



UNIVERSITY OF TARTU

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Business Process Mining

Practice 5: Conformance Checking

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Exercise 1: Repair process

Consider again the log of the device repair process: <http://tinyurl.com/repairLogs>

1. Normally, every repair should be tested. Also, the user should always be informed after a repair. Are these rules always followed? If not, in how many cases these rules are violated?
2. According to the SLA of the repair service, 90% of cases should be fully resolved within 90 minutes. Is this SLA being fulfilled? If not, in how many cases it is not followed. Can you find any striking different between cases where the SLA is followed and cases where it's not followed?

Exercise 2: Purchasing process

Consider the log of the following purchasing example:

<https://fluxicon.com/academic/material/files/PurchasingExample.csv.zip>

1. Immediately after “Send Invoice”, the next activity should be “Release Supplier’s Invoice”. Are there cases where this rule is not fulfilled? How many?
2. Are there any cases where the invoice is released and authorized by the same resource (worker)? If so, who is doing this most often?

Exercise 3: Refund Process

Consider the following RefundProcess log, which captures records of an electronics manufacturer's refund process.

Note: only cases that have reached the "Order completed" event have finished.

Questions:

1. According to the SLA of the refund service, 90% of refund requests should be fulfilled within 3 weeks. Is this SLA being fulfilled?
2. How many customers have received a refund without the product being received by the electronics manufacturing company? This should not happen.
3. Has a customer ever received a double payment? This should not happen in this process.

Hint: look at activities "Payment issued", "Refund issued" and "Special refund issued".