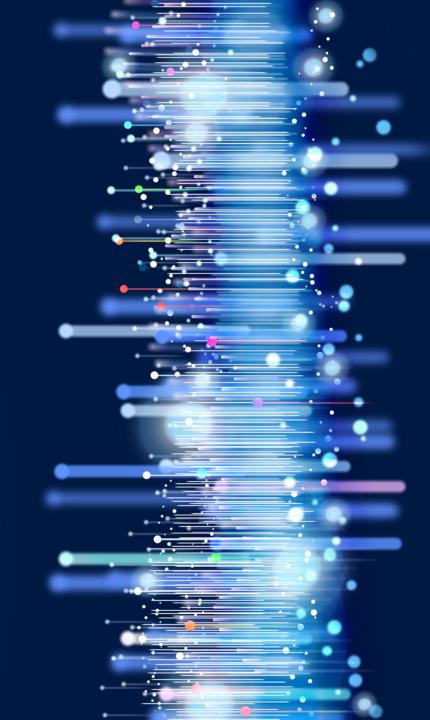


# Do we finally experience the breakthrough of Continuous Auditing and Continuous Monitoring?

ISACA SQUARE TABLE 16 DECEMBER 2020



# With you



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## Contents

- History and future of auditing
  The shift to a more digitized Audit
- Continuous Auditing / Continuous Monitoring
  The what and why
- Applicability and practical implications
  The how including a brief demo
- Moving to Continuous Auditing
  In practice: CA at the largest food company in the world
- Why now?!
  Why we will experience a breakthrough



#### History and future of auditing

The shift to a more digitized Audit





VOC first formally listed public company. Need for Auditors

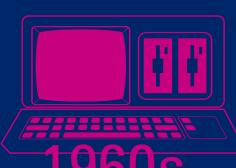


1800s

Mechanization: Steam, water, mechanical production equipment



Mass production: Division of labor, electricity,



The Information Age: Electronics, IT, Mass

Communication, Internet



ISACA founded in 1969



Today

Artificial Intelligence, Intelligent Automation, nanotech, biotech, cyberphysical systems, digital labor

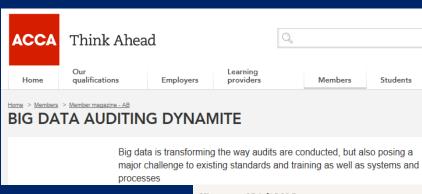


Biggest change in Audit profession

## 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





Nieuws - 03 juli 2015

'Data-analyse gaat accountancy veranderen'

