

Academic Training



Process Mining
KICKSTARTER

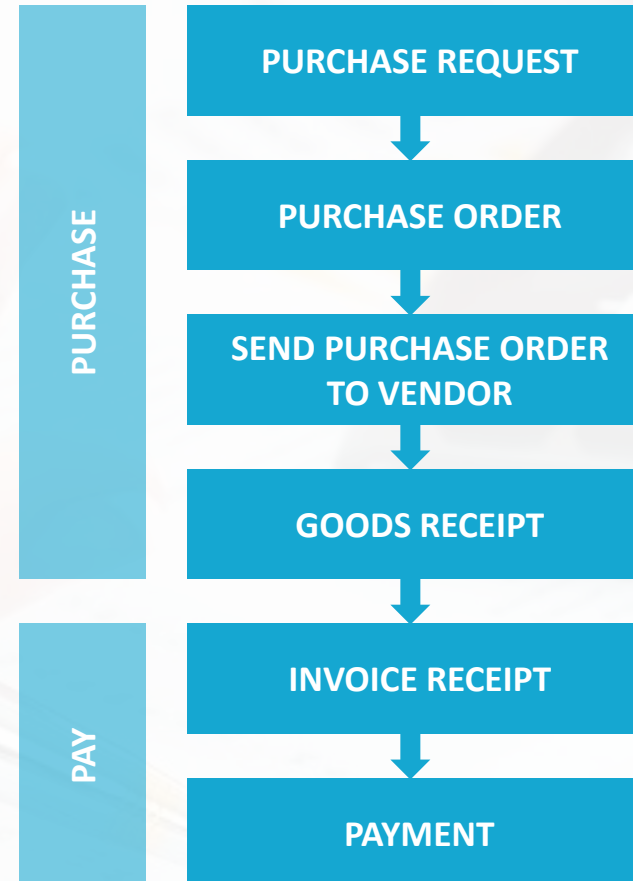
OUTLINE AND LEARNING PATH

- **Audience**
Users who want to explore the basics of Process Mining
- **Requirements**
Access to Celonis Academic Cloud and the Purchase-to-Pay demo data set
- **Duration**
45-60 minutes
- **Learning path**
 - ✓ Process discovery
 - ✓ Work with pre-configured analyses
 - ✓ Detect process inefficiencies
 - ✓ Set filters and drill down the process data
- **Handbook**
A detailed handbook for Celonis is available for download ([Click here](#))

