

# Welcome!

## **Leaner Government: Leveraging Technology for Process Transformation and Consolidation**

June 3 | 2:00–3:50 PM ET | 2 CPEs | FOS: AUDG



# Agenda

- AGA Housekeeping Items
- Process Intelligence – Intro to the Basics
- AGA TTS Innovation Challenge Award Winner
- Panel Conversation with Federal Leaders
- Q&A

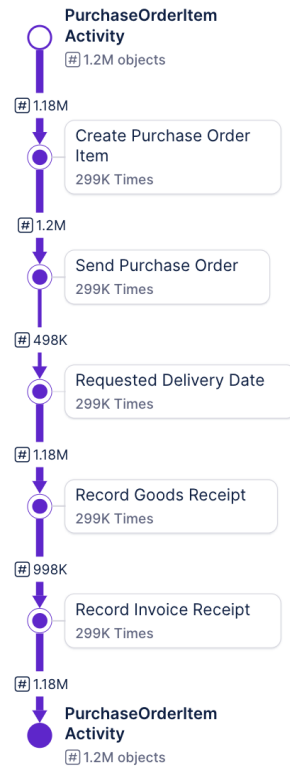


AGA **Webinars**

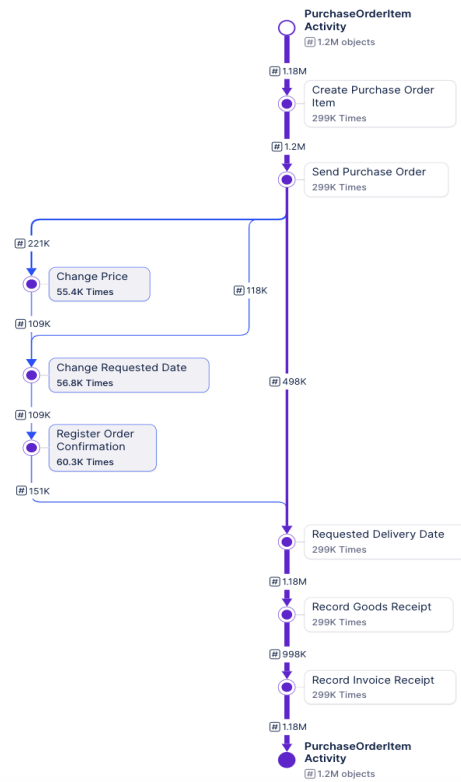
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# Process Mining to Gain Intelligence

