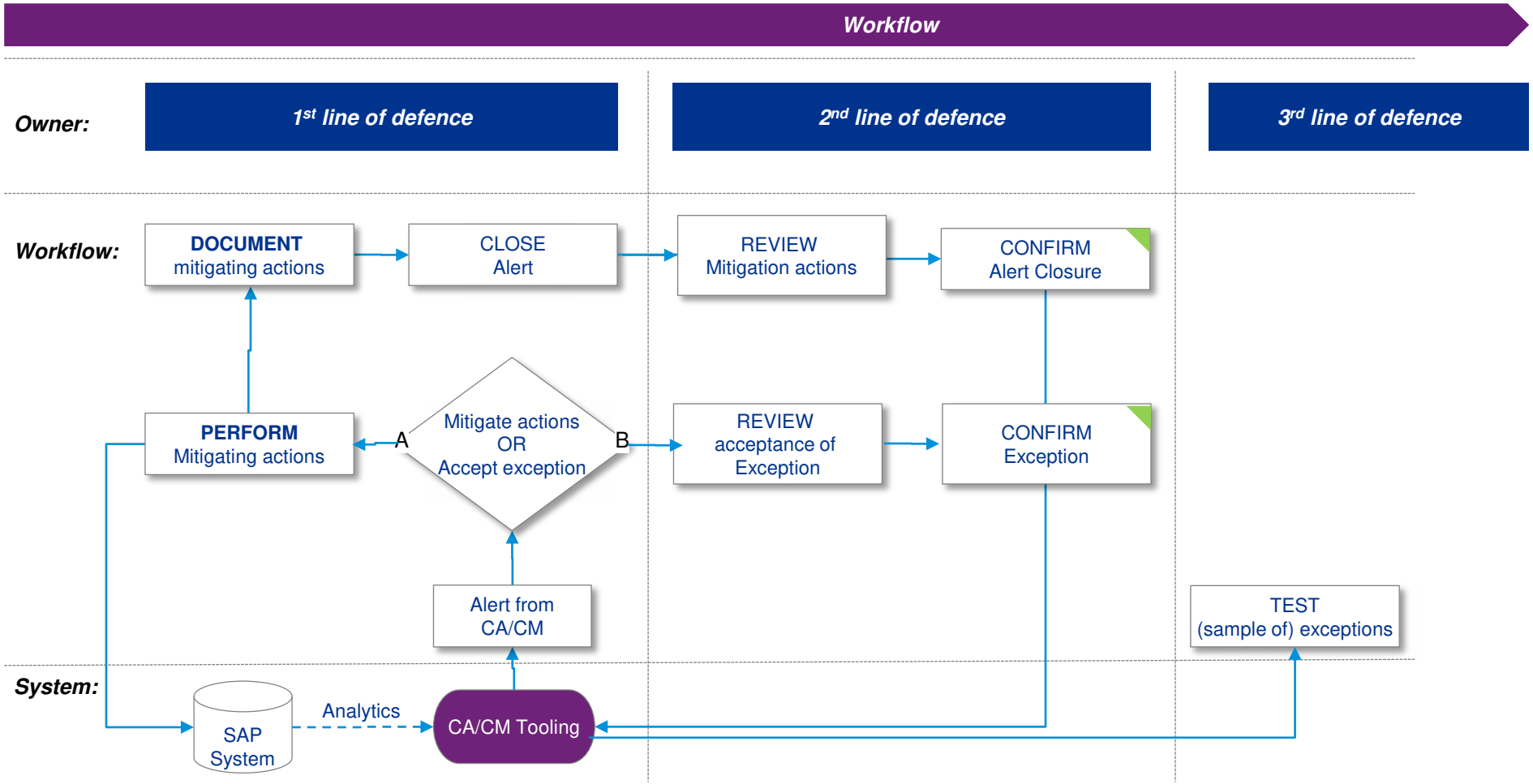
02

Continuous Auditing and Continuous Monitoring

The What and Why


Organization maturity
Adoption of “A.I.” (machine learning)
Dashboard with “smart” exceptions (individual follow-up)
Dashboard, thresholds and evidence splitting for multiple controls (e.g. countries), exception scoring
Automated evidence collection (“non-smart exceptions)
Data analyses performed in other tooling and uploaded as control documentation GRC system
Thesis Koen about CA/CM
2005 - 2009
2009 - 2011
2011 - 2013
2013 - XX
2018 - 2020
Technology development


