Celonis Workshop

Turning Data into Value -
Intelligent Process Analytics and Actions

Anh Ngo
Academic Alliance Manager

Potsdam University
24.02.2022

Video conferencing Netiquette

Please **turn on** your cameras for a more personal atmosphere! ☺

Please keep your your audio **muted** as general setting!

If you have questions you can **raise your hand** and unmute when the moderator asks you to. You can also pose questions in the **chat** anytime.

You will receive **all slides** afterwards.

Ngoc Anh Ngo

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Chapter 1
About Celonis

Chapter 2
The Process Challenge

Chapter 3
Technology Overview

Chapter 4
Live Demo & Application

Chapter 5
Questions & Answers

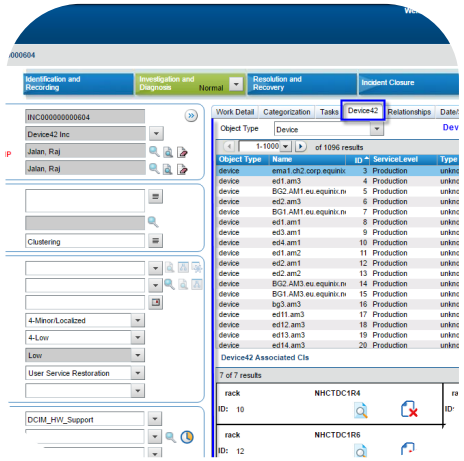
Start right away!

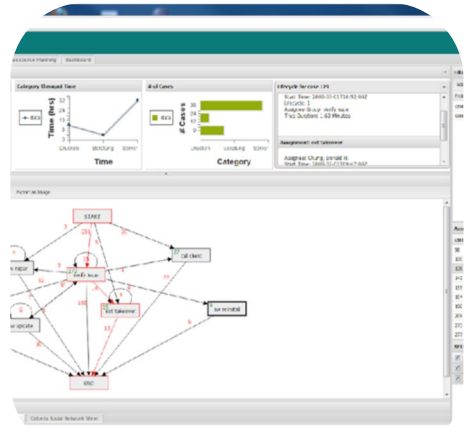
Access Celonis Academic EMS

1. Register for free with your academic e-mail address.
2. Open the invitation e-mail and complete the registration as
   - **Student** or
   - **Professor** or
   - **Researcher**
3. Access your academic account and start exploring!

Chapter 1.
About Celonis

How it started...





The Customer

IT Help Desk of Bayerischer Rundfunk

The Problem

Slow and inefficient processes

The Team

Three student consultants from Academy Consult e.V.

The Solution

The first enterprise software for Process Mining

Hi, we're Celonis.

We turn processes into extraordinary experiences for everyone.

We're pioneers in **Process Mining** and have created a new Ai-driven, enterprise-grade, and cloud-based software category: **The Execution Management System.**