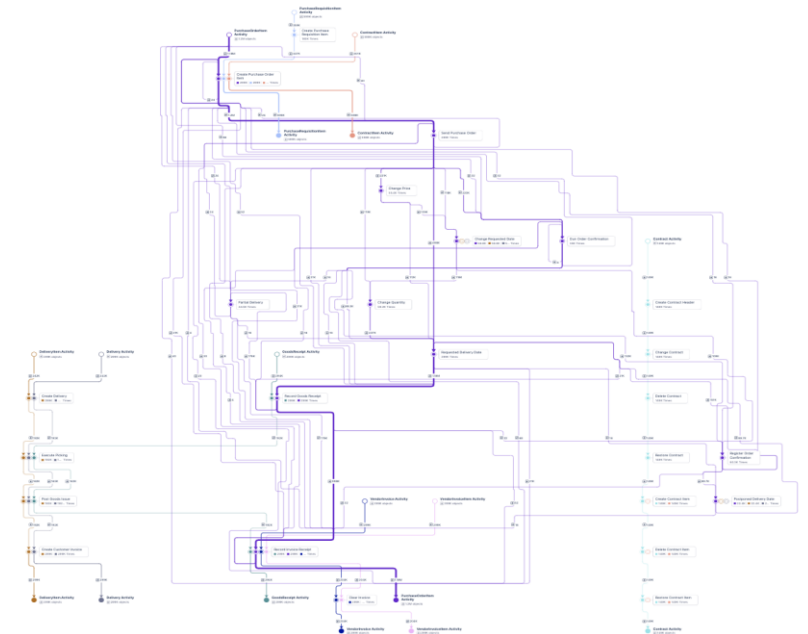
## How the process was designed



## How business think the process runs



## How the process actually runs



# Leaving value hidden in your processes

## Supply & Distribution

1 in 5 orders cancelled due to stock-outs

>70% of orders have to be expedited

>8 delivery date changes for the same order

## Finance & Administration

Invoices paid twice

Goods shipped but not billed

>10 service ticket reassignments

## Sustainability

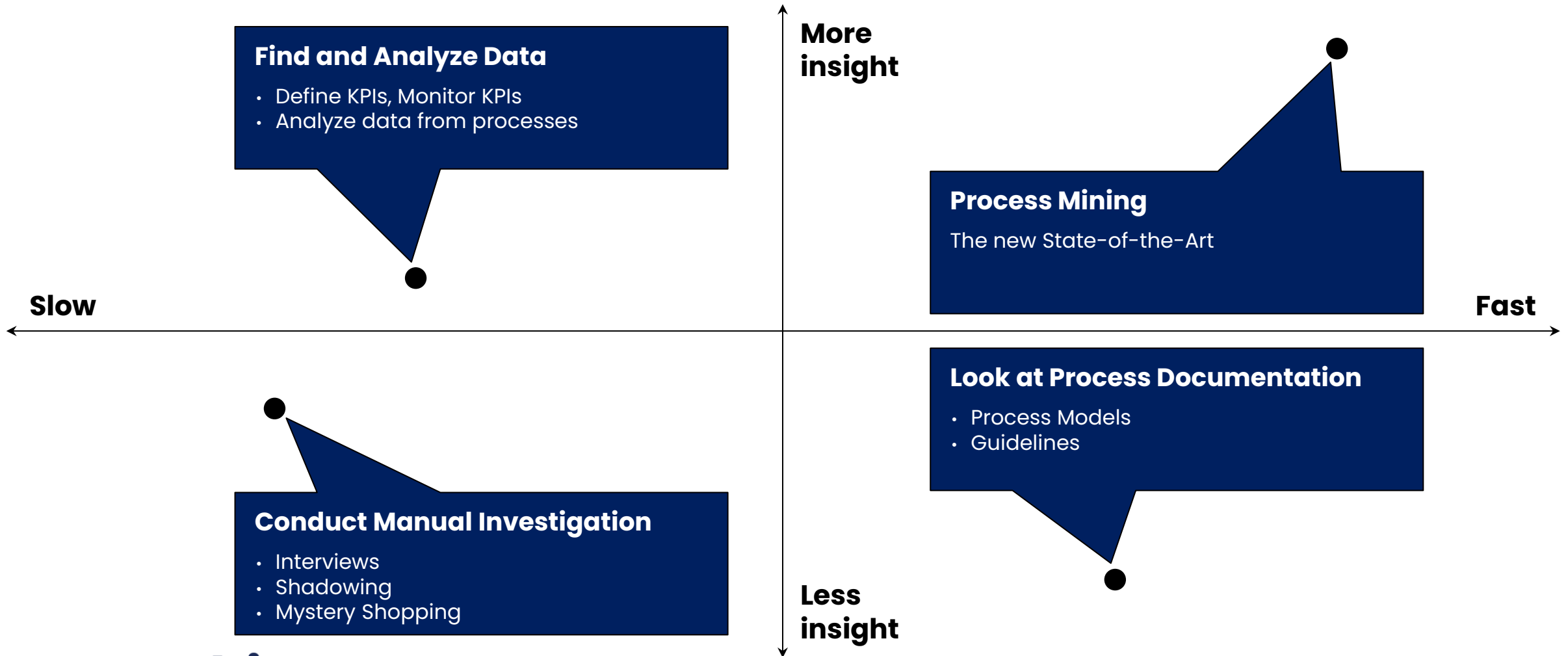
20% of truck shipments can be consolidated