Continuous Assurance
Continuous assurance is a combination of continuous auditing and testing of first and second lines of defense continuous monitoring.
Continuous Monitoring
An automated feedback mechanism used by management to help ensure that systems and controls operate as designed and transactions are processed as prescribed
Continuous Auditing
consists of the automated collection of audit evidence and indicators by an internal or external auditor from an entity's IT systems, processes, transactions, and controls on a frequent or continuous basis.
1st line of defence
2nd line of defence
3rd line of defence


Workflow
Owner:
1st line of defence
2nd line of defence
3rd line of defence
Workflow:
DOCUMENT mitigating actions
CLOSE Alert
REVIEW Mitigation actions
CONFIRM Alert Closure
PERFORM Mitigating actions
A
Mitigate actions OR Accept exception
B
REVIEW acceptance of Exception
CONFIRM Exception
Alert from CA/CM
TEST (sample of) exceptions
System:
SAP System
Analytics
CA/CM Tooling

KPMG Vote

What do you see as the benefits of Continuous Auditing / Continuous Monitoring?

KPMG Vote

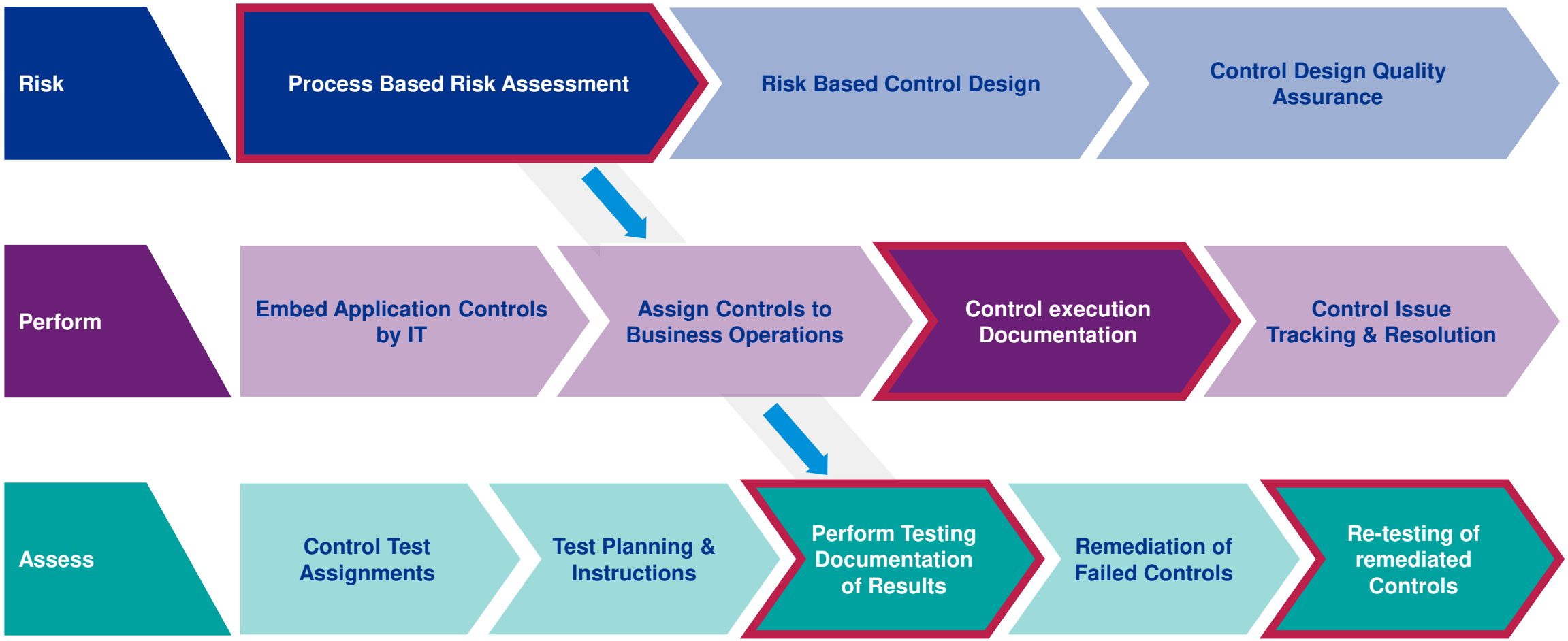
What do you see as the barriers of Continuous Auditing / Continuous Monitoring?