We are a software decacorn with a company valuation of

11B+ US$

100+%
growth YoY

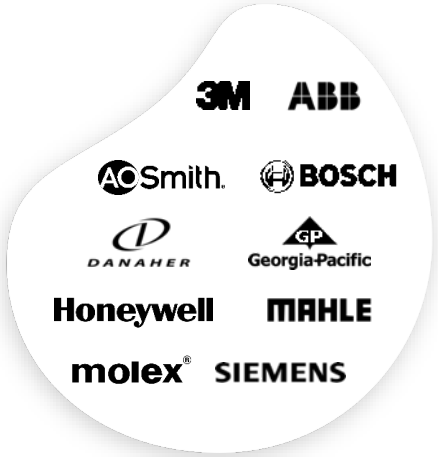
2,000+
enterprise deployments

$150M+
in ARR

2,000+
employees

Cross-Industry Customer Base

Manufacturing



High Tech

Telco

Oil, Gas, & Energy

Consumer, Retail, Wholesale

Pharma & Chemicals

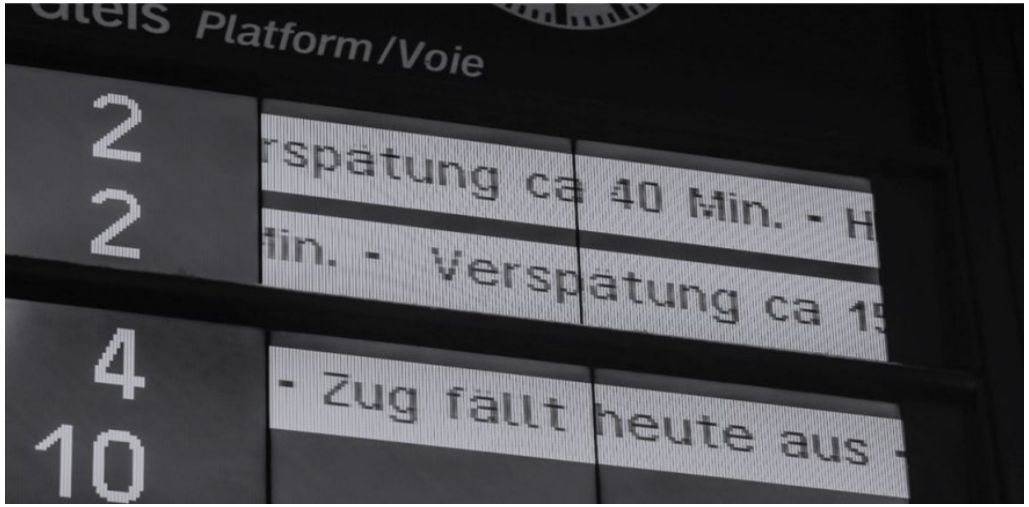
Financial Services & Insurance

Aerospace & Defense

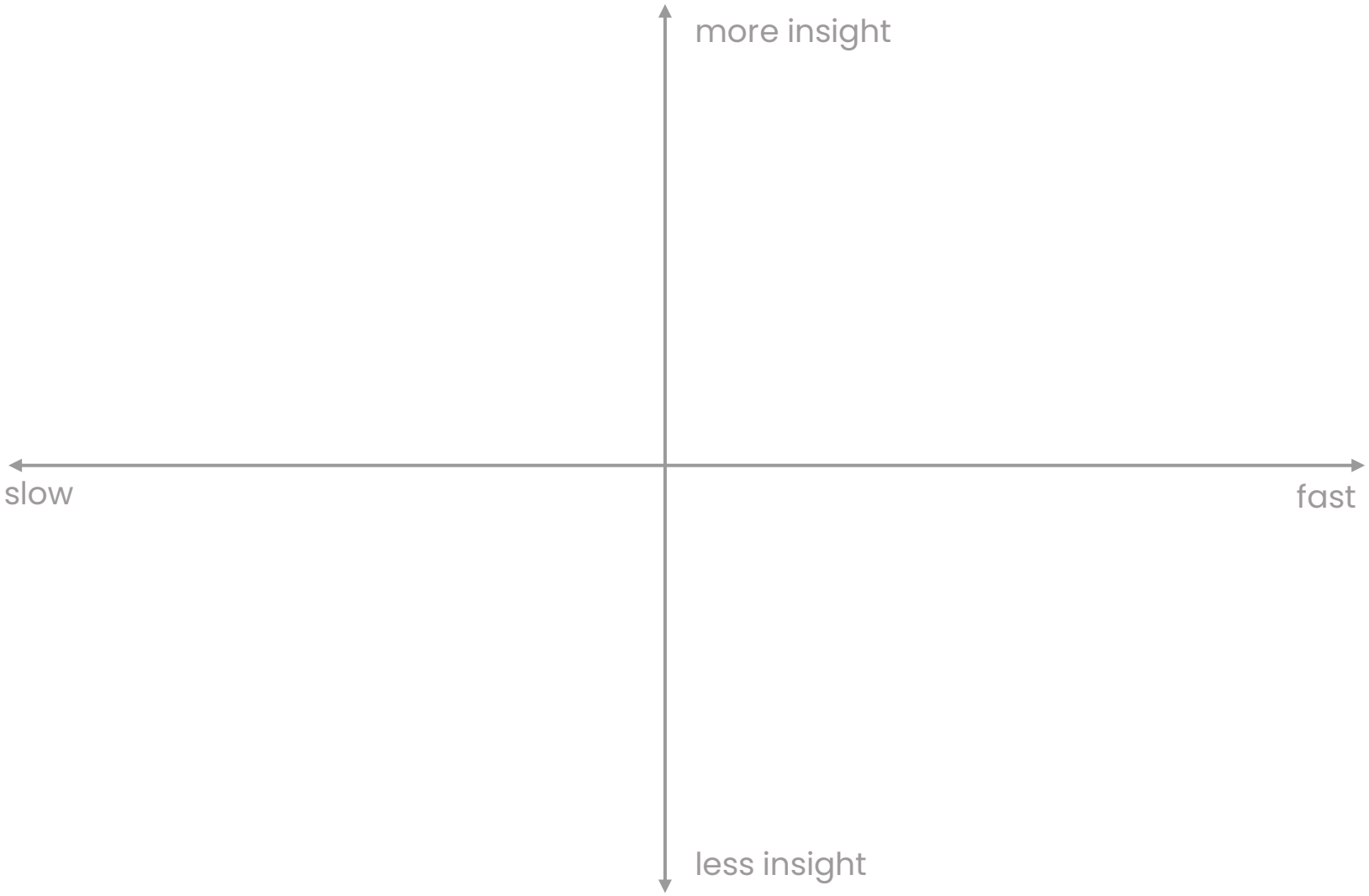
Chapter 2.
The Process Challenge

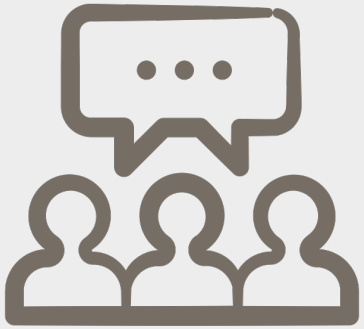
What was your worst customer experience in the last month?

Processes are the engine behind every customer experience.



HOW DO YOU GET INSIGHTS INTO BUSINESS PROCESSES?