Accountants and auditors

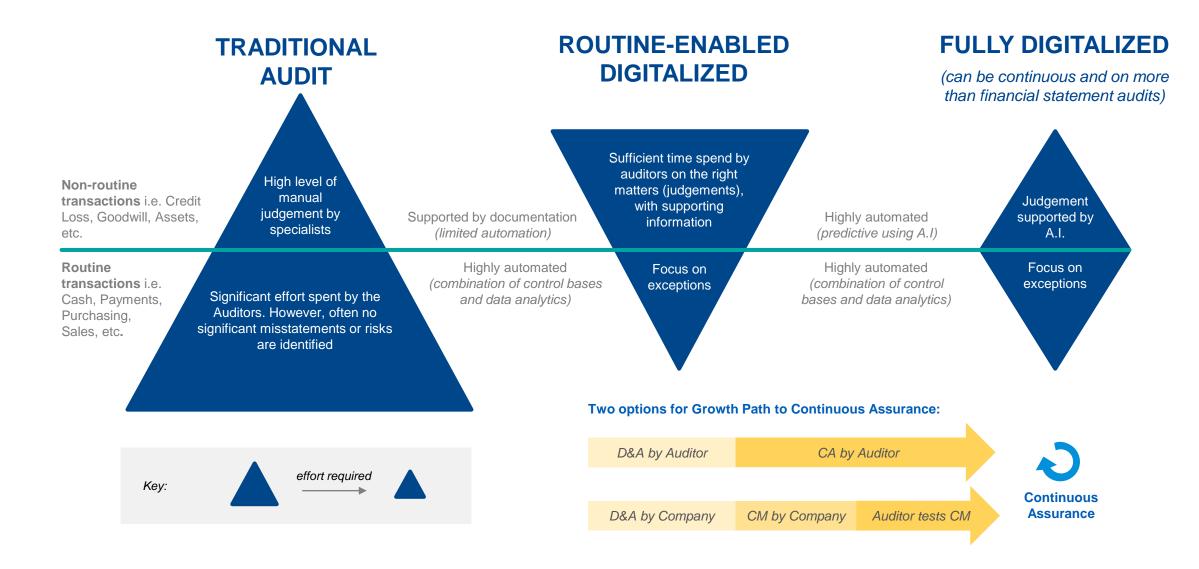
#### Bring on the personal trainers

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
0.94	0.94
reteiliarketeis	0.99

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

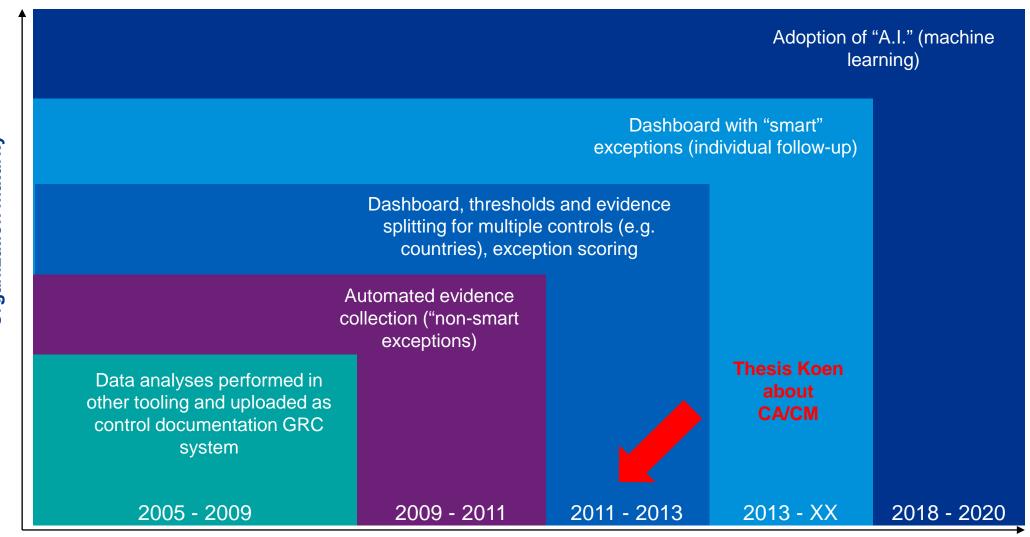
What doesn't kill auditors makes them stronger