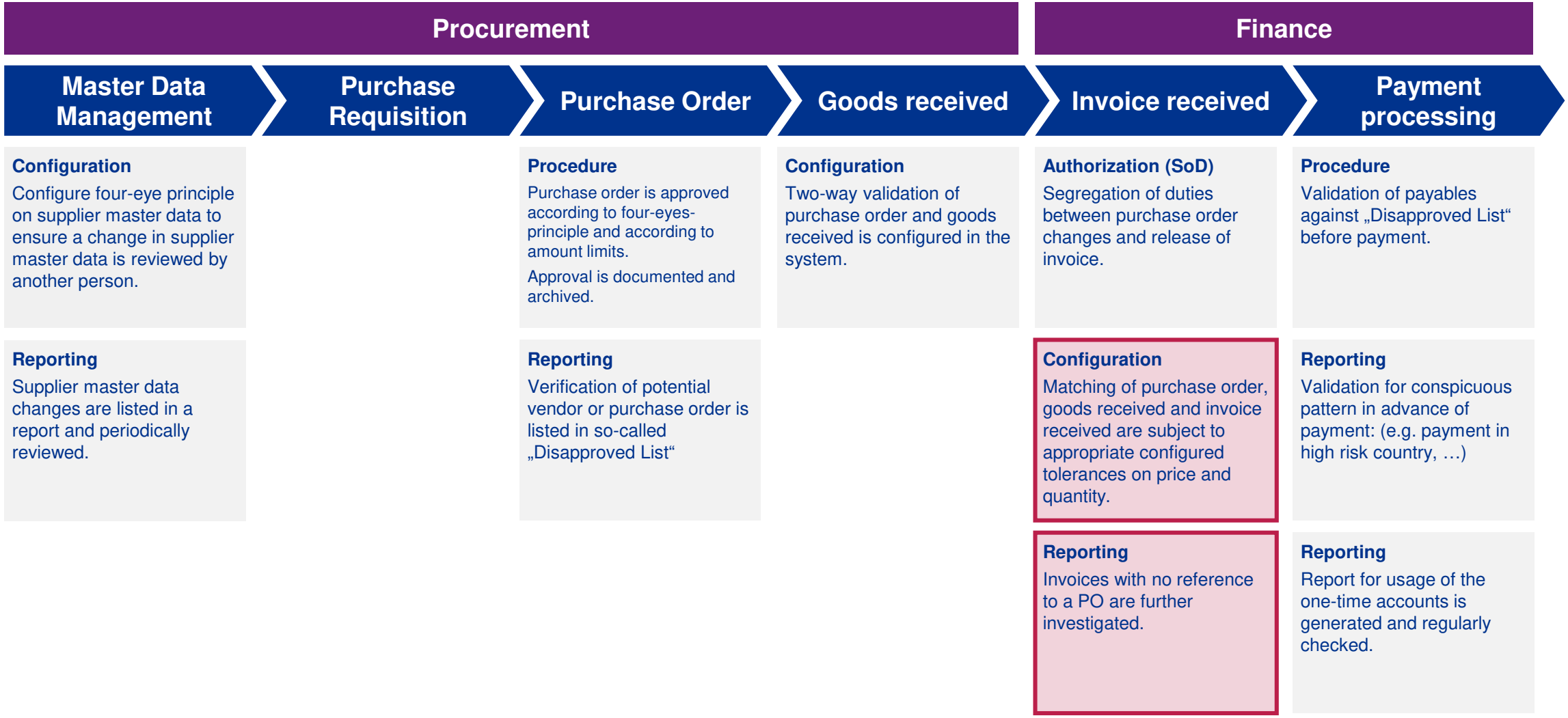
03