The demo data set

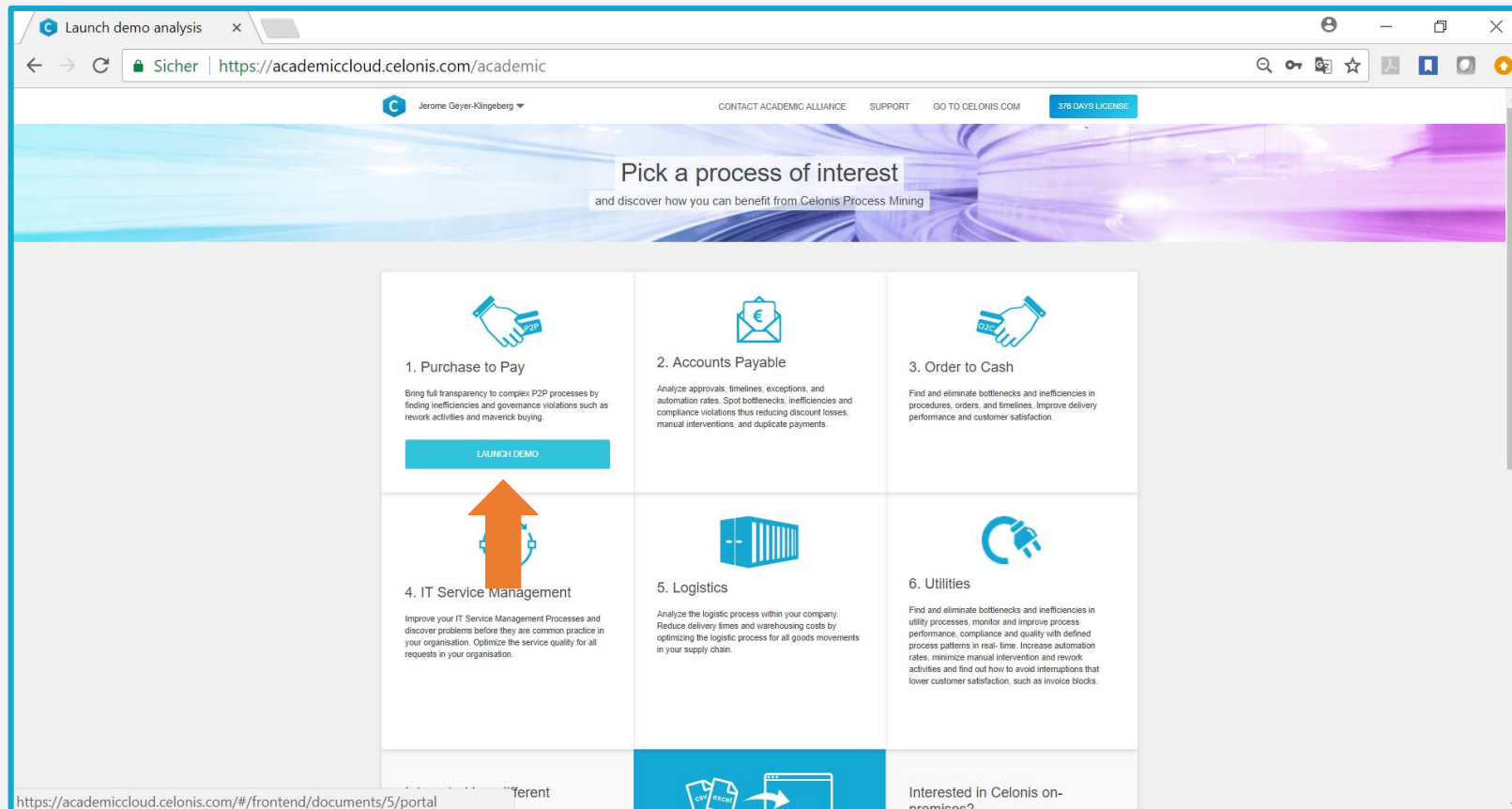
Purchase-to-Pay (P2P)

- **Relevance**
Core business process
- **Volume**
High number of transactions
- **Complexity**
Requests, approvals, timelines
- **Various departments involved**
Procurement, Accounting, Warehousing,...



Academic Cloud

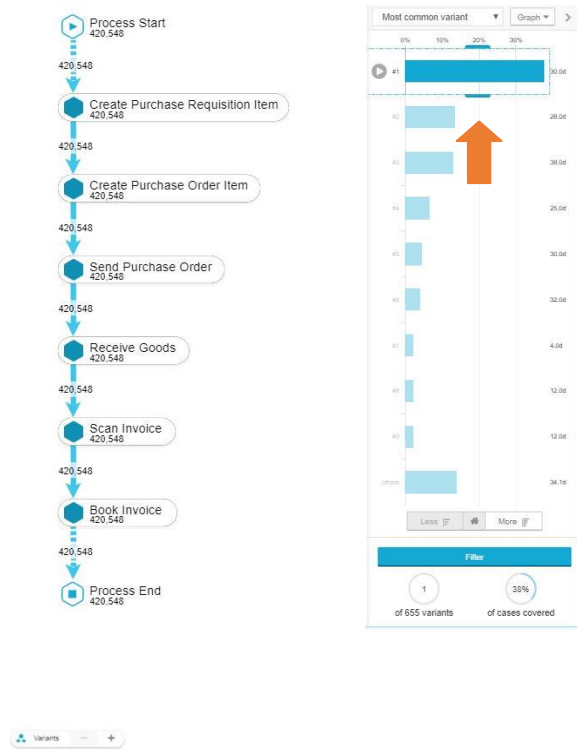
- ✓ The Academic Cloud covers several pre-loaded data sets for different processes
- ✓ You can simply start them by clicking on “Launch demo”
- ✓ The pre-loaded data sets consist of a data model and pre-configured analyses
- ✓ Click on “Launch demo” for the Purchase-to-Pay process



