



# Selecting Key items with Process Mining

*"Software voor auditing" Symposium 26 mei 2021  
Limerg instituut, Stuurgroep Statistical Auditing*

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The better the question. The better the answer.  
The better the world works.

# Agenda

## Part 1 (20 minutes)

- Introduction Angelique Koopman & Ruben Post
- Why Process Mining in auditing?
- Demo Process Mining tool
- Anomaly detection exercise with Process Mining

## Part 2 (10 minutes)

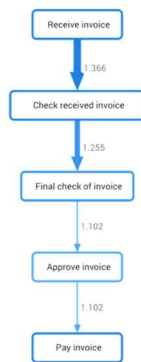
- Feedback exercise to select key items
- What can we learn from this?

# Why Process Mining?

## The "textbook" process

20%

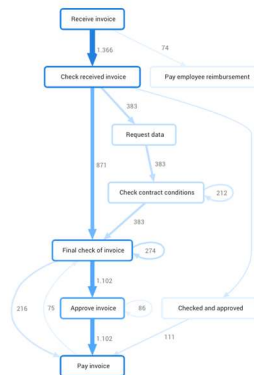
The different process **variants** in which the **most common** process is visualized first.



## What people think

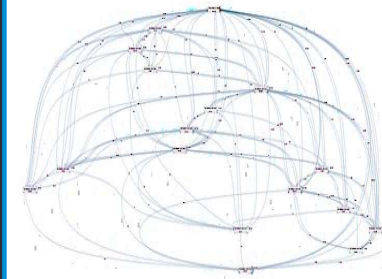
40%

See less common paths and activities. Ideally suited to detect **anomalies** and inefficient process variants.



## The reality

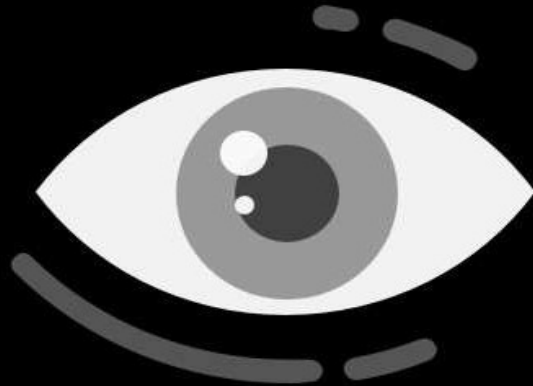
**100% data coverage.** No activity escapes the eye! You can zoom in detecting long-term or **unusual process paths** or defects that would otherwise remain hidden.



## What is Process Mining?

## A demo of a Process Mining solution

If you think, that you just have got only  
**LIMITED INSIGHT** into the as-is  
processes and their weaknesses.