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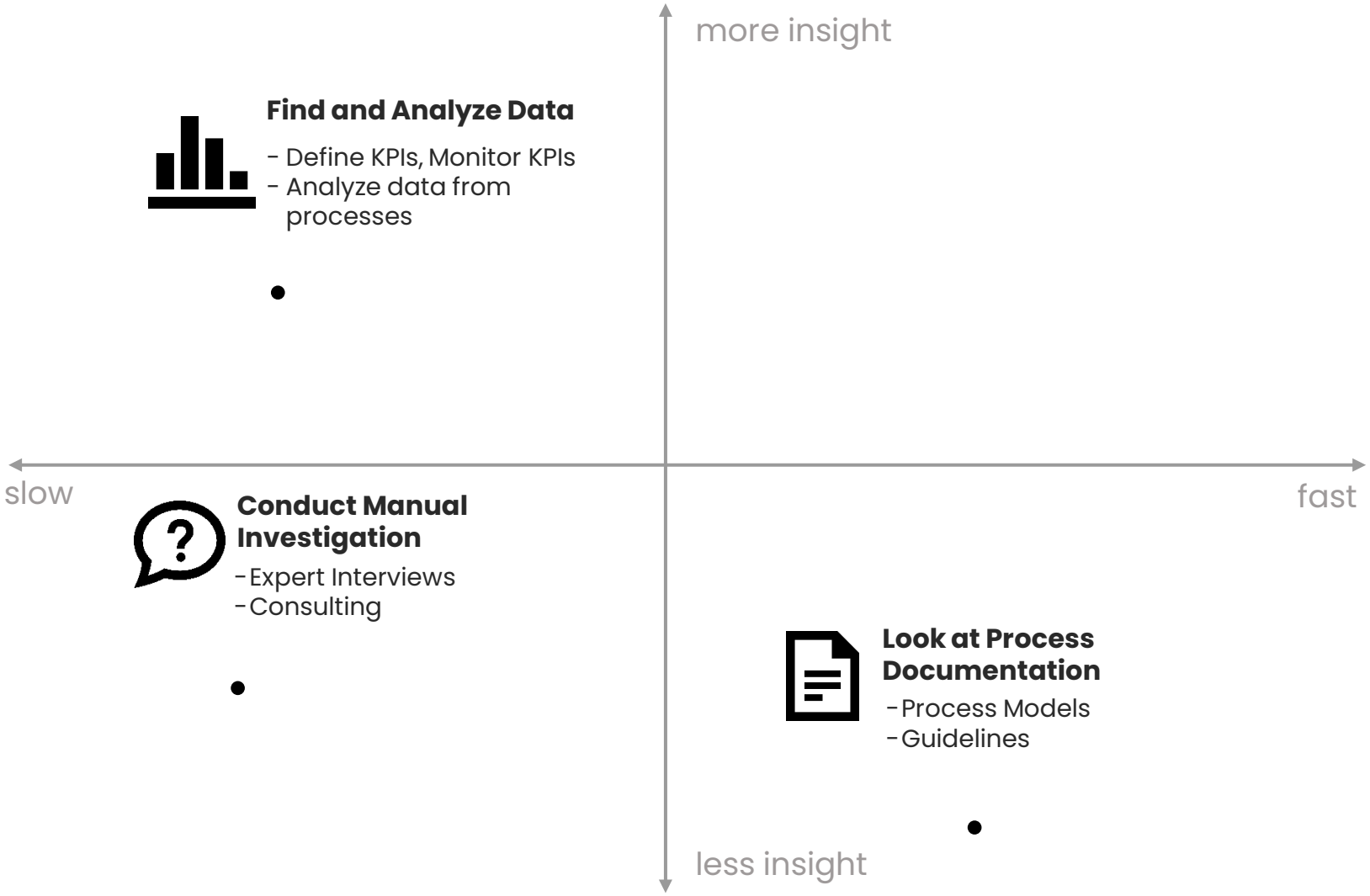

The methods currently available are not efficient or powerful enough.

