INFO-H420
Management of Data Science and
Business Workflows

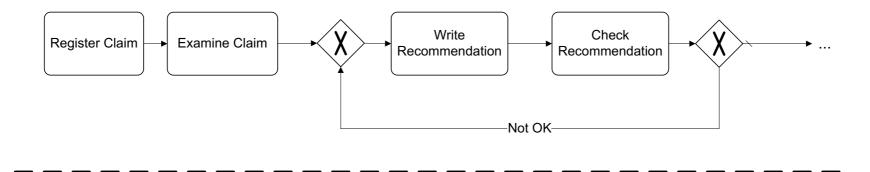
Practice Session – Solutions

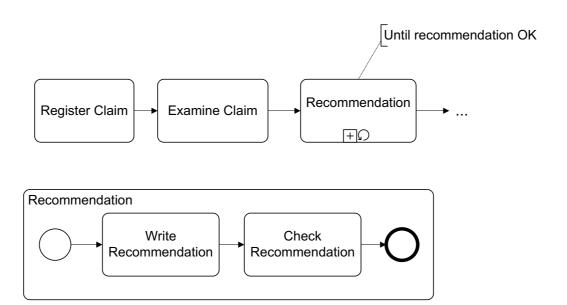
Advanced Process Modeling

Dimitris SACHARIDIS

After a claim is registered, it is examined by a claims officer. The claims officer writes a "settlement recommendation". This recommendation is checked by a senior claims officer who may mark the claim as "OK" or "Not OK". If the claim is marked as "Not OK", it is sent back to the claims officer and the examination is repeated. If the claim is marked as "OK", the claims officer notifies the settlement to the customer.