#### **Continuous Auditing and Continuous Monitoring**

The What and Why



**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

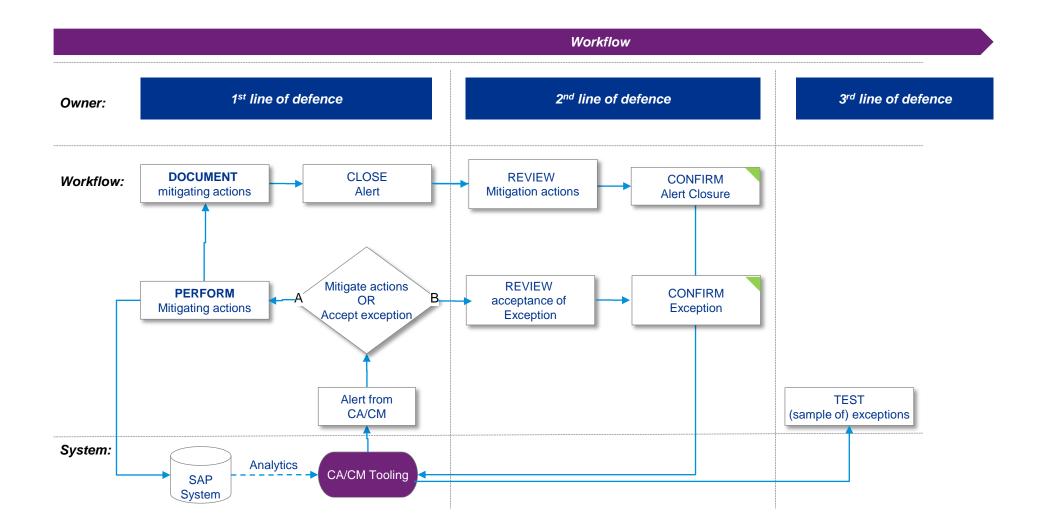
#### **Continuous Auditing**

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





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





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

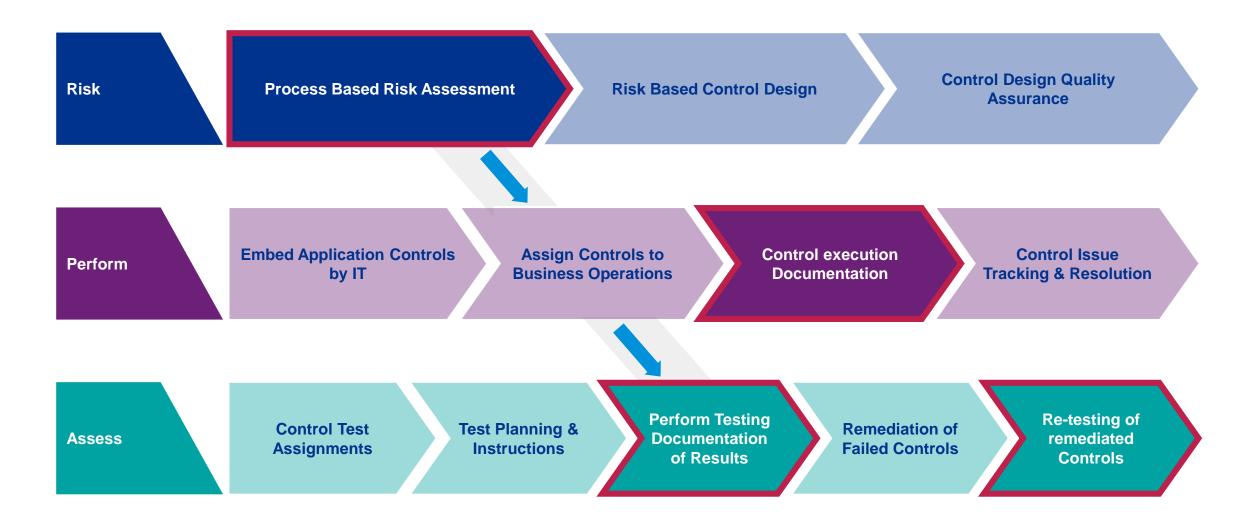




## Applicability and practical implications

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.

#### Reporting

Supplier master data changes are listed in a report and periodically reviewed.

#### **Procedure**

Purchase order is approved according to four-eyes-principle and according to amount limits.

Approval is documented and archived.