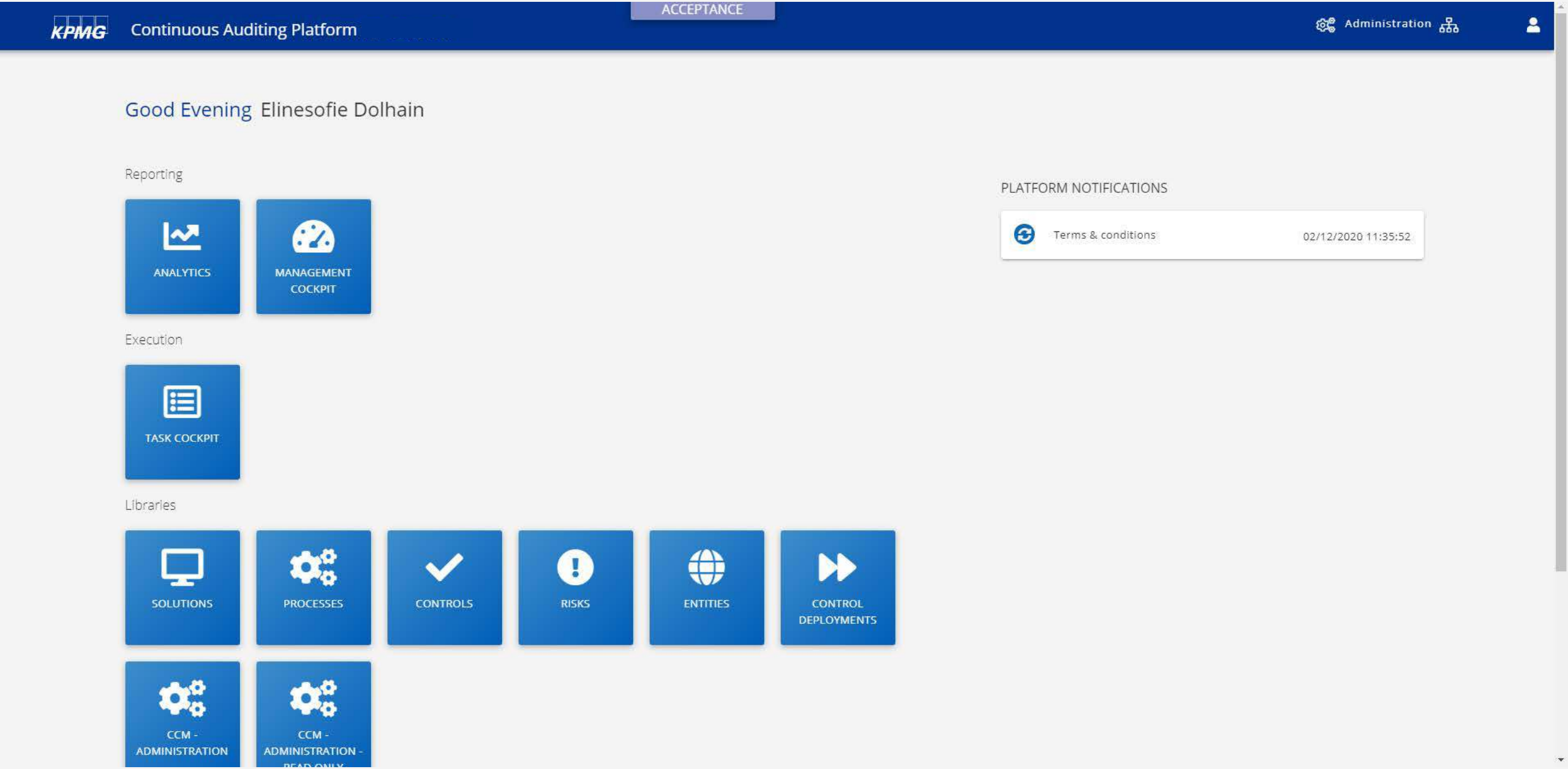
Applicability and practical implications

