

# Process Modeling

Dr. Rodrigo Spínola



Lecture 5 - Process  
Modeling

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## Last time

- Software process model determines the order of the stages involved in software development and evolution
- We need processes to scale up with complexity
- There are several types of process models: waterfall, incremental, spiral...
- There is no silver bullet, the context impacts process



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# Process Modeling

- Refers to the **graphical representation** of business processes or workflows. Like a flow chart, **individual steps** of the process are drawn out so there is an **end-to-end overview** of the **tasks** in the **process** within the context of the business environment.



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# Notations

- Activity Diagram from UML
- BPMN (Business Process Model and Notation)
  - is an open standard to diagram a business process
  - it is like a flowchart and uses standardized graphics to represent the participants, choices and flow of the process
  - the diagrams are designed to be detailed, but easy to read without training
    - This allows the same diagram to be used by executives, analysts and technical implementation staff to foster collaboration and understanding between groups



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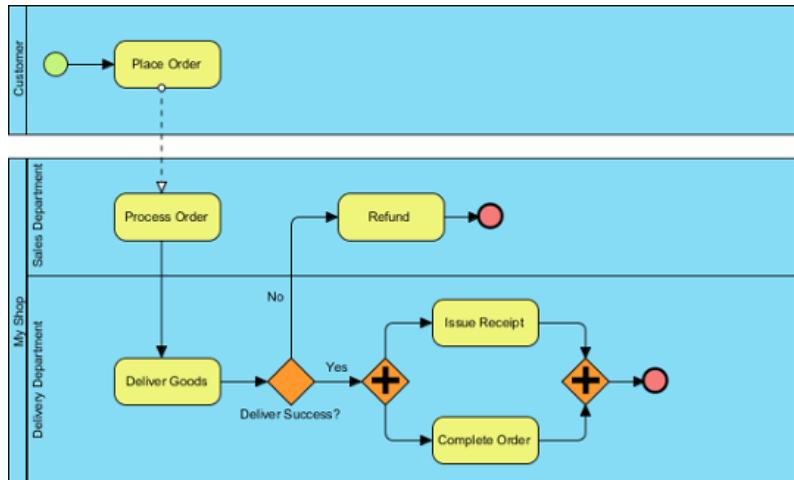
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## Example - Place Order

Process modeling helps communicate and share knowledge on how teams perform their tasks



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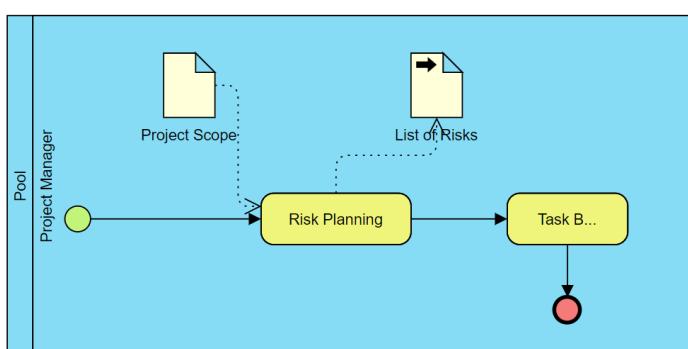
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## A process should define

- Activities
- Flow among activities
- Entry artifacts
- Exit artifacts
- Who is in charge of each activity



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# Task of the Day



**Let's model a simplified software development process together**



Go to [online.visual-paradigm.com](http://online.visual-paradigm.com), then Create New -> Business Process Diagram



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# Requirements Development Process

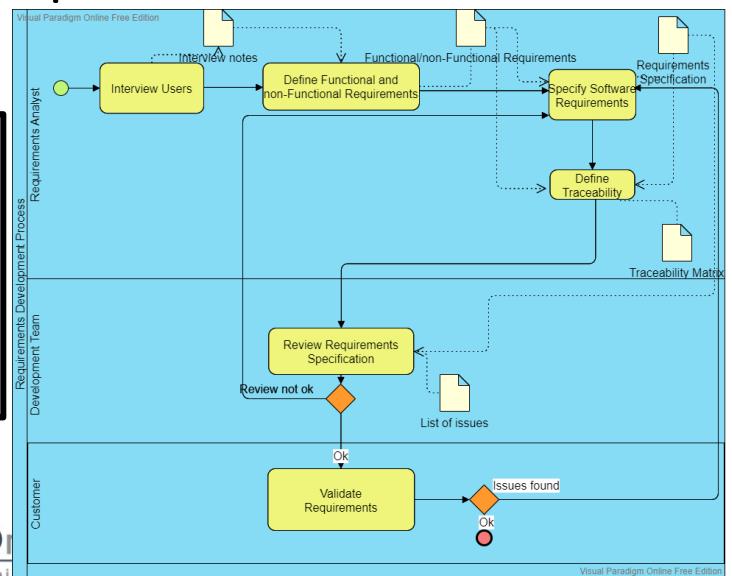
**Task of the Day**

- Organize yourselves in groups of 5
- Define the requirements of the project
- Define test cases to assure the quality of the project
- Define a software project context (e.g., library system, traffic control)
- Define the process used to develop the project

last Friday...

**Lecture 2 - Hands on Day 1**

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Visual Paradigm Online Free Edition

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