

Modeling BPMN 2.0

Level 1

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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)

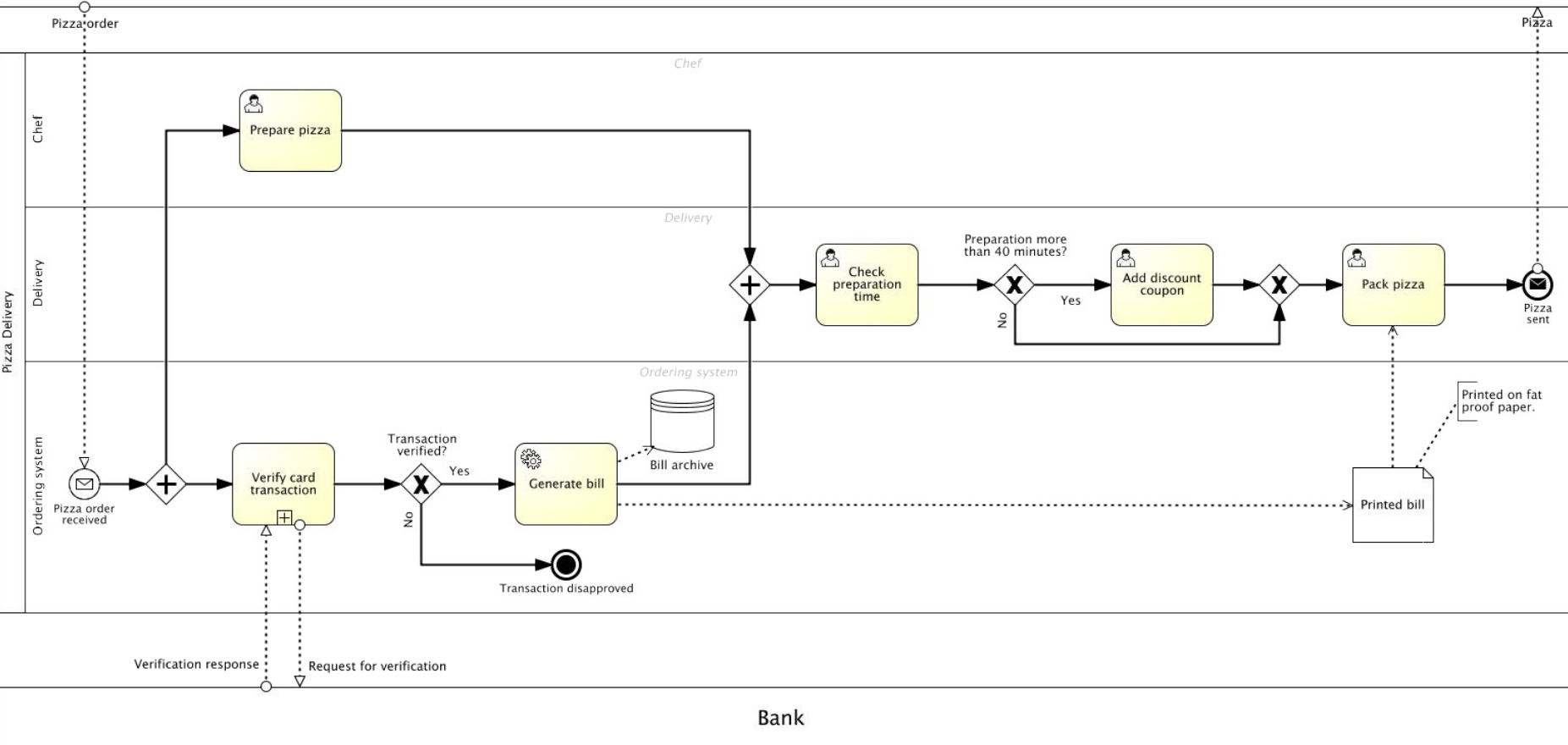
Process Description

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.



Naming Practices

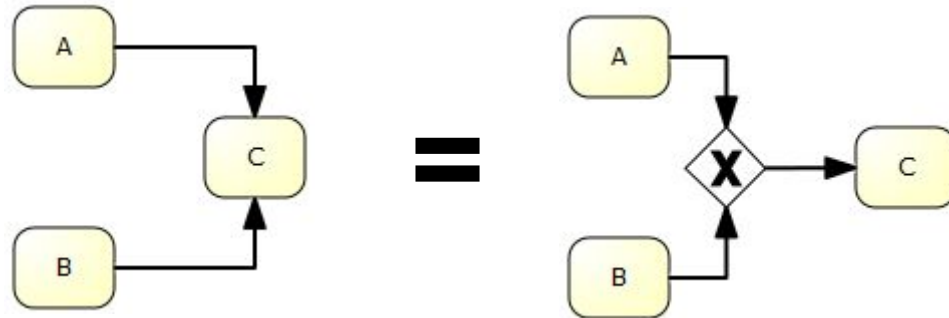
- **Activities: strong verb-object**
 - example: Acquire groceries, Prepare meal, Test release candidate
- **Events: object-passive verb**
 - example: Hunger noticed, Invoice sent, Broken chair received
 - exception: timers and some blank events
- **Split XOR gateways as a question and its outgoing flows 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:



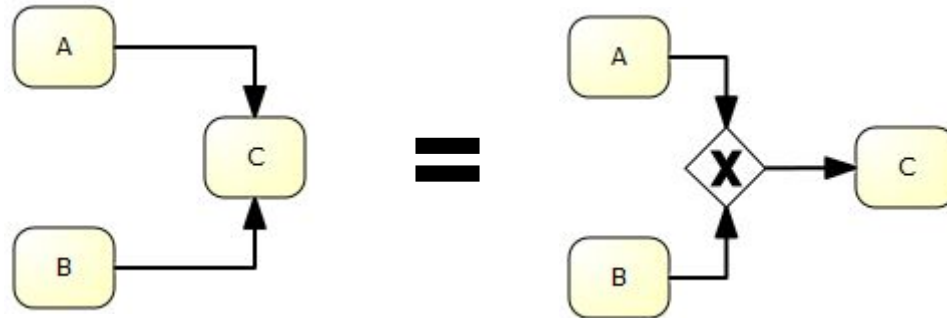
Clear usage of gateways

Parallel split:



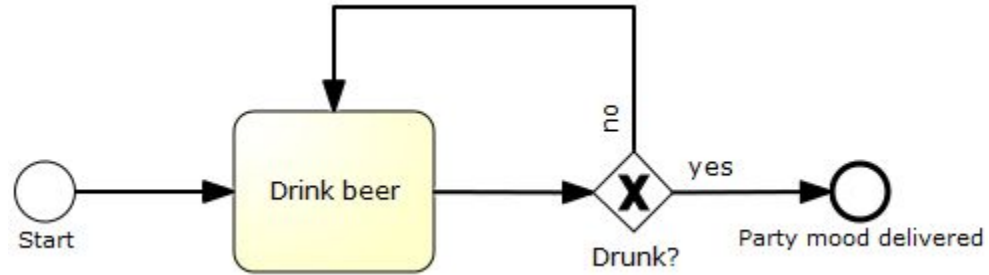
Better not
omit
gateways!

XOR join:

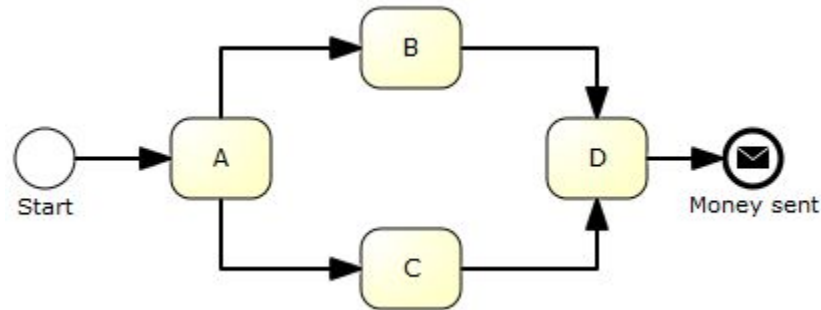


Clear usage of gateways II

Good reason to skip gateway is loopback.

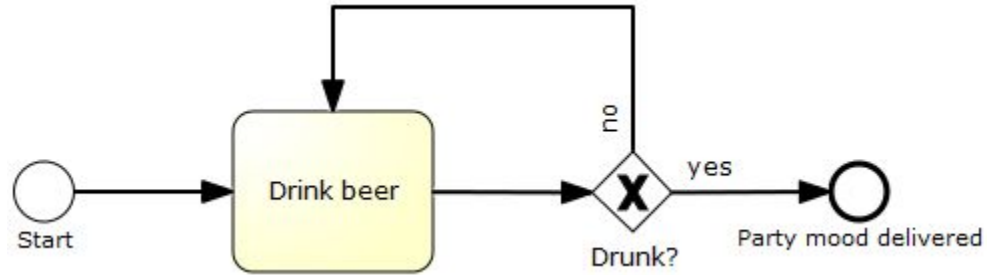


What is happening here?

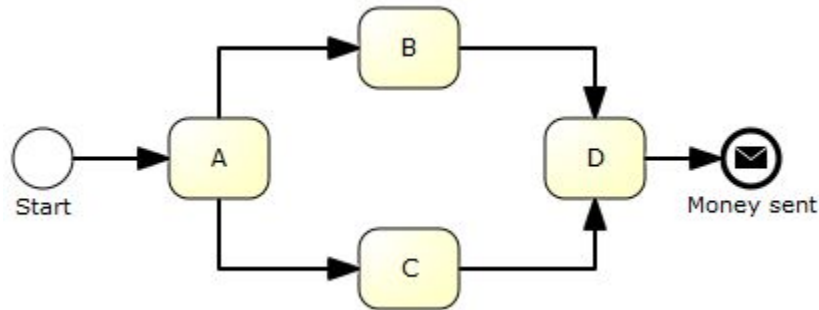


Clear usage of gateways II

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

- Each student will model a business process using L1 palette
- Use only elements which are in palette in slide #3 and model has to have:
 - At minimum these elements
 - 6+ activities - types are required (user task or 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
 - Brief summary of the process (2+ sentences)
 - There has to be your UČO, name and seminar group number
- Submit printed version:
 - Put it into the box called "PV207" next to entrance to room D1, March 18 at 16:00
- Submit electronic version
 - Export to PNG in Signavio, submit to IS MUNI to folder "Homework 1" before deadline 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!



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