The How

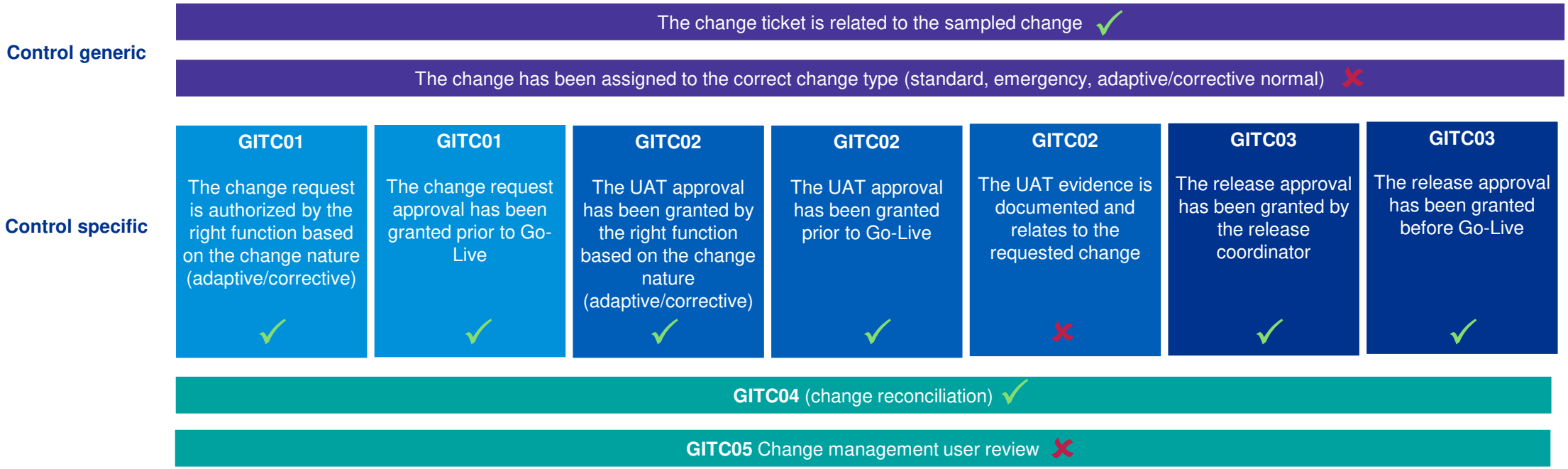
Where can CA/CM be applied?




Procurement
Finance
Master Data Management
Purchase Requisition
Purchase Order
Goods received
Invoice received
Payment processing
Configuration
Configure four-eye principle on supplier master data to ensure a change in supplier master data is reviewed by another person.
Procedure
Purchase order is approved according to four-eyes-principle and according to amount limits.
Approval is documented and archived.
Configuration
Two-way validation of purchase order and goods received is configured in the system.
Authorization (SoD)
Segregation of duties between purchase order changes and release of invoice.
Procedure
Validation of payables against „Disapproved List“ before payment.
Reporting
Supplier master data changes are listed in a report and periodically reviewed.
Reporting
Verification of potential vendor or purchase order is listed in so-called „Disapproved List“
Configuration
Matching of purchase order, goods received and invoice received are subject to appropriate configured tolerances on price and quantity.
Reporting
Validation for conspicuous pattern in advance of payment: (e.g. payment in high risk country, …)
Reporting
Invoices with no reference to a PO are further investigated.
Reporting
Report for usage of the one-time accounts is generated and regularly checked.


KPMG
Continuous Auditing Platform
ACCEPTANCE
Administration
Good Evening Elinesofie Dolhain
Reporting
ANALYTICS
MANAGEMENT COCKPIT
Execution
TASK COCKPIT
Libraries
SOLUTIONS
PROCESSES
CONTROLS
RISKS
ENTITIES
CONTROL DEPLOYMENTS
CCM - ADMINISTRATION
CCM - ADMINISTRATION -
PLATFORM NOTIFICATIONS
Terms & conditions
02/12/2020 11:35:52

Automation of Change Management Controls

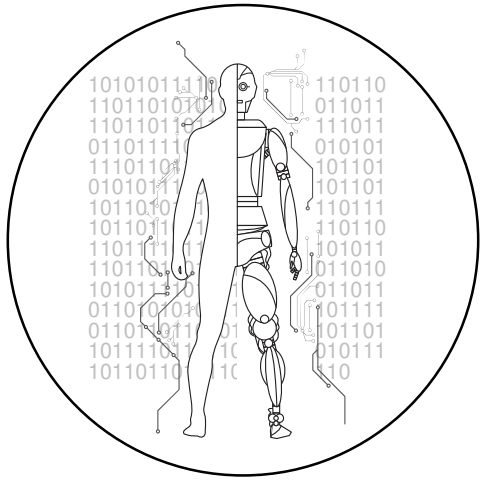


✓ Automation is possible. Disclaimer: the level of automation is highly dependent on (appropriate) usage of the ticket system (e.g. approvals are giving as part of approval workflows and not uploaded as evidence such as approval e-mails)