**PROCESS MINING** can SWITCH ON THE  
LIGHTS and empower you to see  
EVERYTHING in the real processes



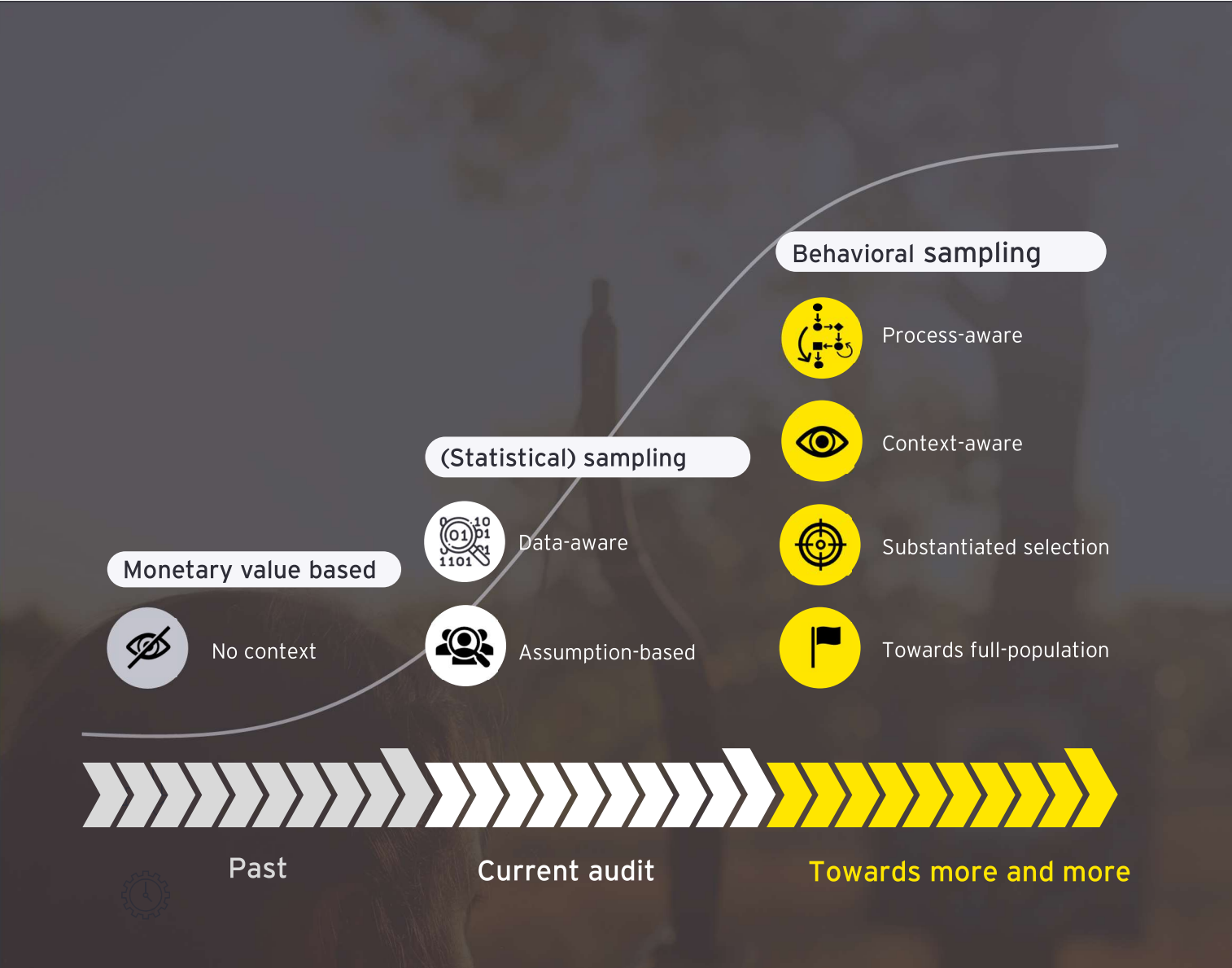
Process Mining in Auditing

Learning by Doing

Selecting Key Items

# Key item selection

Key items are transactions that might have a **higher likelihood** of containing misstatements



# Hands-on Process Mining exercise

Selecting Key items



[https://survey.uu.nl/jfe/form/SV\\_6G7uCFNzSyuPU4C](https://survey.uu.nl/jfe/form/SV_6G7uCFNzSyuPU4C)





## Selecting Key items with Process Mining (part 2)

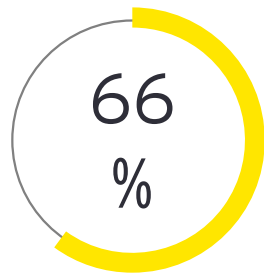
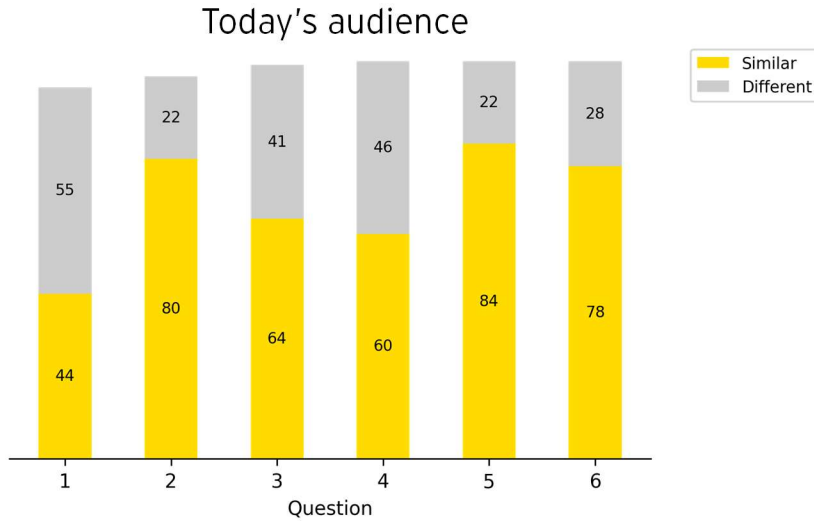
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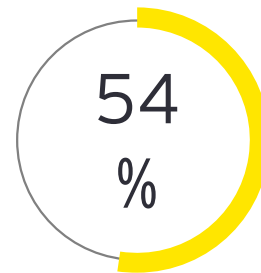