#### Reporting

Verification of potential vendor or purchase order is listed in so-called "Disapproved List"

#### 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.

#### 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.

#### Good Evening Elinesofie Dolhain

#### Reporting





#### Execution



#### Libraries













#### PLATFORM NOTIFICATIONS



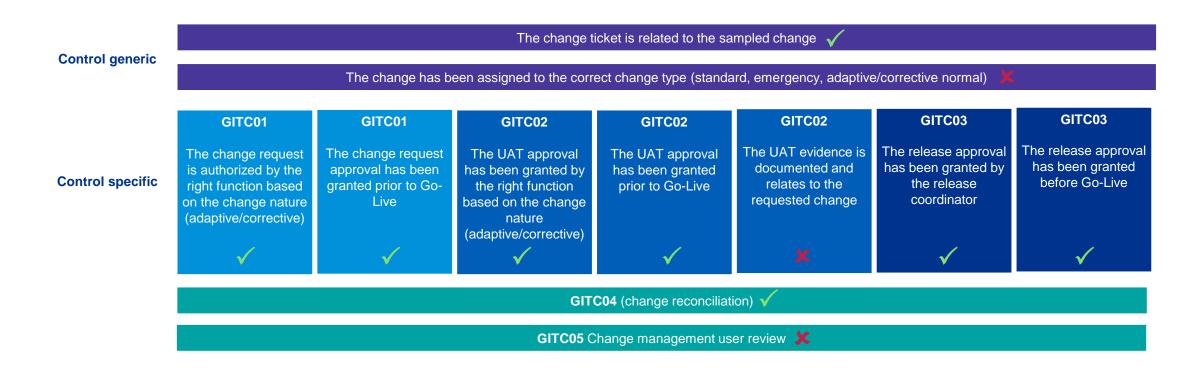
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## Automation of Change Management Controls