Analyze the process flow

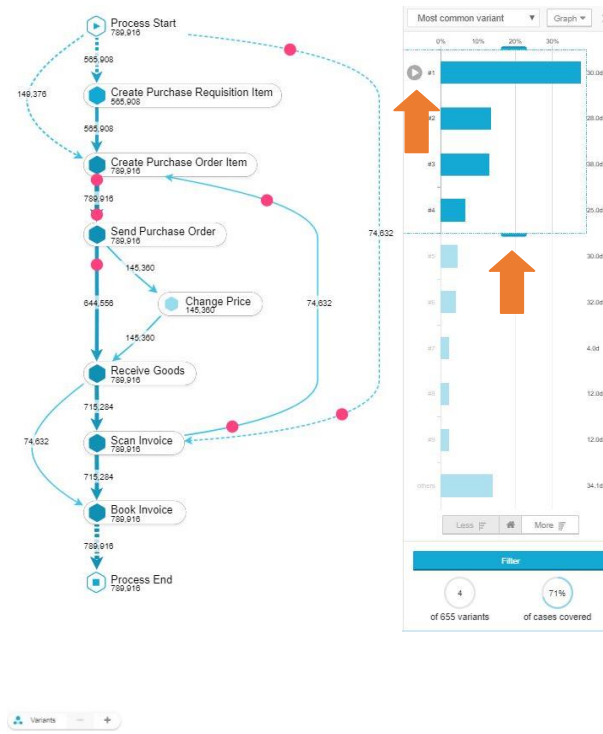
1 See the 'happy path'

The level of detail of the process can be **easily adjusted**. The number of variants displayed can be reduced in order to show only the **core process**.



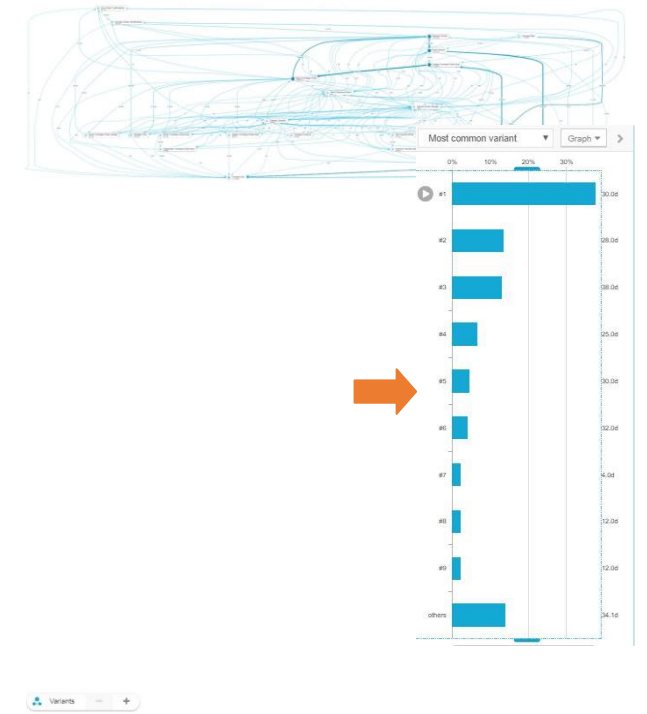
2 Explore deviations

Increase the number of variants, i.e. the level of detail. The process will reveal **less common paths and activities**. Spot **deviations** and **inefficient loops**. Use process animation (play button) to see the process flow of each process path.