800,000 returned products not accounted for

No sustainability coverage of suppliers

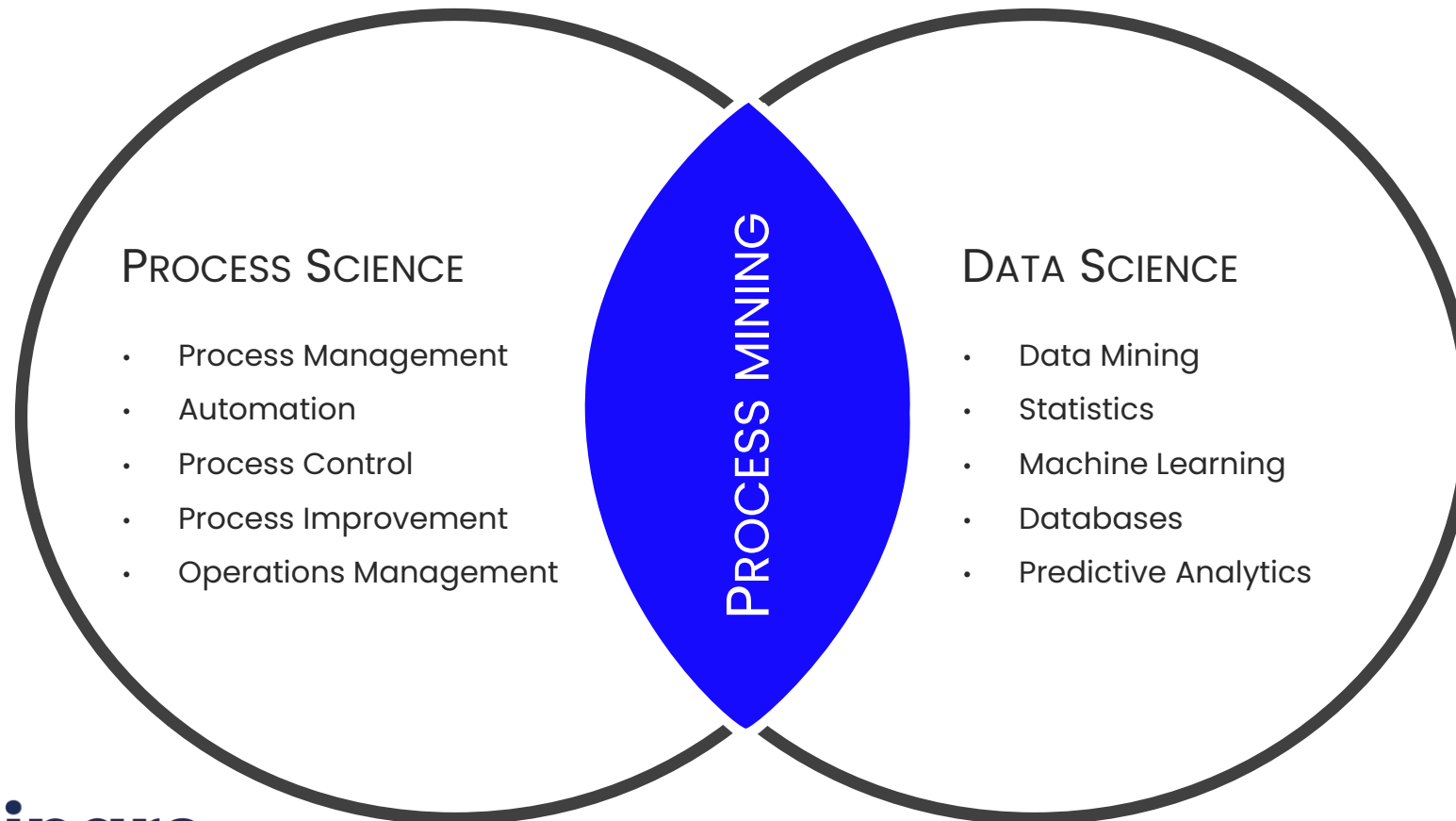
... Product, Logistics, Administration, Risk & Compliance, and more

# What to do to get process insights?



# An interdisciplinary science

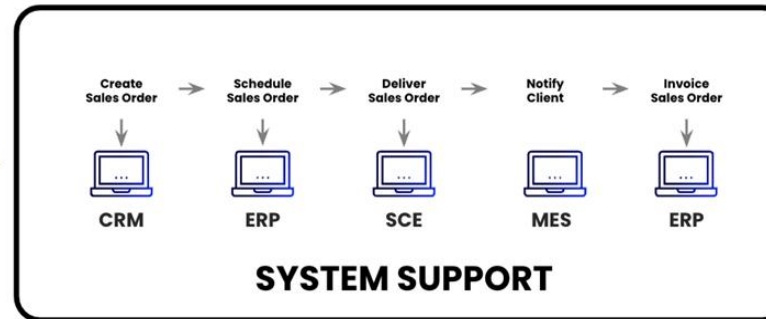
*Research classification:* Process mining lies at the intersection between **process science** and **data science**, bridging the gap between model-based process analytics and data-centered analytics.