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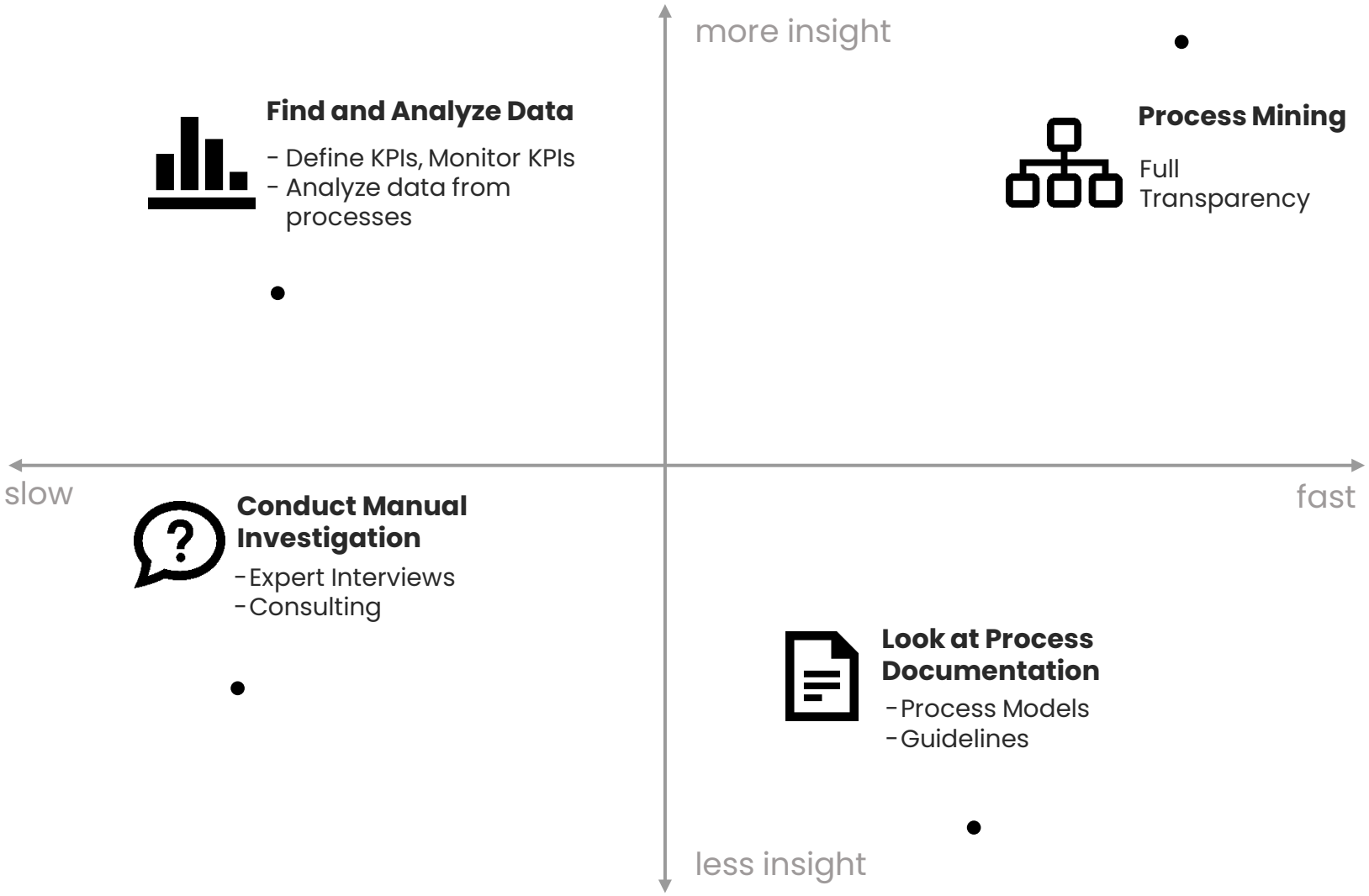
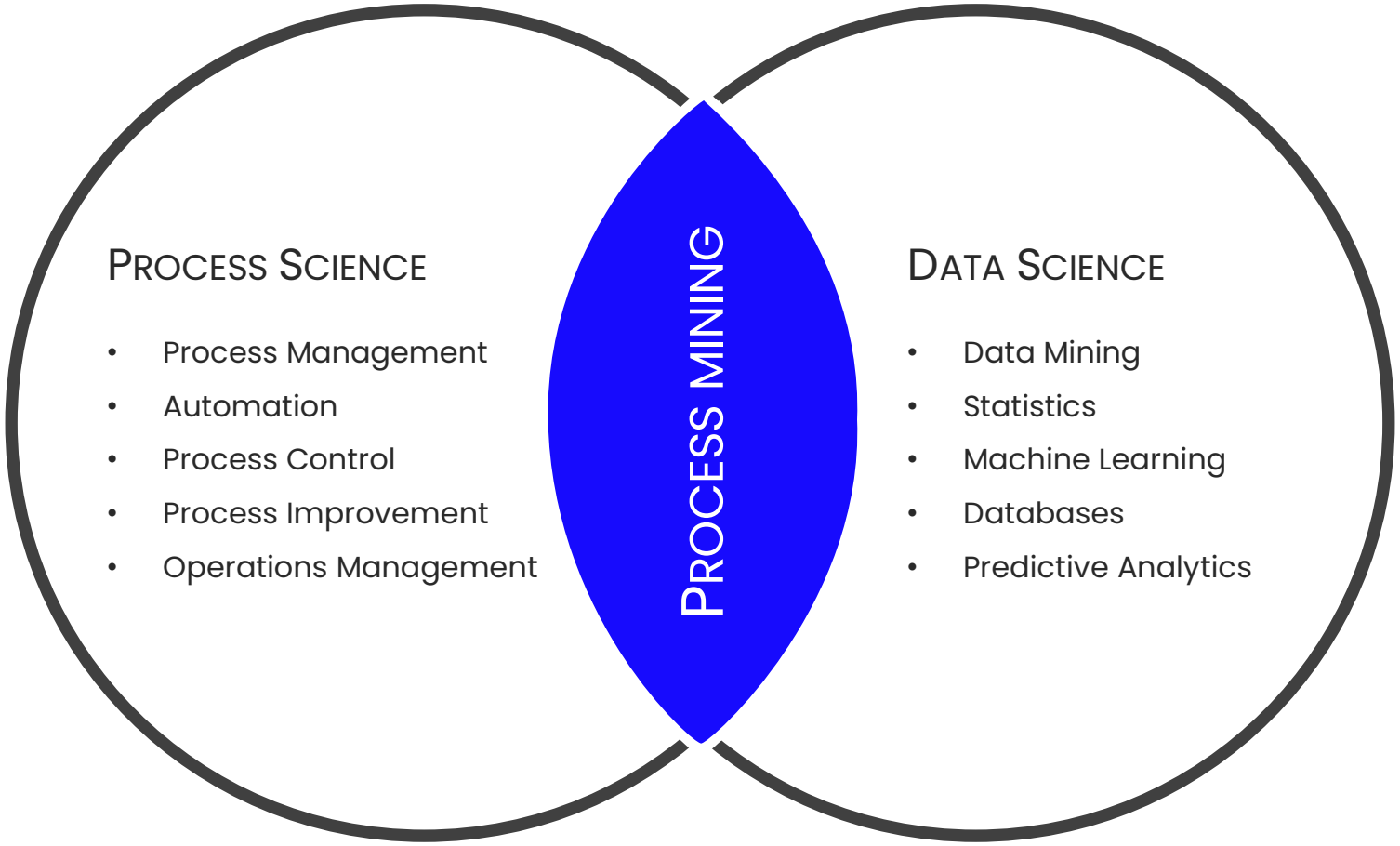


Time for a change: Switch on the lights!

Chapter 3.
Technology Overview

What is Process Mining?



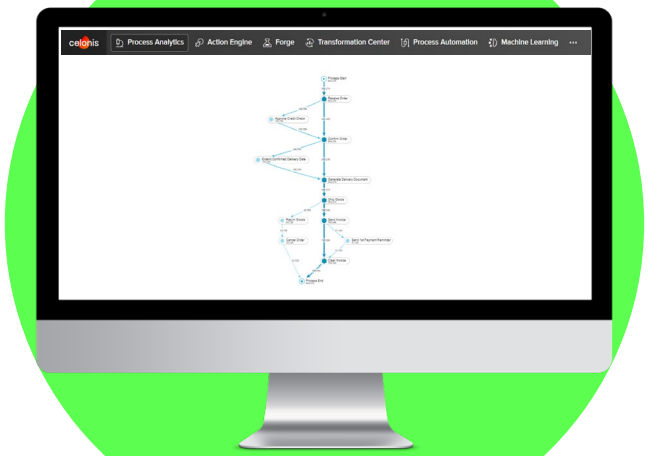
Source: Based on van der Aalst (2016)

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.