3 Get the big picture

Going full overview on the process by increasing to **100% data coverage**.



Please open the P2P process and navigate to the “**Variant Explorer**” 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

Please answer the following questions using the functionality of the variant explorer.

1. What does the initial path (first variant) display?
 - a. The initial path shows the complete ‘as is’ process
 - b. The initial path shows the target (‘to be’) process
 - c. The initial path shows the most frequent ‘as is’ process flow across all process patterns
2. How many activities does the happy path (most common variant) consist of?
 - a. 6
 - b. 7
 - c. 8
 - d. 9
3. How many different process variants exist?
 - a. 1
 - b. 38
 - c. 655

4. How many purchase order (PO) items follow the second process variant?
 - a. 37,270
 - b. 38,089
 - c. 107,688
 - d. 149,376

5. What's the overall average throughput time (in days) for the happy path from process start to end?
 - a. 28
 - b. 30
 - c. 38
 - d. 655

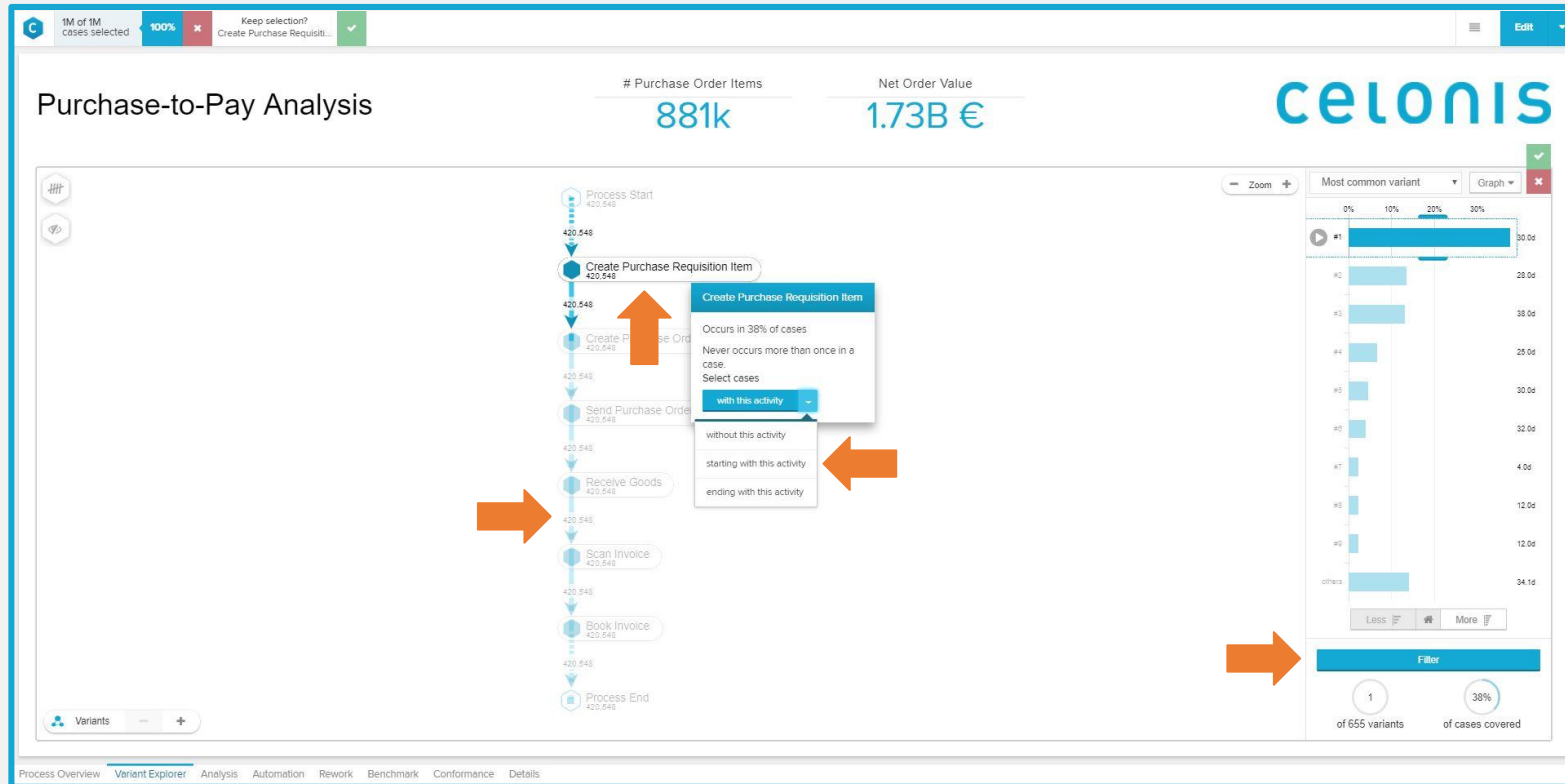
6. Display the first 17 variants in the variant explorer.
How does the 17th most common variant look like (use process animation)?
 - a. The quantity is changed after the purchase requisition item is created
 - b. The purchase order item is blocked after the order is print and sent
 - c. Payment blocks are set and removed
 - d. The currency is changed after the order is print and sent