Other IT / Cyber Examples

Continuous Vulnerability Management

Administrator Privileges



Controlled Access Based on the Need to Know

Secure Configuration for Network Devices, such as Firewalls, Routers, and Switches

4 EXAMPLES FROM THE 20 CIS CONTROLS - HTTPS://WWW.CISECURITY.ORG/CONTROLS/CIS-CONTROLS-LIST/

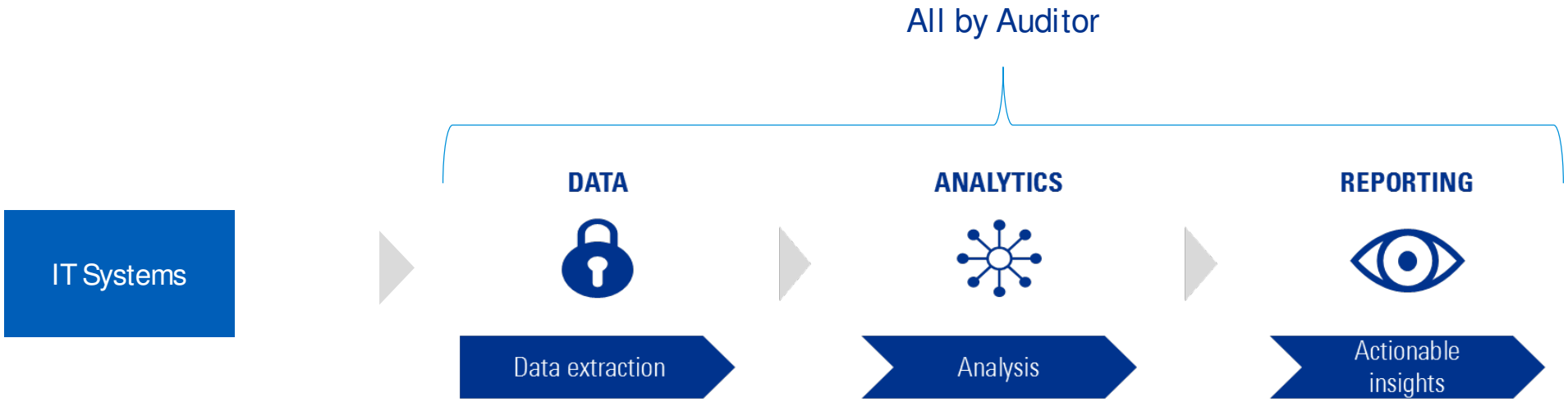
Artificial Intelligence creates new possibilities