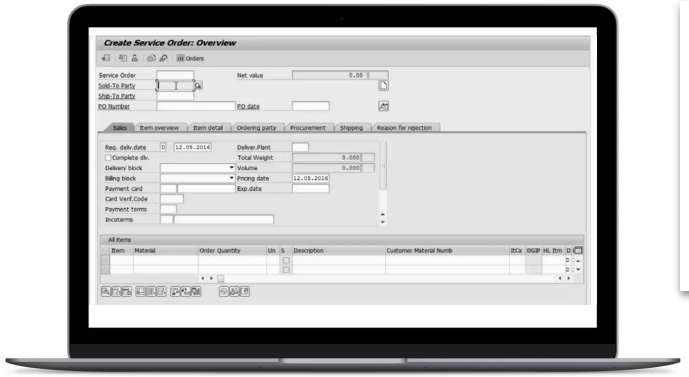
Process Mining

The Real World

Digital Twin

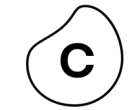


Systems of Record



Event Log

ID	Activity	Time
1234	Create PO	04.01.2019
1234	Send PO	05.01.2019
5678	Create PO	07.02.2019
0987	Change Price	08.02.2019
5678	Receive Goods	17.03.2019



Chapter 4.
Demo & Exercises

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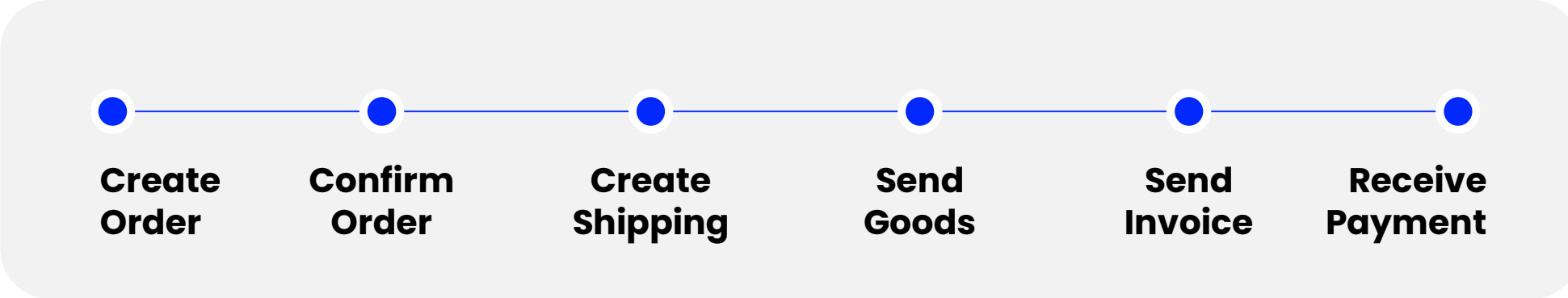
Demo Process: Order-to-Cash



Business Objectives	**Revenue Increase**	**Working Capital Optimization**	**Labor Productivity**	**Customer Satisfaction**	**Risk Mitigation**
Key Metrics	Conversion rate Rejection rate Return rate	Days Payable Outstanding	Cost per SO First-Time Right	OTIF Rate	# SoD Violations % Expired Contracts % Invoices with Errors

1. ANALYSIS OF PROCESS FLOW IN THE VARIANT EXPLORER

C

Please open the O2C process and navigate to the **"Process"** sheet. In this step, you will learn how to interpret the process graph and how to identify inefficiencies and bottlenecks. Please note that one or multiple answers might be correct.

YOUR TASKS

1. How many sales order (SO) items follow the second process variant?
    a. 65,375
    b. 156,792
    c. 168,038
    d. 418,778

2. What's the overall average throughput time (in days) for the happy path from process start to end?
    a. 16
    b. 11,8
    c. 19
    d. 36,6

3. Display the first 17 variants in the variant explorer. How does the 17th most common variant look like (use process animation)?
    a. The route is changed.
    b. The confirmed delivery date is changed.
    c. The credit check is approved.
    d. The order is cancelled and afterwards, a delivery document is created.