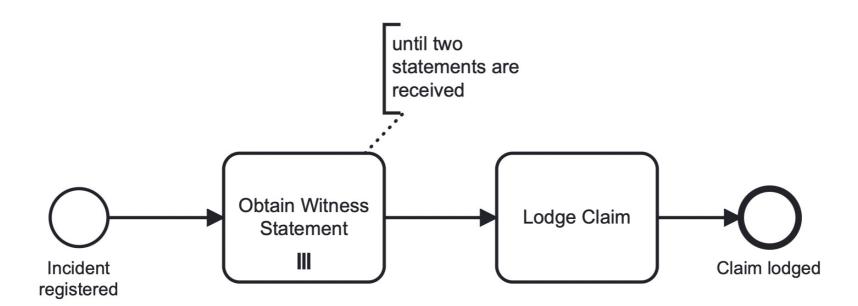
Solution: repetition/cycles



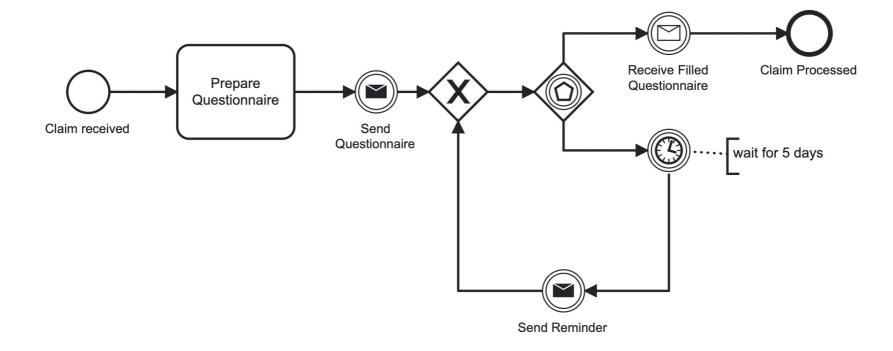


Motor insurance claim lodgement

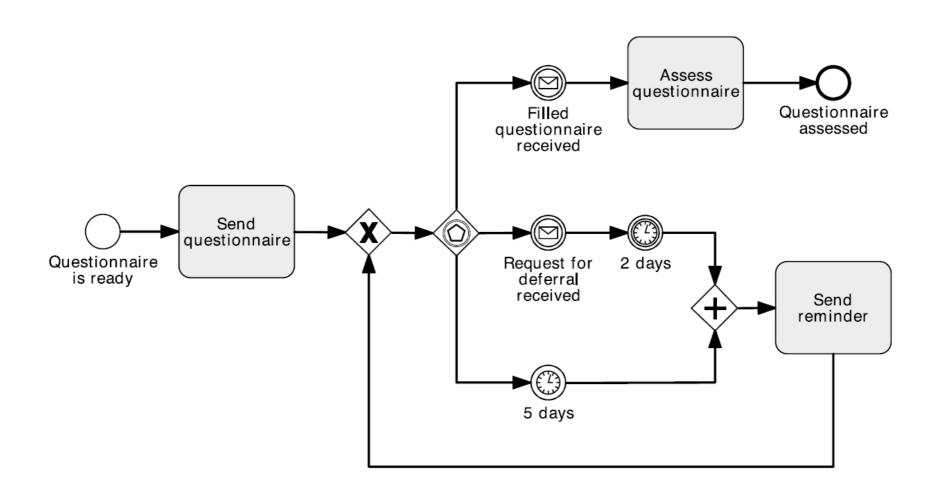
After a car accident, a statement is sought from the witnesses that were present, in order to lodge the insurance claim. As soon as the first two statements are received, the claim can be lodged to the insurance company without waiting for the other statements.



In the context of a claim handling process, it is sometimes necessary to send a questionnaire to the claimant to gather additional information. The claimant is expected to return the questionnaire within five days. If no response is received after five days, a reminder is sent to the claimant. If after another five days there is still no response, another reminder is sent and so on until the completed questionnaire is received.



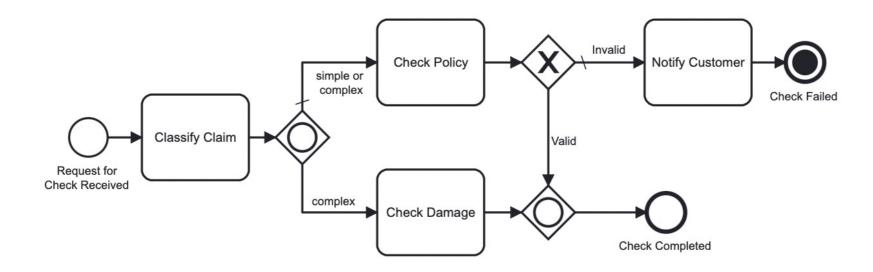
Exercise 4. What is wrong with this model?



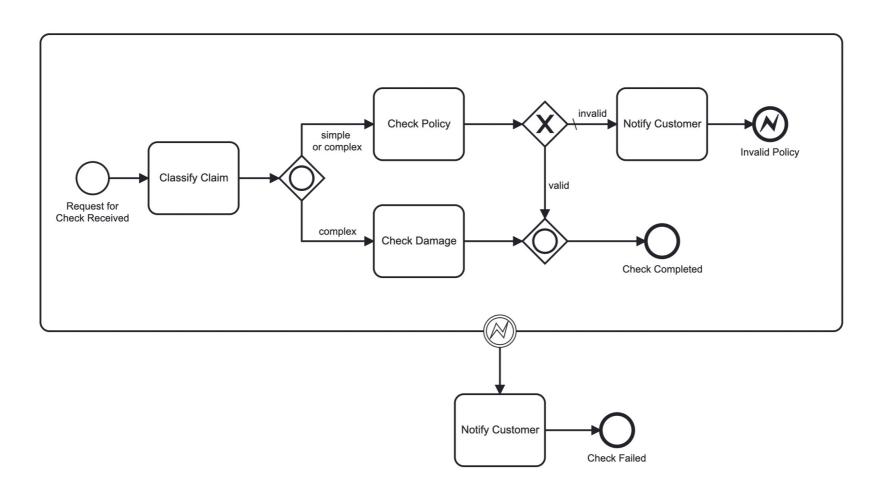
Deadlock in the AND-join

When a claim is received, it is registered. After registration, the claim is classified leading to two possible outcomes: simple or complex. If the claim is simple, the policy is checked. For complex claims, both the policy and the damage are checked independently.

A possible outcome of the policy check is that the insurance is invalid. In this case, any processing is cancelled and a letter is sent to the customer. In the case of a complex claim, this implies that the damage checking is cancelled if it has not yet been completed.



Alternate Solution



... continued

After the check(s), an assessment is performed which may lead to two possible outcomes: positive or negative. If the assessment is positive, the garage is phoned to authorize the repairs and the payment is scheduled (in this order). In any case (whether the outcome is positive or negative), a letter is sent to the customer and the process ends.

At any moment after the registration and before the end of the process, the customer may call to modify the details of the claim. If a modification occurs before the payment is scheduled, the claim is classified again (simple or complex) and the process is repeated. If a request to modify the claim is received after the payment is scheduled, the request is rejected.