04

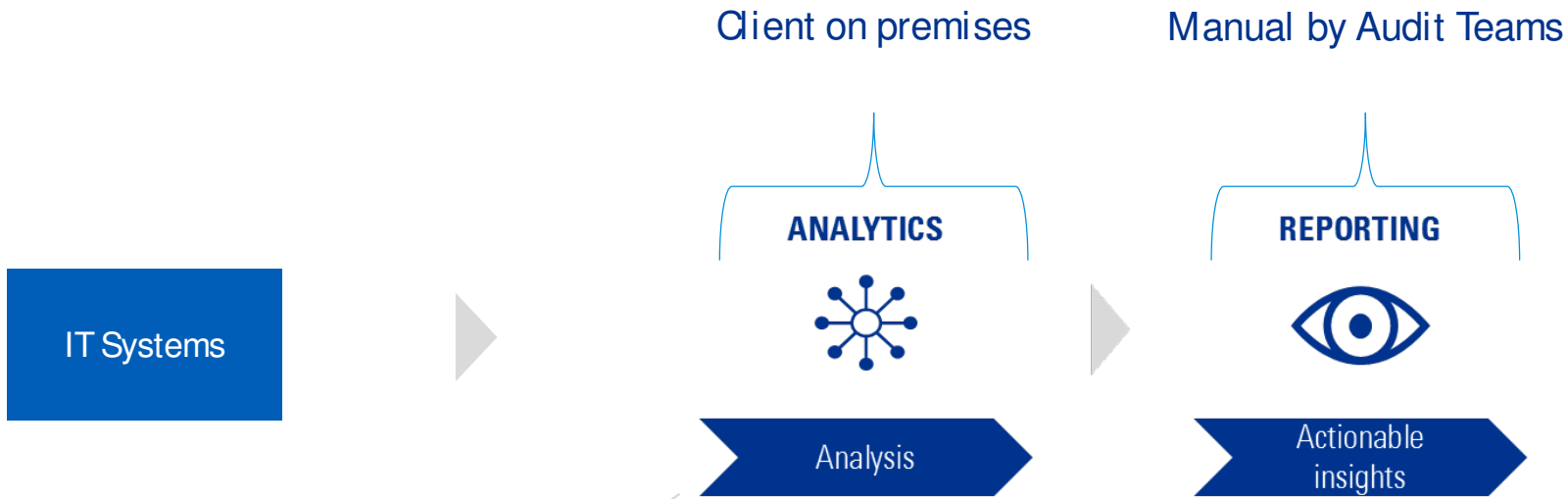
Moving to CA

In practice: CA at the largest food company in the world

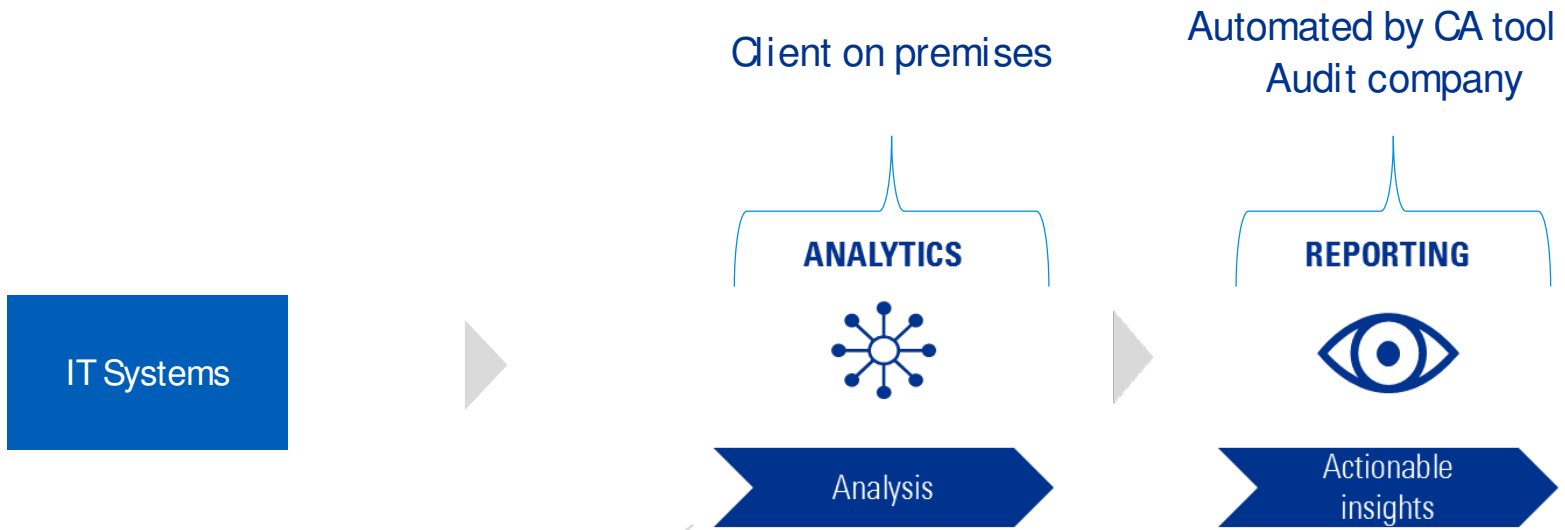
Moving to CA - D&A by the Auditor



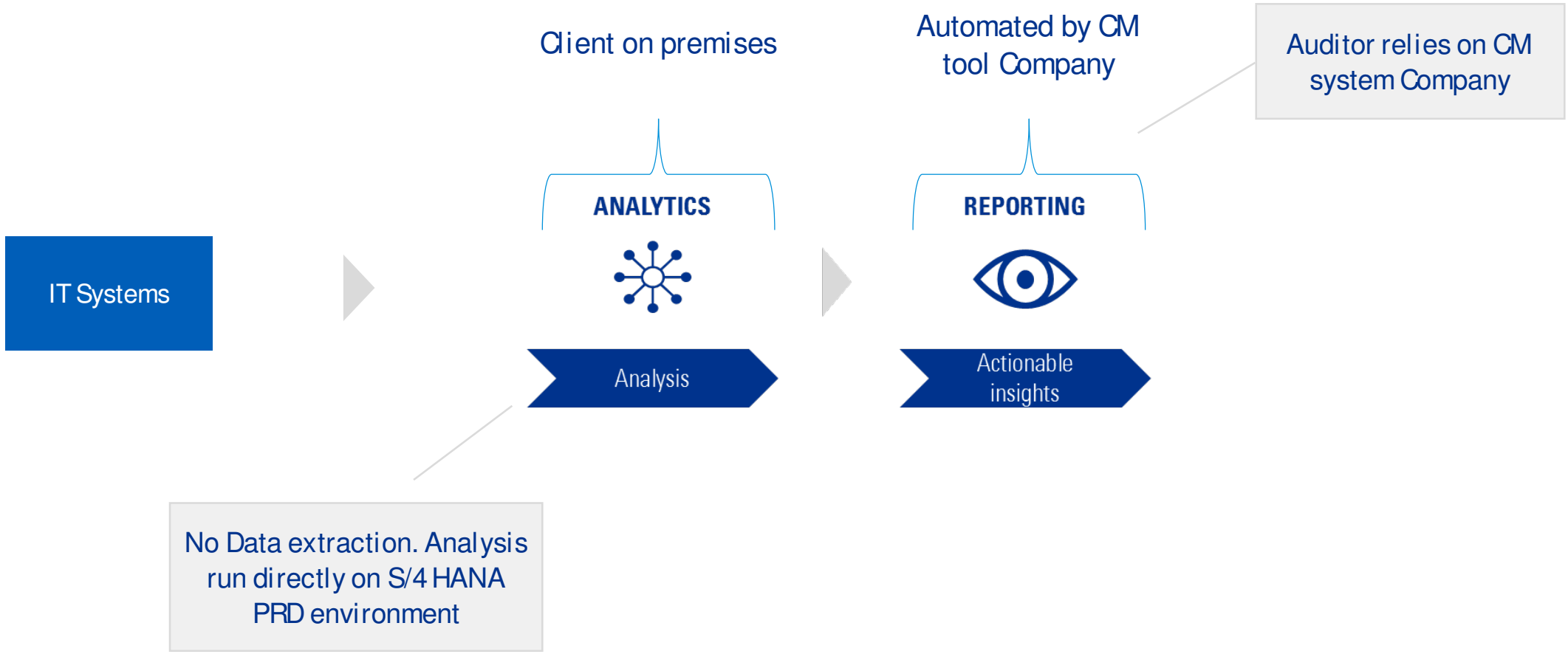
Moving to CA - D&A on premises of the Company



Moving to CA - Moving to a Continuous Auditing tool



Moving to CA - Company implemented Continuous Monitoring



05

Why now!?

Why we will experience a breakthrough

Why now

Technology

Intelligent Automation, AI, nanotech, biotech, cyber-physical systems, digital labor

Standardization

Standardization, harmonization and centralization efforts of companies

Compliance vs Costs

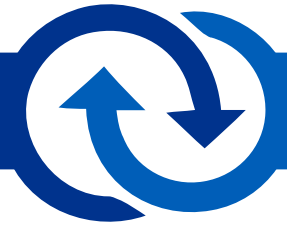
Increased compliance pressure on companies, while they want to keep costs in cotnrol

Above all, professionals nowadays do see the need for automation of their profession

Key criteria to a successful implementation

Business

1. Determine **governance model** including, stakeholders, responsibilities and accountabilities
2. Determine how to **measure success**
3. Ensure the risk and compliance program of the organization is **mature**
4. Determine how to **integrate** CA/CM with other business initiatives
5. **Validate** the data within the solution with the stakeholders in the business



Technology

1. **Start small** and allow yourself to explore the possibilities of CA/CM
2. The number of false positive alerts should be on a **acceptable level** to ensure buy-in from the end-user
3. **Visualisations** can help the business to identify trends and improvement opportunities.
4. **Make the solution bullet proof** (e.g. data completeness checks, solution subject to formal change and security management).
5. **Integrate** with existing technology

Thank you!