1. ANALYSIS OF PROCESS FLOW IN THE VARIANT EXPLORER – SOLUTIONS

C

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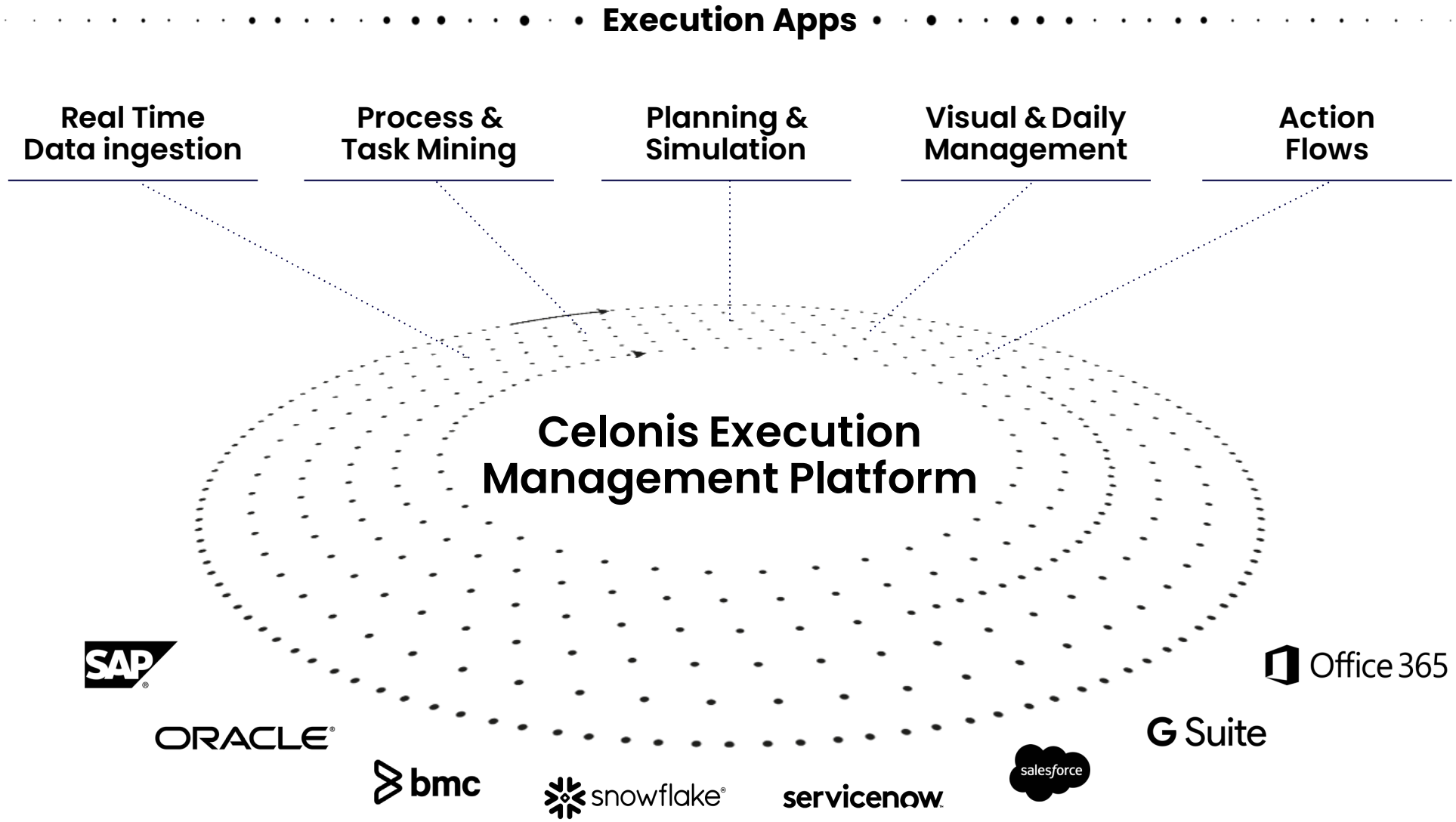
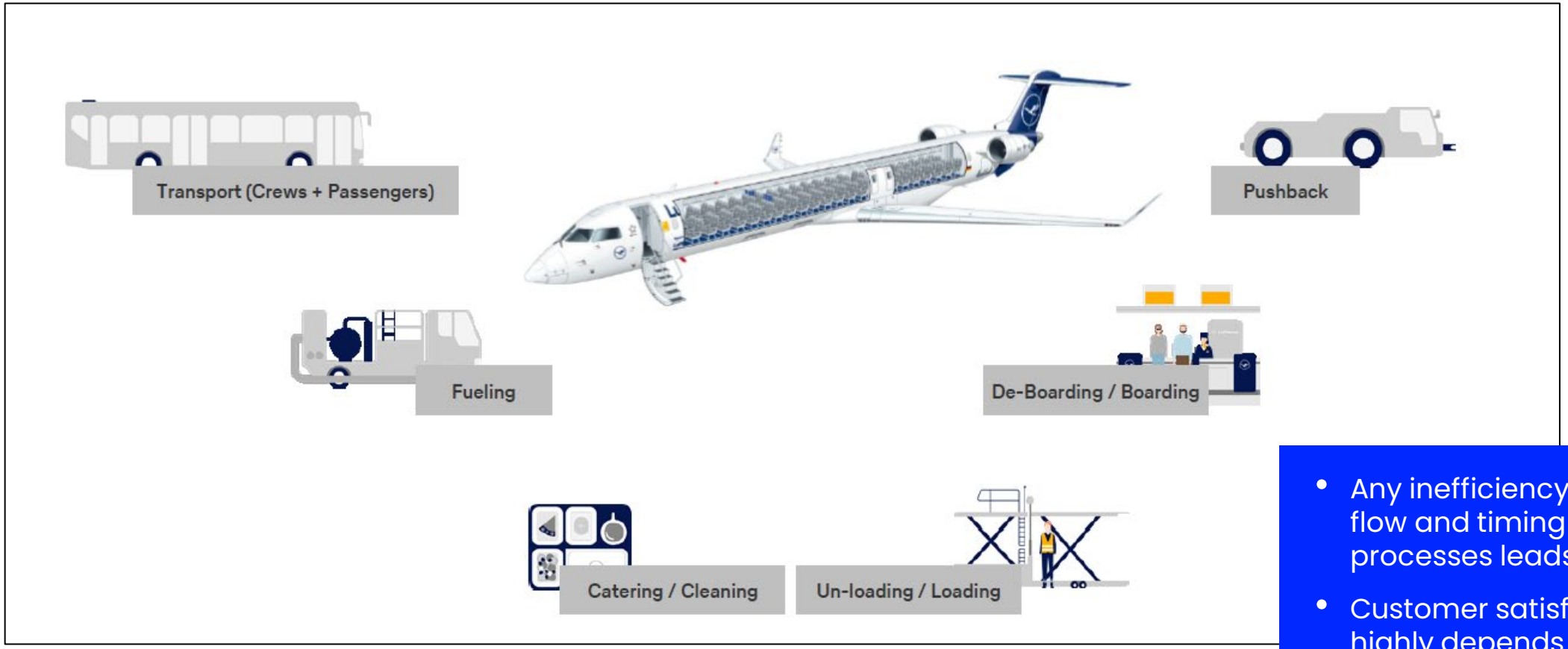


Execution Management

Lufthansa CityLine

- Full subsidiary of Lufthansa AG
- Flights to European capitals and regional cities
- HUBs at Munich and Frankfurt Airport
- 8 million passengers per year