# Process Mining Theory

Process Mining is a data analytics technology to **reconstruct, analyze, and improve** business processes based on log data from transactional IT systems. Process Mining bridges the gap between model-based process analyses and data-centric analysis techniques.

- v.d.Aalst 2016



PROCESS INSIGHTS



7/14/2011 6:20	7/14/2011 6:20	Authorize Client's Invoice Payment	748	Tina Janssens	Financial Manager
7/14/2011 6:38	7/14/2011 6:52	Pay Invoice	748	Annemie Van Ginneken	Financial Manager
11/20/2017 0:20	11/20/2017 0:29	Create Inquiry Request	152	Karin Gielen	RES
11/20/2018 23:11	11/20/2017 23:18	Analyze Inquiry Request	152	Jef Konings	RES Manager
11/20/2017 23:20	11/20/2017 23:24	Create Inquiry Proposal RES Manager	152	Rudy Schroyen	RES Manager
11/23/2017 6:28	11/23/2017 6:49	Analyze Inquiry Proposal	152	Kris Cassauwers	Purchasing Agent
11/23/2017 7:38	11/23/2017 7:45	Amend Inquiry Proposal	152	Jef Konings	RES Manager

PROCESS DATA (EVENT LOGS)

# When is your data ready for process mining?

Minimum requirements for your data to be process mining ready

## Unique Identifier

Represents an identifier that uniquely follows the **case** from **start-to-end** of the process

**Across systems** the identifier can be in **different format**, but it should be possible to **link their relations**

*Example*



**ID:**

Case ID - For each Job - Unique Identifier

## Activity Name

Represents the **Activity** that is **executed** in at a particular time

One process can **contain dozens of different activities** that characterize it

*Example*



**Activity:**

Job Create, Stock Movement, Appointment Create, etc.

## Timestamp

Represents the **date and time** at which the **activity** has been **completed**

This process data is usually found in **transaction tables, change tables, workflow history tables**, etc.

*Example*



**Executed on:**

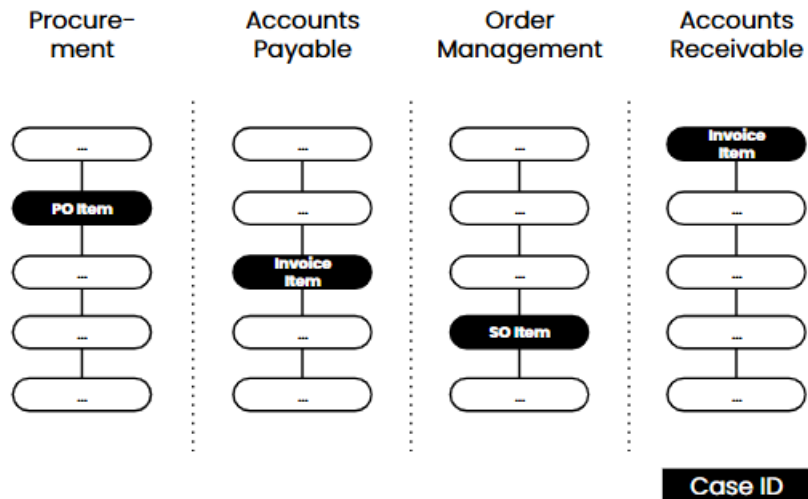
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# Object-centric process mining vs Case-centric process mining

## Case-centric process mining

Case-centric process mining lines up all the objects and events that make up your processes behind a predetermined case ID.

