

# Modeling BPMN 2.0

## Level 1

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)

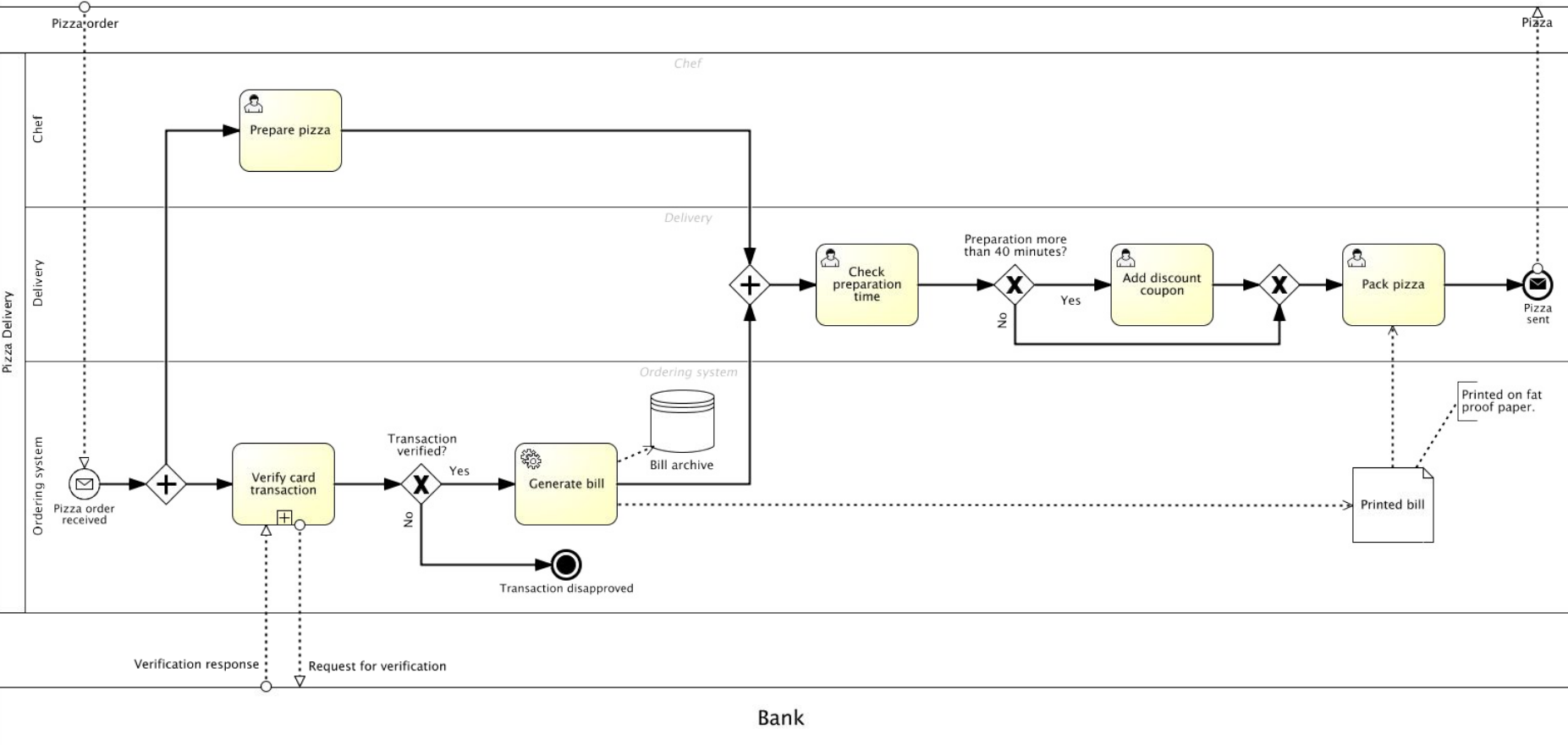
# Process Description

*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.*

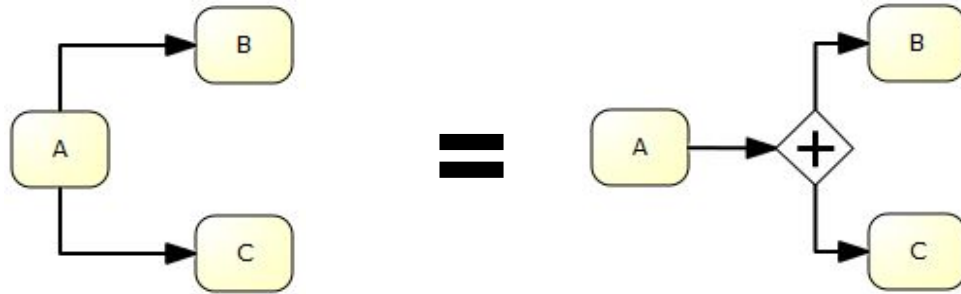


# Naming Practices

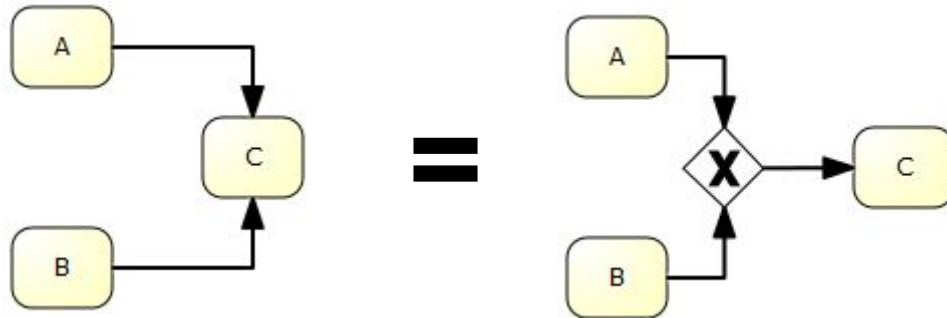
- **Activities: strong verb-object**
  - example: Acquire groceries, Prepare meal, Test release candidate
- **Events: object-passive verb**
  - example: Hunger noticed, Invoice sent, Broken chair received
  - exception: timers and some blank events
- **Split XOR gateways as a question and its outgoing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