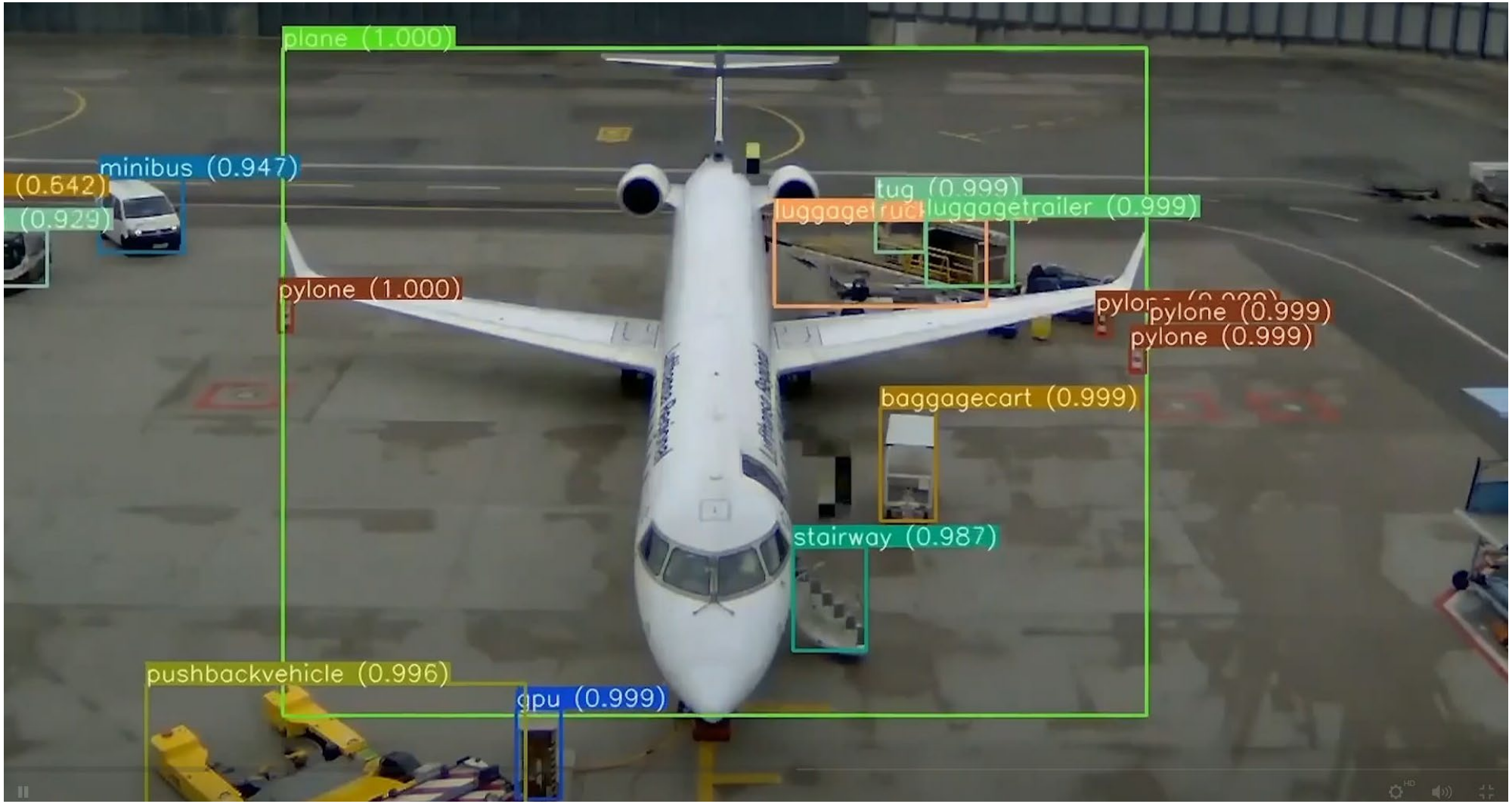
Ground Operations @ Lufthansa CityLine



- Any inefficiency in the flow and timing of these processes leads to delays
- Customer satisfaction highly depends on punctuality

https://www.celonis.com/celosphere-live/lufthansa-cityline-soaring-customer-satisfaction-with-on-time-departures/