Drill down the process data

Filters

✓ There are three types of filters in the variant explorer:

1. **Activity filter:**
Click on an activity node
2. **Connection filter:**
Click on a connection
3. **Variant filter:**
Click on the “Filter” button in the lower right part of the screen



Now you will learn to explore the power of filtering and how to get deeper insights into business processes. Please answer the following questions using filters within the “**Variant Explorer**” sheet.

YOUR TASKS

7. How many different variants exist for PO items with price change?
 - a. 1
 - b. 3
 - c. 68
 - d. 655

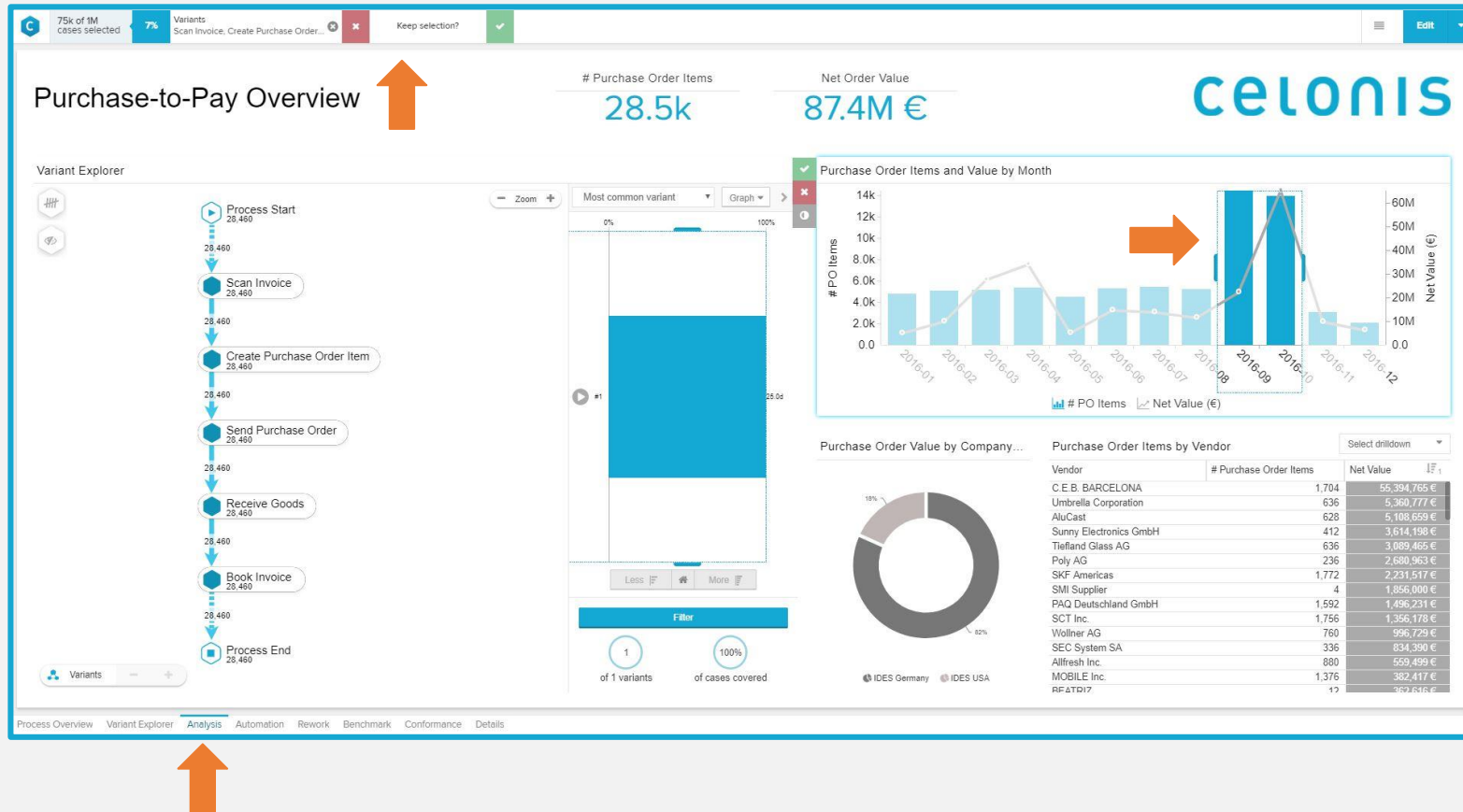
8. Let's look at PO items without purchase requisitions. How does the second most common variant look like for those?
 - a. The process starts with the scan of the invoice
 - b. The purchase order items are deleted
 - c. The purchase order items are refused
 - d. The price is changed after purchase order is sent out to vendor

9. Filter on purchase order items that are blocked (show the 10 most common variants), yet not reactivated. How does the main variant look like?
 - a. After blocking the purchase order item, the quantity is changed
 - b. The process ends with the purchase order items being blocked
 - c. After blocking the purchase order item, the goods receipt is cancelled

Work with an analysis

Drill down the process data

- ✓ Switch from the variant explorer to the sheet "Analysis" to see additional analysis components
