Modeling BPMN 2.0
Level 1

Anton Giertli, Lubomír Hruban

Seminar Overview

- BPMN Level 1 modeling and its palette
- Introduction to Signavio
- Process construction
- Remarks on modeling
- Homework
- Summary

Level 1 Modeling

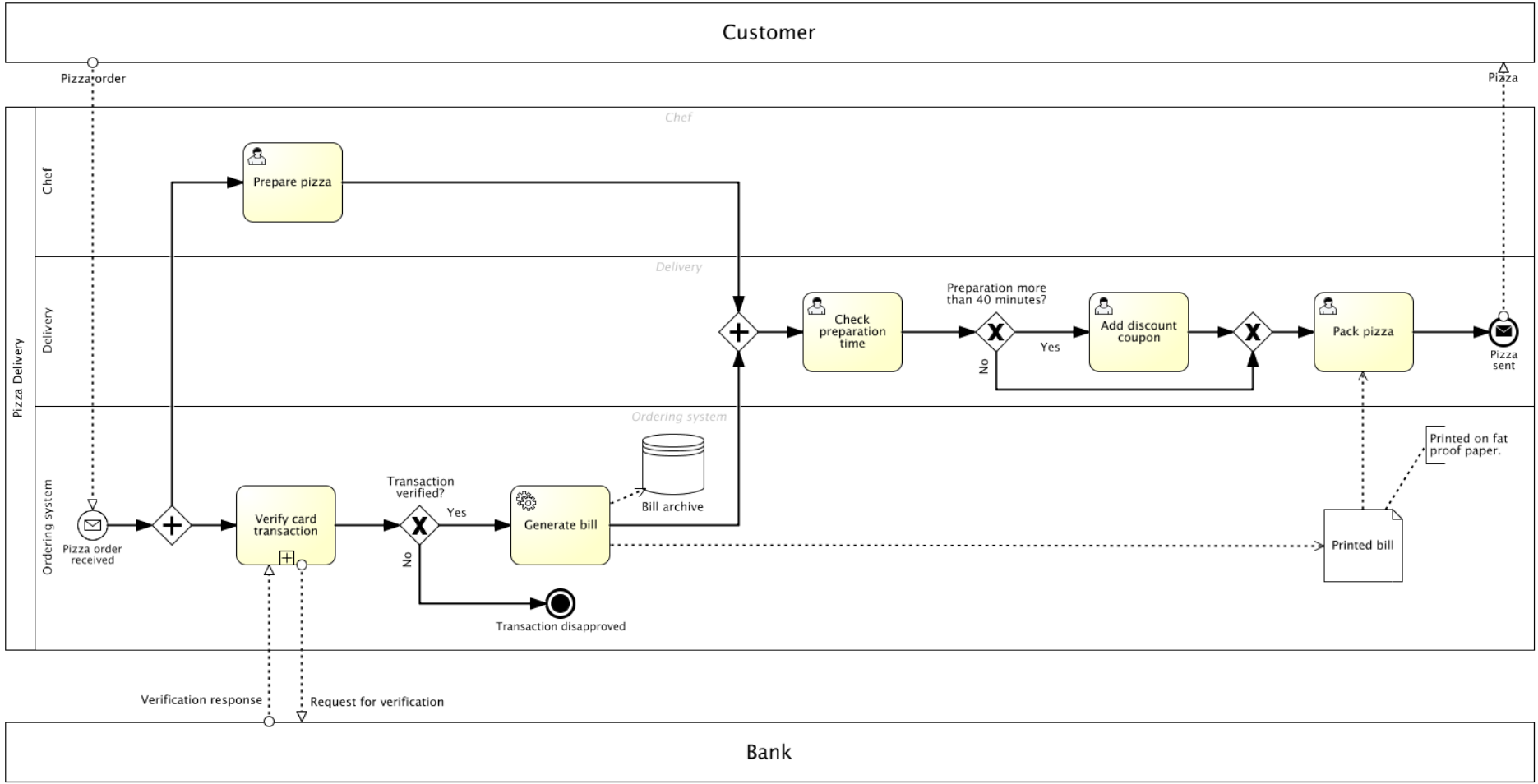
- Also known as descriptive modeling
- Business oriented
- Purpose is to document simply the process flow
- Usually we omit exception flows
- Can be extended to L2 or L3 (just refine L1)
- Using a basic working set of BPMN elements

BPMN L1 Palette

- Pool and Lane
- Task (User, Service)
- Subprocess (Collapsed, Expanded)
- Start event (None, Message, Timer)
- End event (None, Message, Terminate)
- Gateway (Parallel, Exclusive)
- Sequence flow
- Message flow
- Data object (Data store, Message)
- Text annotation
- Link event pair

Process Description

Hungry customer logs into website of Little Vincent's Pizza, chooses Pizza Venezia and places his order.
In the pizzeria, ordering system receives order, verifies card transaction through bank system (external service). If transaction is ok, then bill for 10 dollars is stored in our system and also printed on paper which is resistant to the fat. If transaction is not ok, then we stop all work related to this pizza.
Meanwhile in the kitchen chef prepares pizza.
When the pizza is ready, delivery boy puts pizza and bill into pizza box. If the whole preparation of pizza took more than 40 minutes, he adds discount coupon (otherwise customer wouldn't be satisfied with our service). Then the pizza is sent to the customer.