# Exercise Results

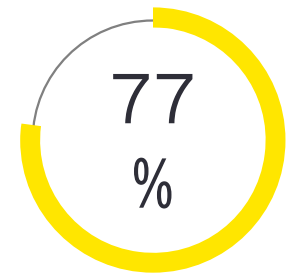
What can we learn from the way we select key items with Process Mining



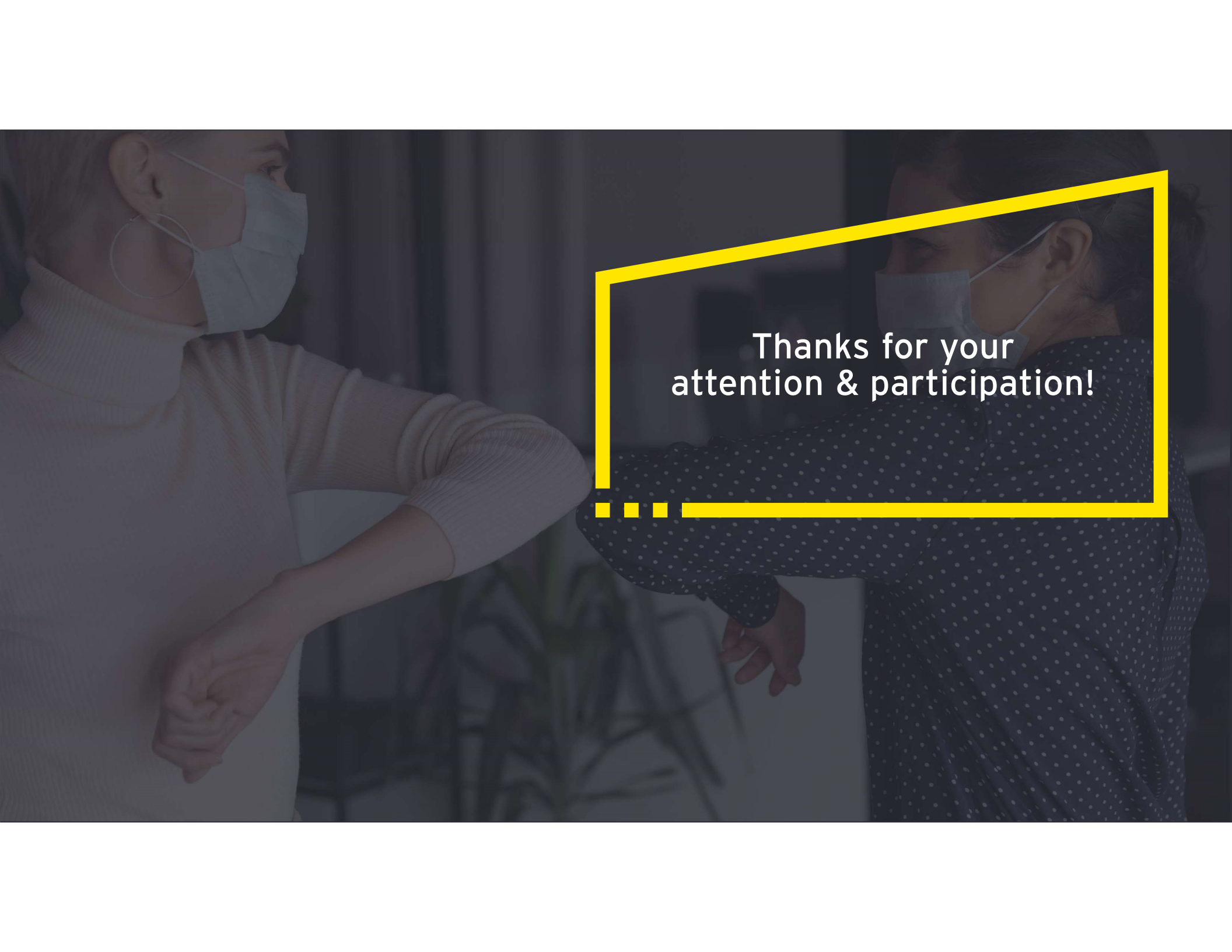
of the cases were labeled the same by you and the algorithm



of the cases the algorithm gave a low score were chosen as key items



of the cases the algorithm gave a high score were chosen as key items.

A photograph of two women wearing face masks and shaking hands. The woman on the left is wearing a white turtleneck sweater and a white face mask. The woman on the right is wearing a dark blue polka-dot long-sleeved shirt and a white face mask. The background is slightly blurred, showing what appears to be a window with blinds. A yellow graphic frame is overlaid on the right side of the image, containing the text.

**Thanks for your  
attention & participation!**