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









## Artificial Intelligence creates new possibilities

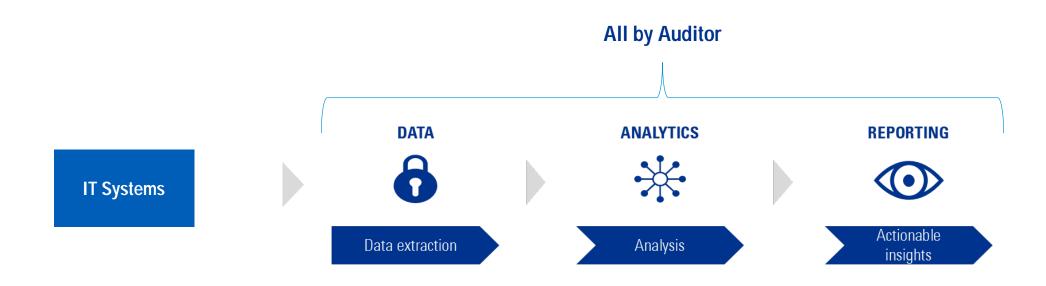




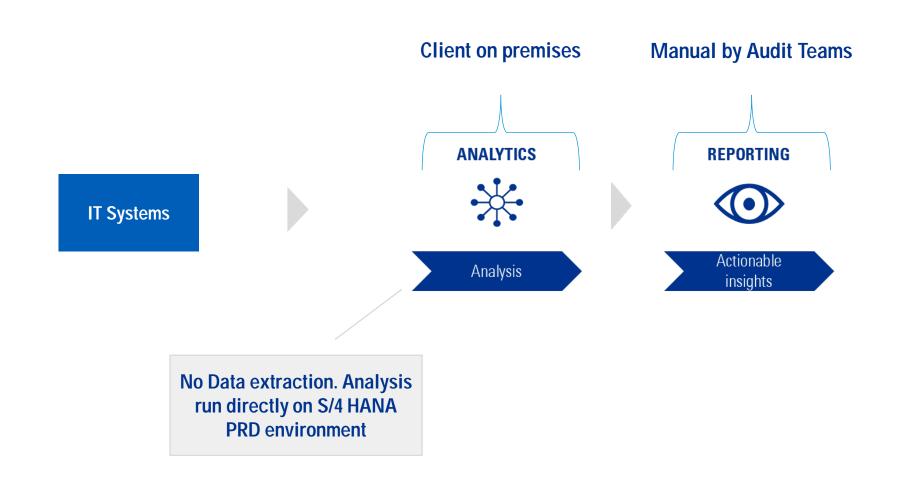
#### **Moving to CA**

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

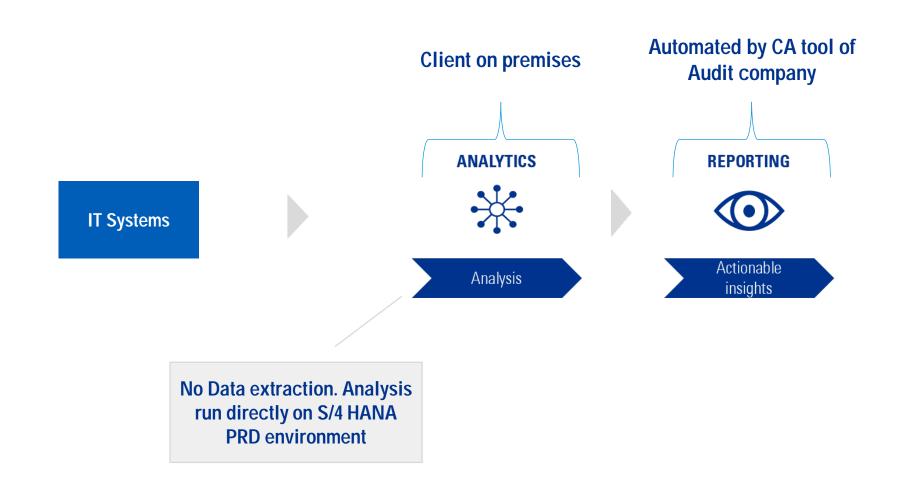
## Moving to CA - D&A by the Auditor



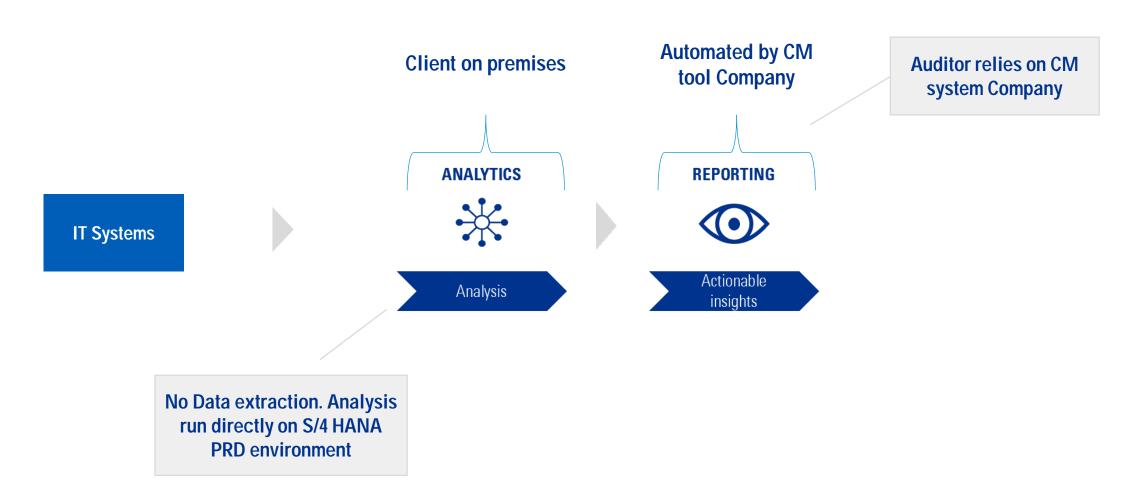
## Moving to CA - D&A on premises of the Company



## Moving to CA - Moving to a Continuous Auditing tool



## Moving to CA - Company implemented Continuous Monitoring





#### Why now!?

Why we will experience a breakthrough

## Why now



### Technology

Intelligent Automation, Al, 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**

- Determine governance model including, stakeholders, responsibilities and accountabilities
- 2. Determine how to **measure** success
- 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!