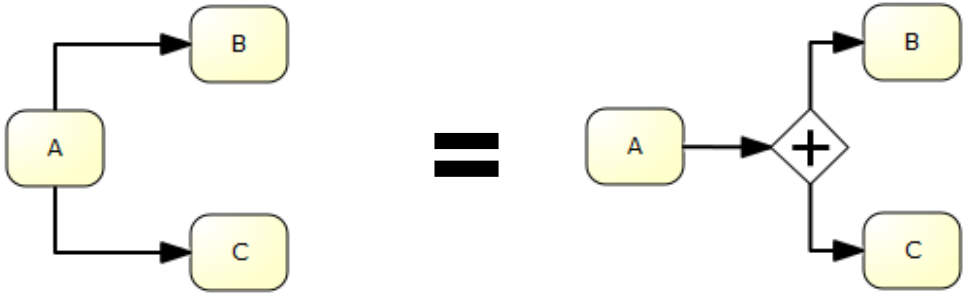

Customer
Pizza order
Pizza
Pizza Delivery
Chef
Delivery
Ordering system
Chef
Prepare pizza
Delivery
Check preparation time
Preparation more than 40 minutes?
Yes
No
Add discount coupon
Pack pizza
Pizza sent
Ordering system
Pizza order received
Verify card transaction
Transaction verified?
Yes
No
Generate bill
Bill archive
Transaction disapproved
Printed on fat proof paper.
Printed bill
Verification response
Request for verification
Bank

Naming Practices

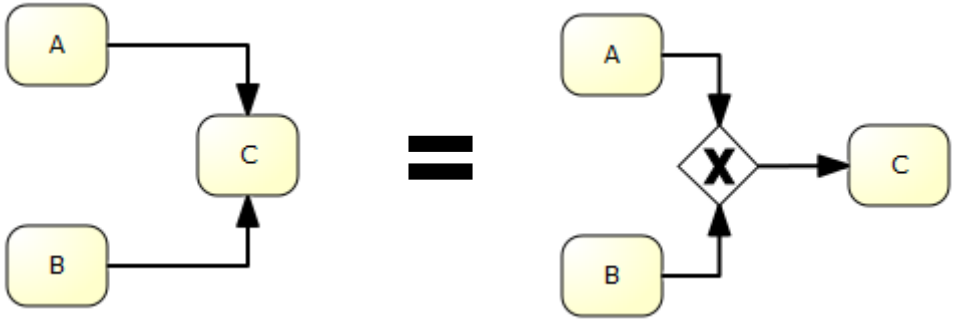
- Activities: Strong verb-Object
  - example: Acquire groceries, Prepare meal, Test software
- Events: Object-Passive verb
  - example: Hunger noticed, Invoice sent, Broken chair received
  - exception especially for timer and blank events
- Split XOR gateways as a question and its outgoing flows as answers to the question
  - example: Gateway: Is computer ok? Flows: Yes/No
- Pool can have the same name as the process

Clear usage of gateways

Parallel split:

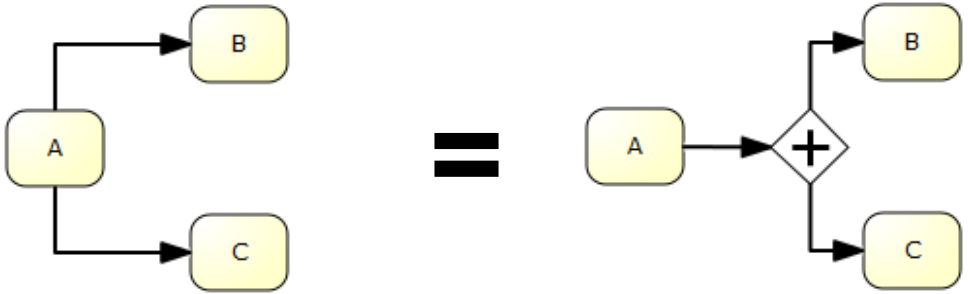


XOR join:



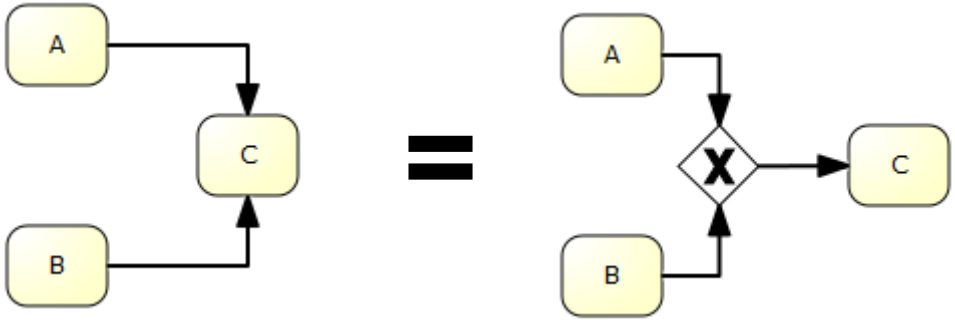
Clear usage of gateways

Parallel split:



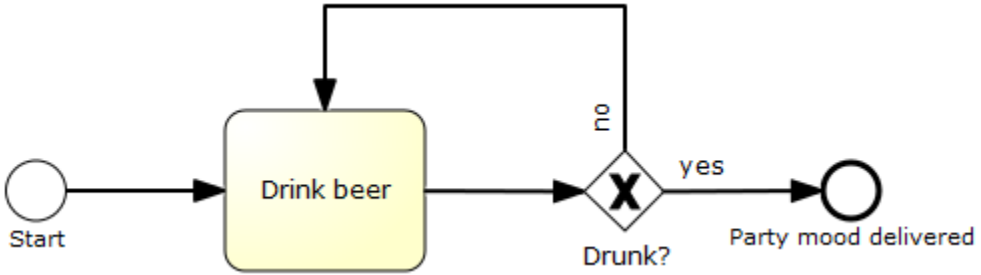
Better not omit gateways!

XOR join:

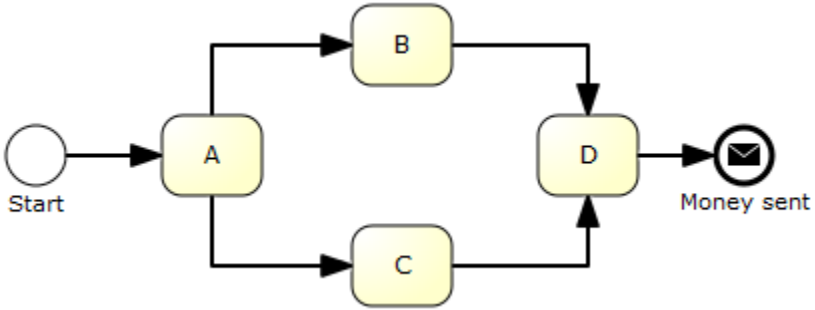


Clear usage of gateways II

Good reason to skip gateway is loopback.

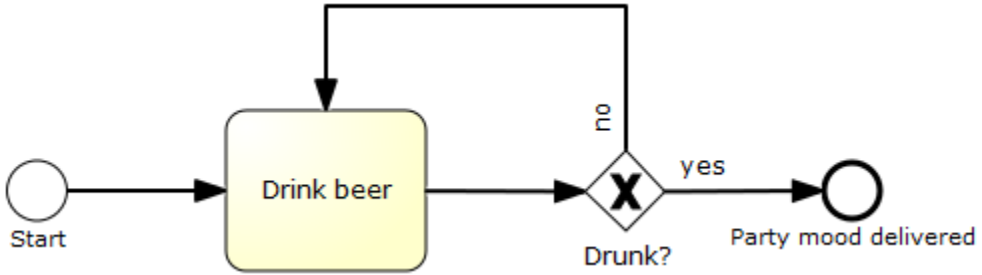


What is happening here?

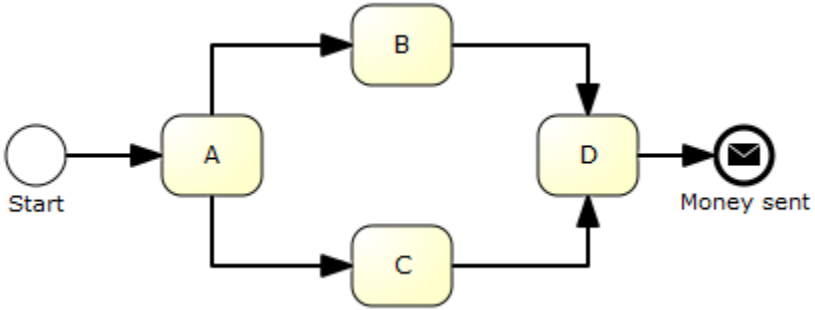


Clear usage of gateways II

Good reason to skip gateway is loopback.



What is happening here?



D and end event are executed twice!

Process domains for teamwork

- **Artificial domains**
  - Hospital
  - Bank
  - Insurance company
  - Airlines
  - Real estate agency
  - Court
  - Package delivery
  - Software company
  - IT support center
  - Car manufacturer
- **Custom domain**
  - ++ exam advantage
  - Your own work experience
  - Proper opportunity required !!
  - Backup plan needed

Homework Assignment

6+ Activities - types are required (user task, service task,....)

2+ gateways

3+ events - at least 1 start event and 2+ end events.

1+ data object connected with an element

1+ pool / 2+ lanes

- Submit printed version to the box called "PV207" next to entrance to room D1, before 20.3. 17h
- Submit electronic version
  - Export to PNG in Signavio, submit to IS MUNI to folder "homeworks" before 20.3. 17h as <surname>_bpmn.png

Summary

- Understand purpose and usage of BPMN L1
- Create correct and clear models with BPMN L1
- Basic knowledge of Signavio
- Homework

Thank you for your attention!

Anton Giertli, Lubomír Hruban