AI-Activity Tracking @ Lufthansa CityLine



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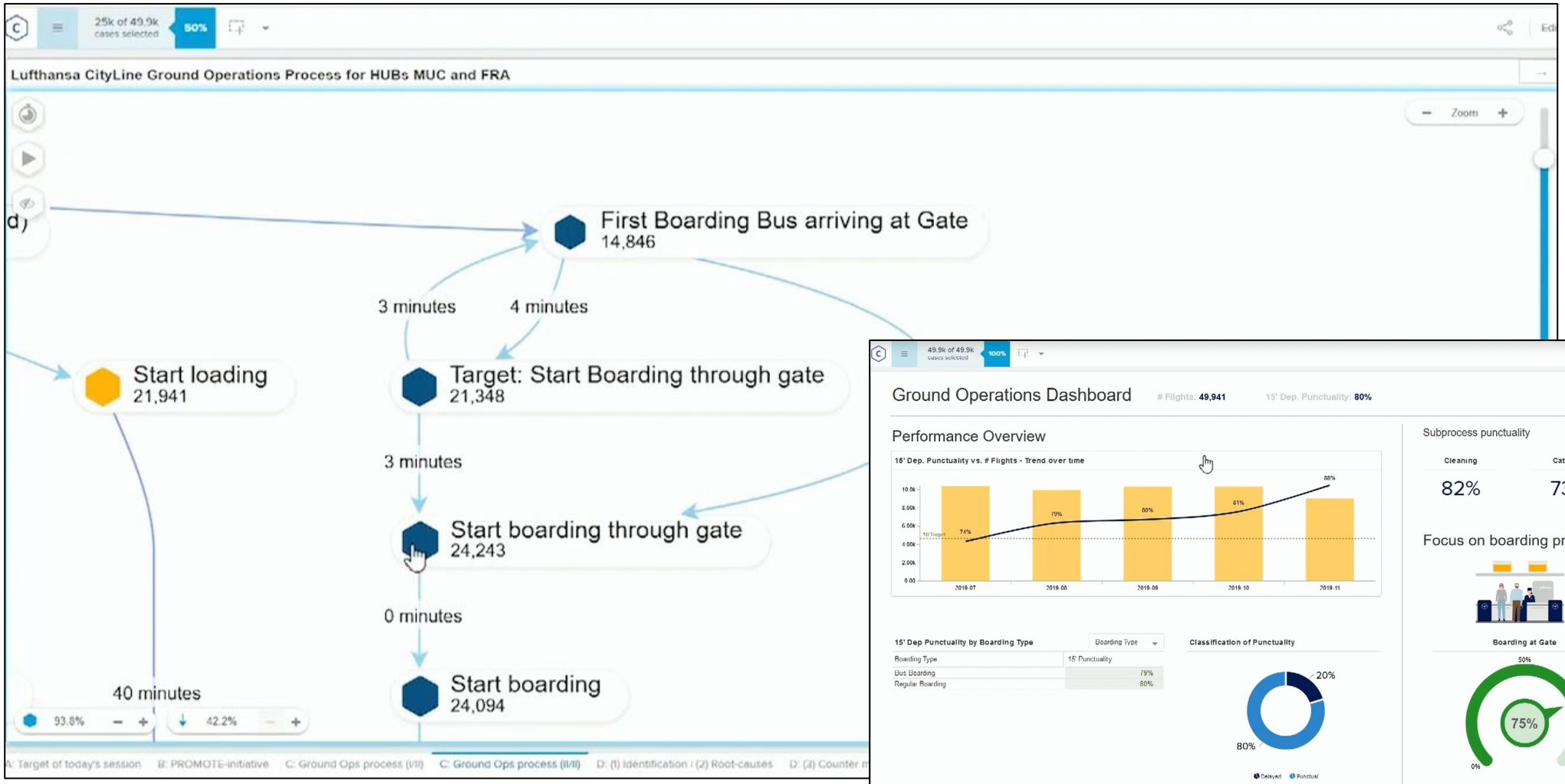
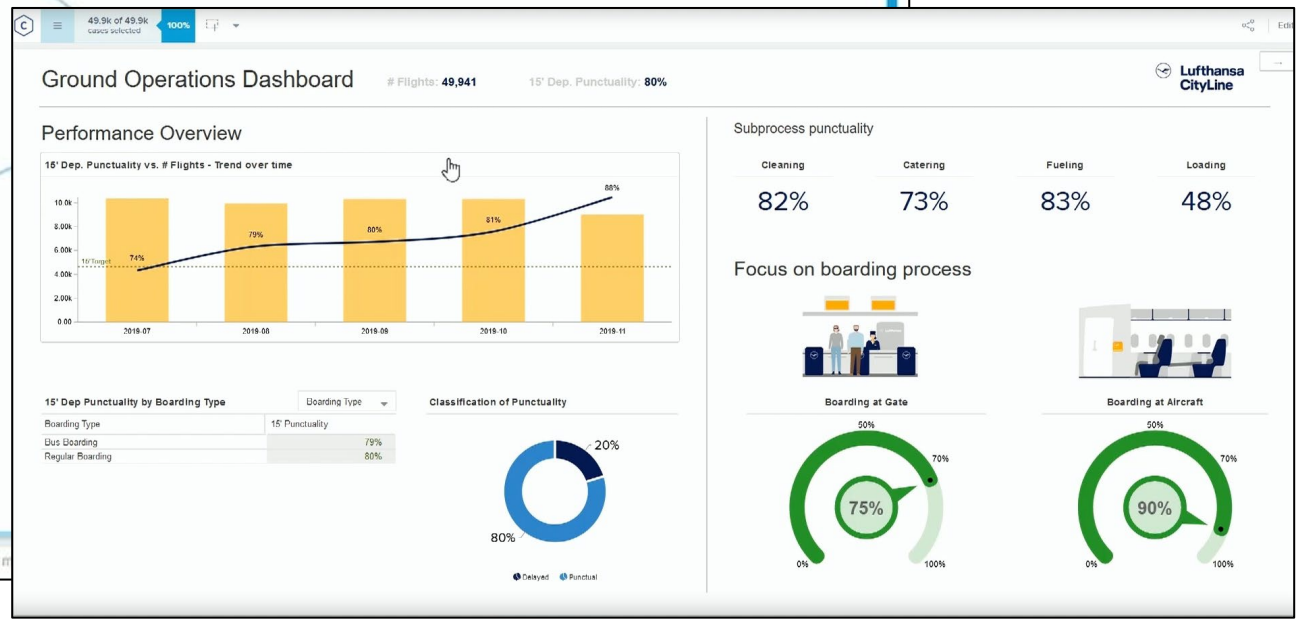
Process Mining @ Lufthansa CityLine





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Process Mining @ Lufthansa CityLine

PROMOTE = PROcess Mining for OperaTional Excellence

- Initiative focusing on better punctuality and reliability
- Celonis is used to proactively monitor and control all grounding and maintenance processes

Results

- ✓ Less delays by eliminating first-flight process issues
- ✓ Improved ranking in OAG's punctuality report and higher customer satisfaction rating
- ✓ Improved maintenance and tool transfers to minimize long aircraft-on-ground times for faster takeoffs

17%

more flights depart on time

(A flight is considered punctual if it leaves within 3 minutes of its scheduled departure time)

Watch the full story here

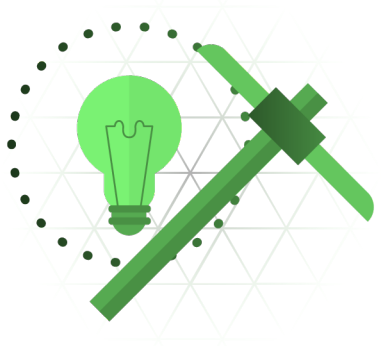
Get certified!

Process Mining Fundamentals - Certification Course

"I want to understand the theoretical fundamentals of Process Mining and how it is applied in industry."

What you will learn:

- Theoretical foundations of Process Mining
- Translate data into actionable insights
- Create and refinement of target-oriented analyses
- Applied Process Mining examples from various industries
- Realize and sustain business value identified with Celonis



Prerequisites:

- Business expertise
- No technical knowledge required

Skills Profile:

- Business
- Analytical
- SQL

Time:

- 12 hours

Sign up here: https://www.celonis.com/training

(as Academic user)

celonis

Ques

Ngoc Anh Ngo

Academic Allian

n.ngo@celonis.