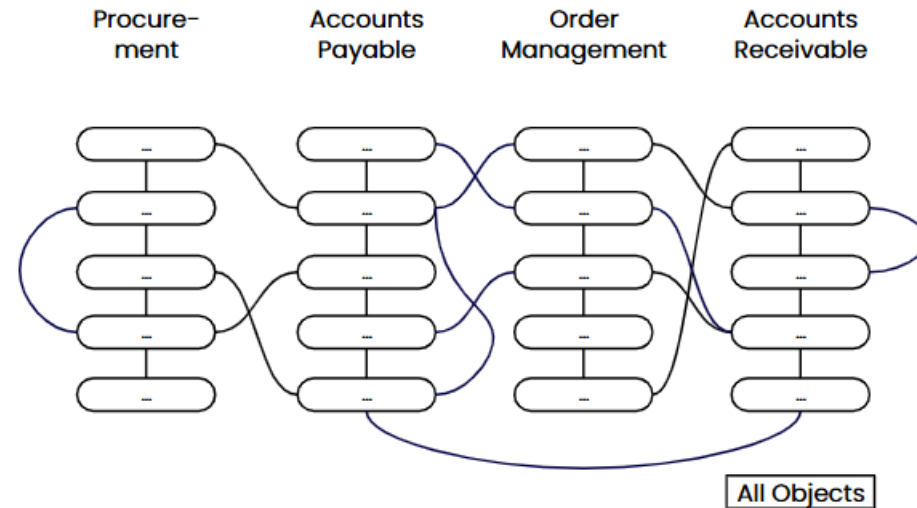
*One model per process*



## Object-centric process mining

OCPM captures objects without the imposition of a case ID, enabling the accurate analysis of processes as they truly run.

*One scalable data model*



# Process Intelligence

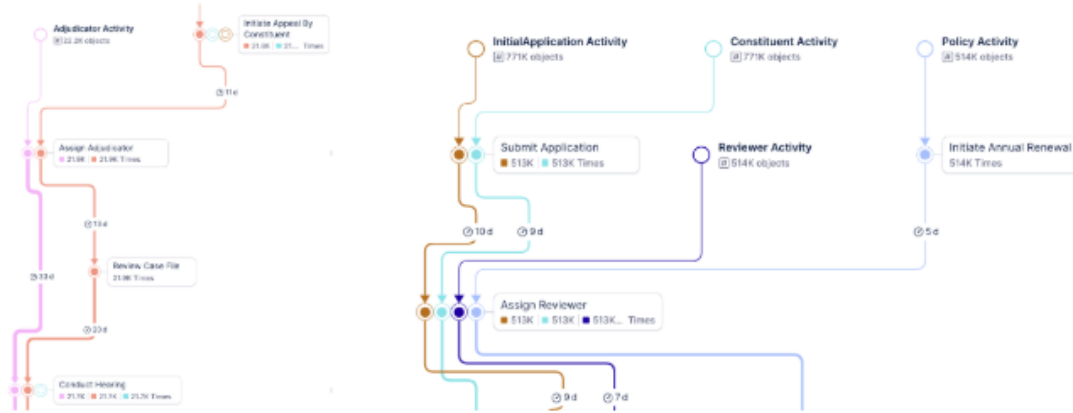
## Government Agencies KPIs Identified and Delivered

Public Satisfaction

Driving Efficiency

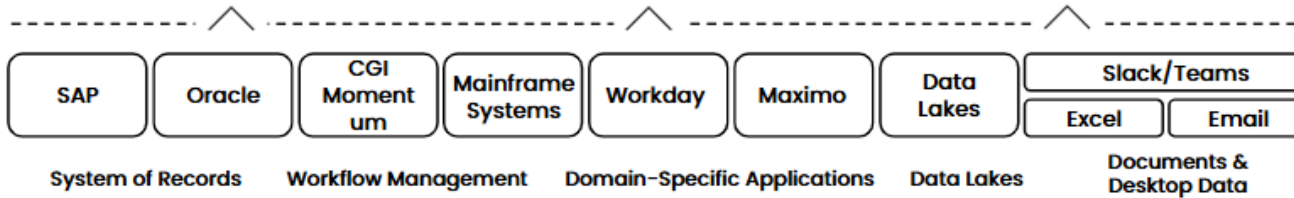
Compliance

## Government Process Digital Twin



## Process Improvement CoE

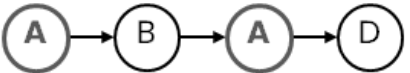
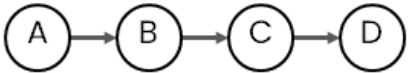
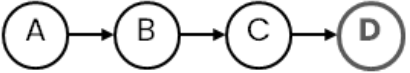
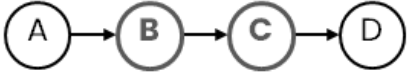
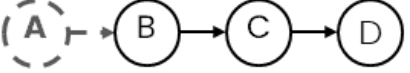
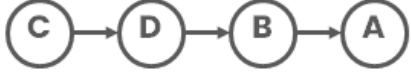
Analyze Processes, Identify Inefficiencies, and Recommend Actions