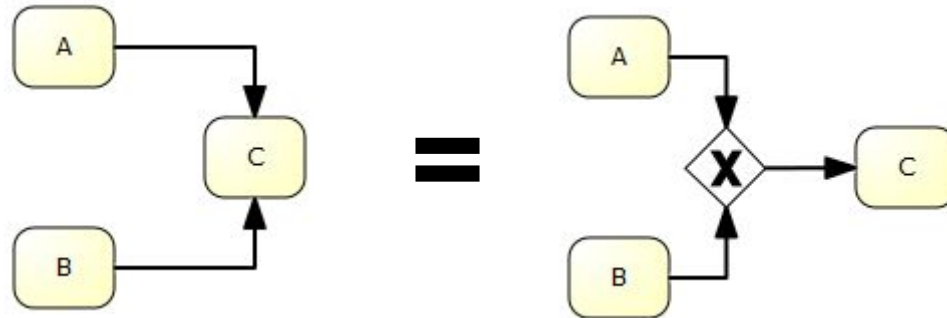
# Clear usage of gateways

Parallel split:



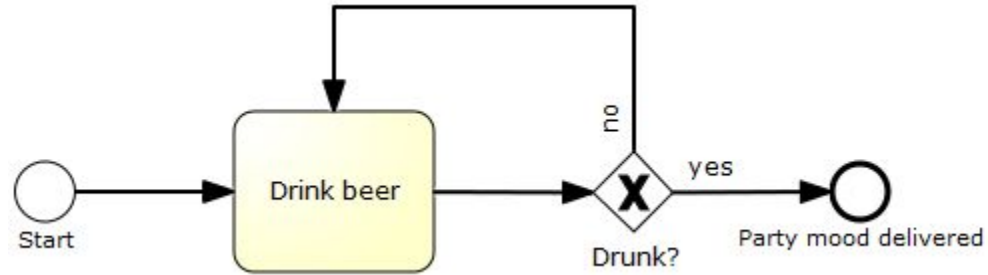
Better not  
omit  
gateways!

XOR join:

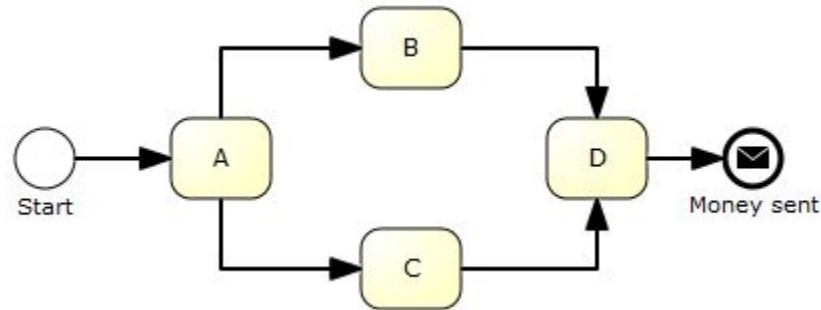


# Clear usage of gateways II

Good reason to skip gateway is loopback.

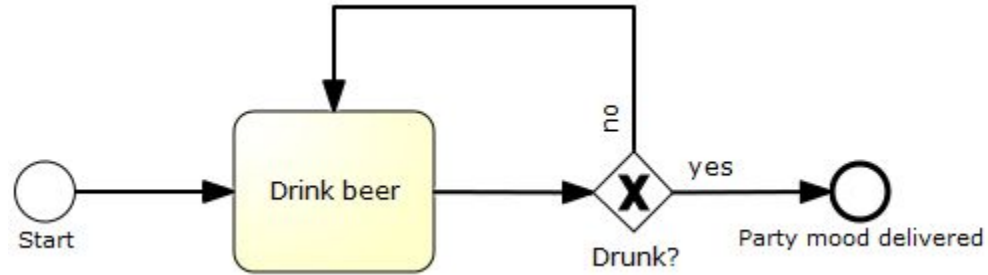


What is happening here?

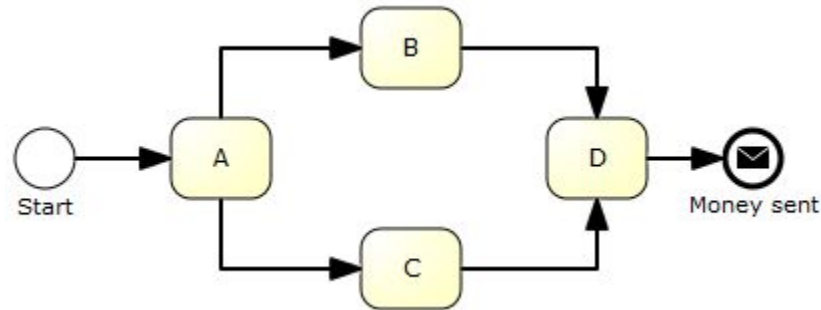


# Clear usage of gateways II

Good reason to skip gateway is loopback.



What is happening here?



D and end event are executed twice!

# 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
- Submit electronic version
  - **PNG image or PDF document** exported from Signavio will be submitted to IS MUNI folder "Homework 1" named <surename>\_bpmn.png , **before deadline (Monday 29th March at 4PM)**
  - Diagram has to be readable in a printed A4 paper size (it can be multiple pages if needed)

# 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

# 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!**



**Lubomír Hruban**

