LTAT.05.025

Business Process Mining

Practice 3: Introduction to Process Mining

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Apromore: https://apromore.cloud.ut.ee/

• Same credentials as for the study information system (ÕIS)

You will need to …
• ... upload an event log –

• ... discover a process map – double-click on the event log

• ... use the dashboards – right-click -> Launch dashboard

You can also …
• ... organize event logs (and models) into folders – File -> Create folder
• ... share event logs, models, and folders to others – right-click -> Share
  • Sharing is based on university usernames
Part 1: Import the Call Center event log in a way that each “interaction” is one case

1. How many interactions are there in this event log?
2. What is the average duration of an interaction (i.e., the cycle time)?
3. Describe how a typical interaction is handled, in plain English, as if you were explaining how an interaction is handled to a colleague. Note: there might be multiple types of interactions, and it is best to describe them separately (default abstraction settings and no filters).
4. In the Process Discoverer, move the Arcs slider to the right until 30%. An arc appears from “Inbound call” to the end event. What could that arc on the process map mean?
Analysis of Customer Interactions in a Customer Care Center

5. An interaction is said to be “in progress” if it has started but is not yet finished. On which day did we have the largest number of interactions “in progress”? How many interactions were “in process” that day? (Hint: check the Overview tab in the dashboard, highest peak is sufficient)

6. Which interaction required the largest number of steps (activity instances) to be completed? What was the duration of that interaction? (Hint: Check the Overview tab in dashboard)

7. Which four resources are involved in the highest number of interactions? (Hint: Check the Resource tab in the dashboard, “Others” can be ignored)
Analysis of Customer Interactions in a Customer Care Center

8. How many interactions have taken 5 or more days to be completed? (Hint: Use a Performance filter)

9. What is the average case duration of those cases where there is an inbound email? What is the average case duration of those cases where there is NO inbound email? (Hint: Attribute filter)

10. What is the average case duration of those cases that involve a product of type “MacBook Pro”? (Hint: Attribute filter, Case attribute)
Analysis of Customer Journeys in a Customer Care Center

Part 2: Import the Call Center log again, but this time, do it in such a way that each customer is one case

1. How many customers are there in this event log?

2. Which customer has generated the largest number of activity instances? How many activity instances has this customer generated? (Hint: Dashboard, tab “Overview”)

3. Which resource has worked with the largest number of customers? (Hint: Dashboard, tab “Resources”)

4. How many customers have generated more than 10 inbound calls? (Hint: use the Rework filter)