# Enabling Identification of Deviations

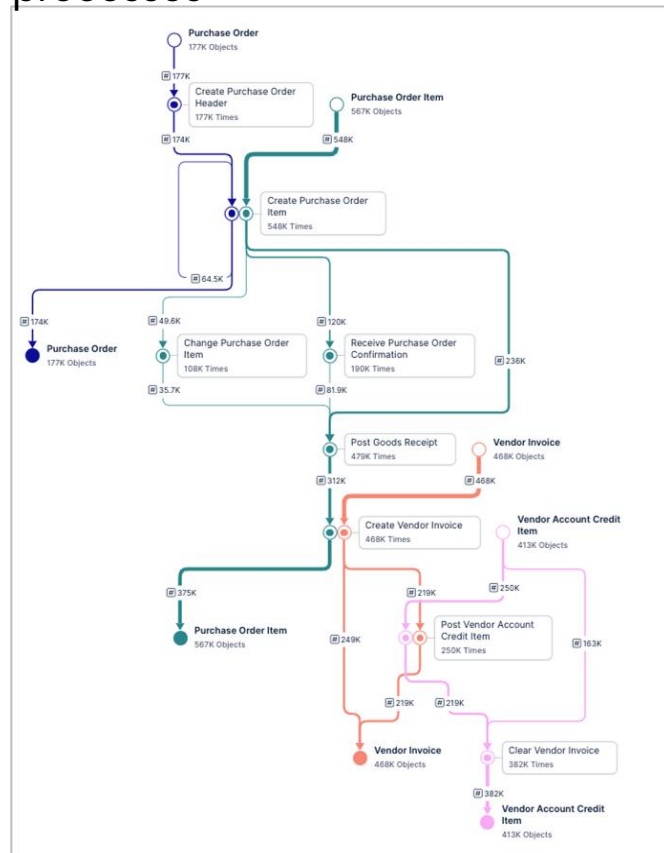
## Transaction-based testing of control indicators

Risk manifests itself in process patterns that can be mined and analyzed

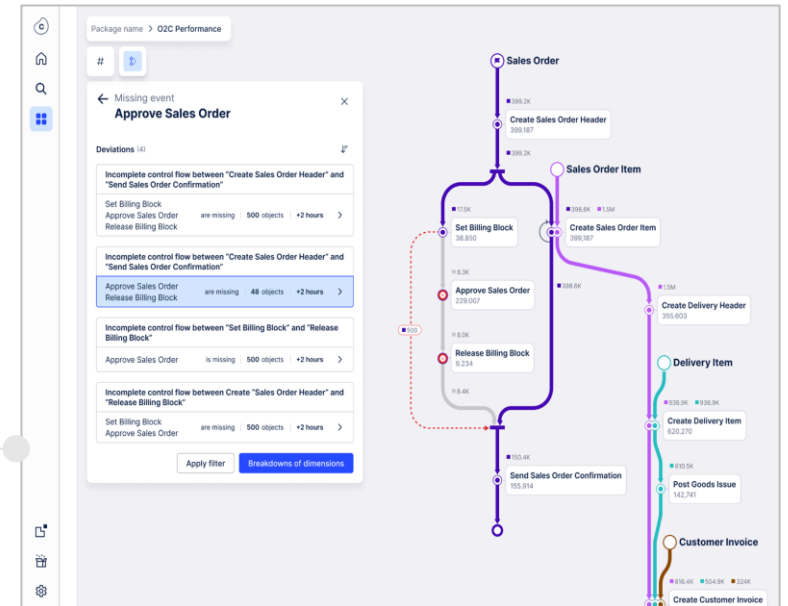
Process pattern	Example	Process pattern	Example
 Activity multiple times	Someone is approving the same PO multiple times	 (Between-) activity duration	The time between PO creation and submission is outside of SLA window
 Unwanted activity	Someone is adding PO lines after the PO was approved	 Activity allocation	The same person is creating and approving the PO
 Missed activity	Someone is creating a PO without placing a PR	 Activity sequence	Processes don't follow standard operating procedures