- ✓ By clicking on the various analysis components, you can set various filters to drill down the process data and find the root causes of process inefficiencies
- ✓ Accept a filter by clicking on the green box with the checkmark



After learning the basic functions in Celonis, you continue with a more in-depth analysis of the process. For this task, go to the “**Analysis**” and the “**Details**” sheet.

YOUR TASKS

10. Look at purchase order items without purchase requisitions. Who is the dominant vendor for these positions in terms of net value?
 - a. IDES Consumer Products
 - b. C.E.B. Barcelona
 - c. Tiefland Glass AG

11. Have a look at Unisono AG (top 3 vendor in terms of number of PO items).
Observing the number of PO items and the net value over time, what attracts your attention?
 - a. There is an unusual peak in the net value in September 2016
 - b. The number of PO items is strongly decreasing over time with December 2016 being the month with the lowest net order value
 - c. There is a high accumulation of purchases towards the end of the year with a peak in net order value in November 2016

12. In the “Details” sheet, have a look at the PO item with the Purchasing Document Number 0000097360.
What is the material group of the goods being ordered?
 - a. Monitors
 - b. SMI Demo Scenarios
 - c. Bulbs

Congratulations!

**You successfully finished the PROCESS MINING KICKSTARTER training!
Continue with the next training and become a Business Process Analyst.**

... and for any questions, just contact the Academic Alliance Team
(academic.alliance@celonis.com)