# Analyze with measured outcomes

Finding variants and deviations, monitor live data, build dashboards for cross-system processes



- Discover and visualize your processes across all objects and events
  - Identify process deviations, bottlenecks and inefficiencies
  - Places all processes in context and allows to spot friction across cross-system processes
- 
- Conduct conformance checking against defined process models
  - Visually detect deviations by overlaying the live processes with defined process model
  - Mine processes and create an informed best practice process model in a single interface



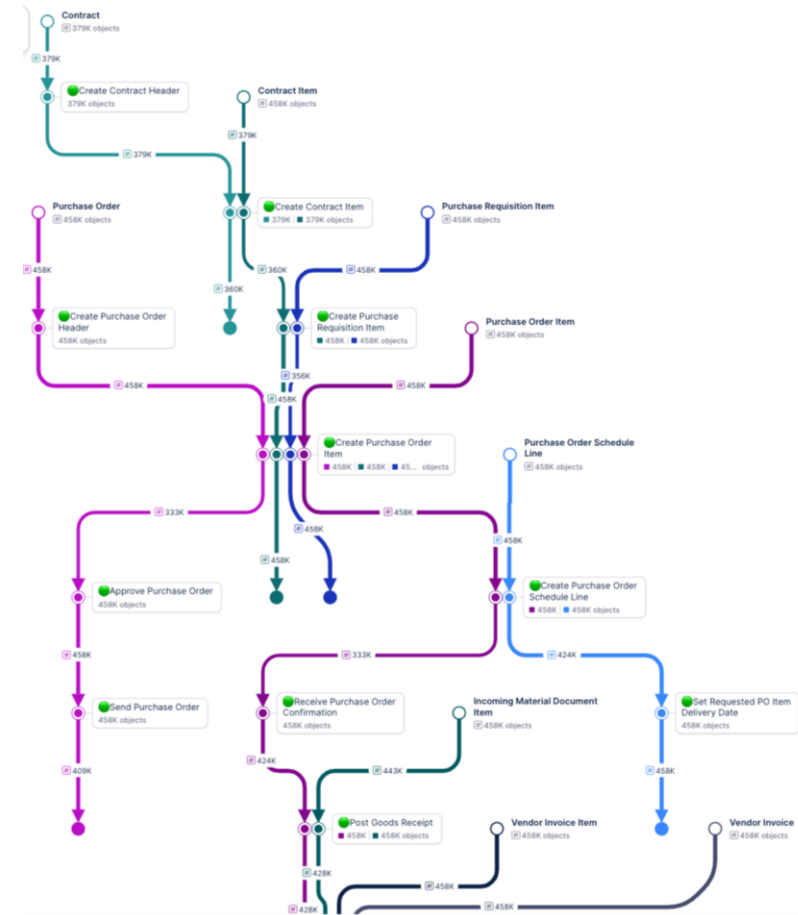
- Real-time or near real-time process monitoring through dashboards and alerts
- Personalize your dashboards with modular components
- Combine data from multiple processes and systems into a unified single source of truth

# AGA TTS Innovation Challenge Award Winner

## *Audit Acceleration and Control Monitoring Solution Demo*



*Chris Conlan*  
*Senior Value Engineer, Celonis*





# PROCESS INTELLIGENCE DAY PUBLIC SECTOR



**Join us on June 24!**

Convene | Arlington, VA

[Reserve your seat](#)

Ready to maximize mission performance?

Connect with agency leaders for a day of networking and discussion on innovative approaches to modernizing Government and Defense operations through Process Intelligence and AI.

# Panel Discussion



Sairah Ijaz  
Managing Director, Celonis  
*Moderator*



Glenn Flowers  
Assistant Commissioner  
*Bureau of Fiscal Service*  
*U.S. Department of the Treasury*



Christine Turner  
Acting CFO  
*Food Safety and Inspection Service*  
*U.S. Department of Agriculture*

# Q&A

**Thank You for Participating!**