LAB-01
Introduction

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Objectives of the labs

- Provide a **practical feeling** of the main aspects tackled during the course.

- **Discuss exercises** and concrete **projects** on business process modeling, automation and execution.

- **Deploy** and **simulate** **BPMN processes** through a real **BPM system**, called **Bizagi Suite**.

What is a business process?

- **Business Process**: a set of activities performed in coordination in a technical environment. These activities jointly realize a business goal.

- To manage business processes, they have to be described and documented in terms of **process models**.

- A **notation** for process modeling defines the *symbols* for the various process elements, their correct *meaning* as well as their possible *combinations*.
    - Thus, a **notation** is a *standardized language* for the description of business processes.
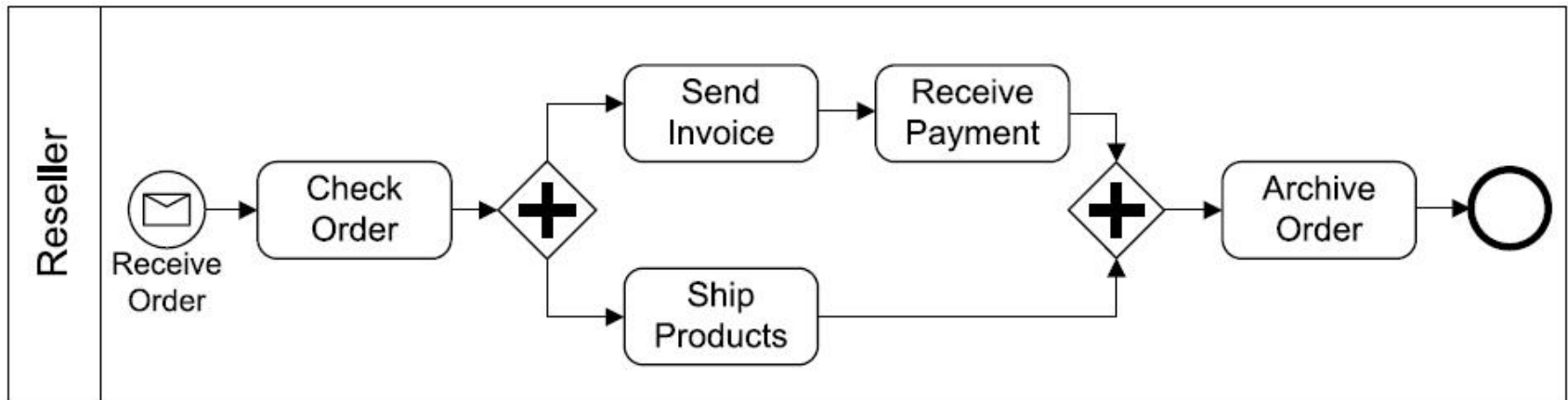
Why BPMN?

- BPMN (*Business Process Modeling Notation*) is the OMG standard for representing business processes (nowadays BPMN 2.0).
    - *"The primary goal of BPMN is to provide a notation that is **readily understandable by all business users**, from the business analysts that create the initial draft of the processes, to the technical developers responsible for implementing the technology that will perform these processes, and finally to the business people who will manage those processes."* [BPMN 2.0 spec.]
- Supported by several tools:
    - http://www.bpmn.org/ lists over 70 tools.
- Both for **business process design** and **process implementation**.
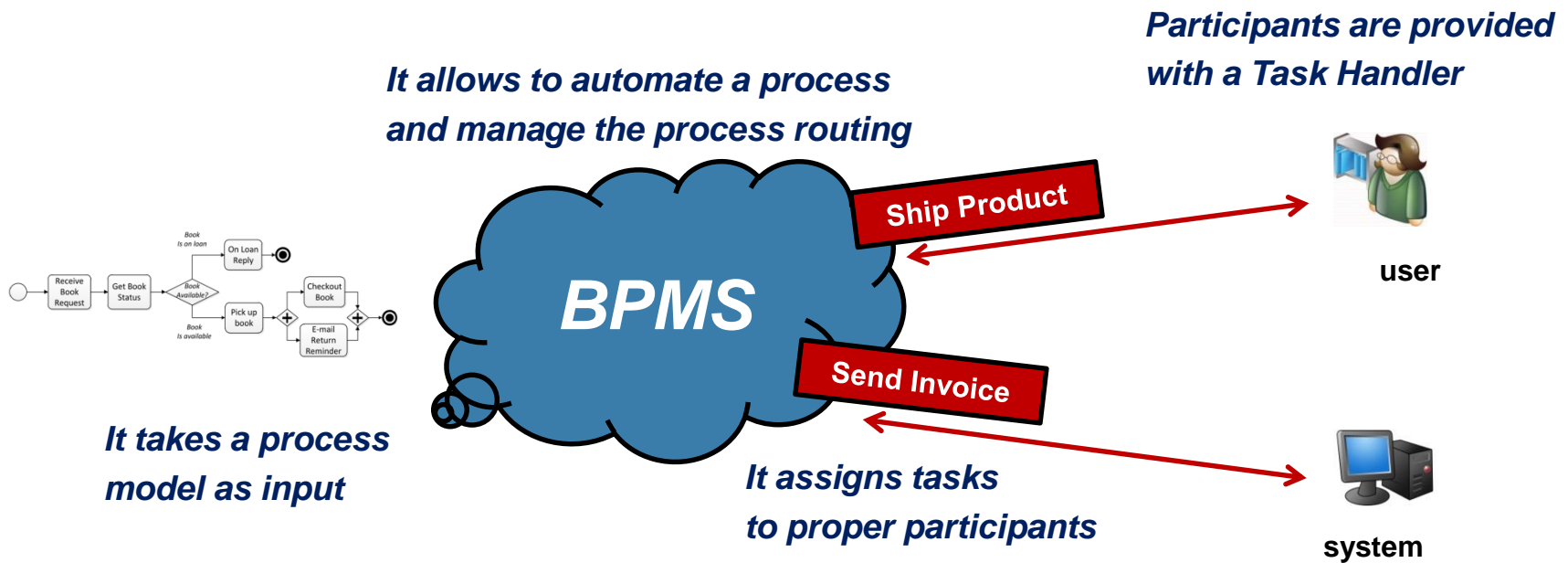
A first concrete BPMN process model

- A **BPMN Process Model** consists of a set of *activities* and *execution constraints* between them, criteria to indicate the *start* and *termination* of the process, and *information* about each activity, such as *participants*, associated *IT applications* and *data*, etc.

- Process models focus on the **process structure** rather than on technical aspects of their realization.

Business Process Management System

■ *A BPMS is a generic software system that is driven by explicit process representations (process models) to coordinate the enactment of business processes.*
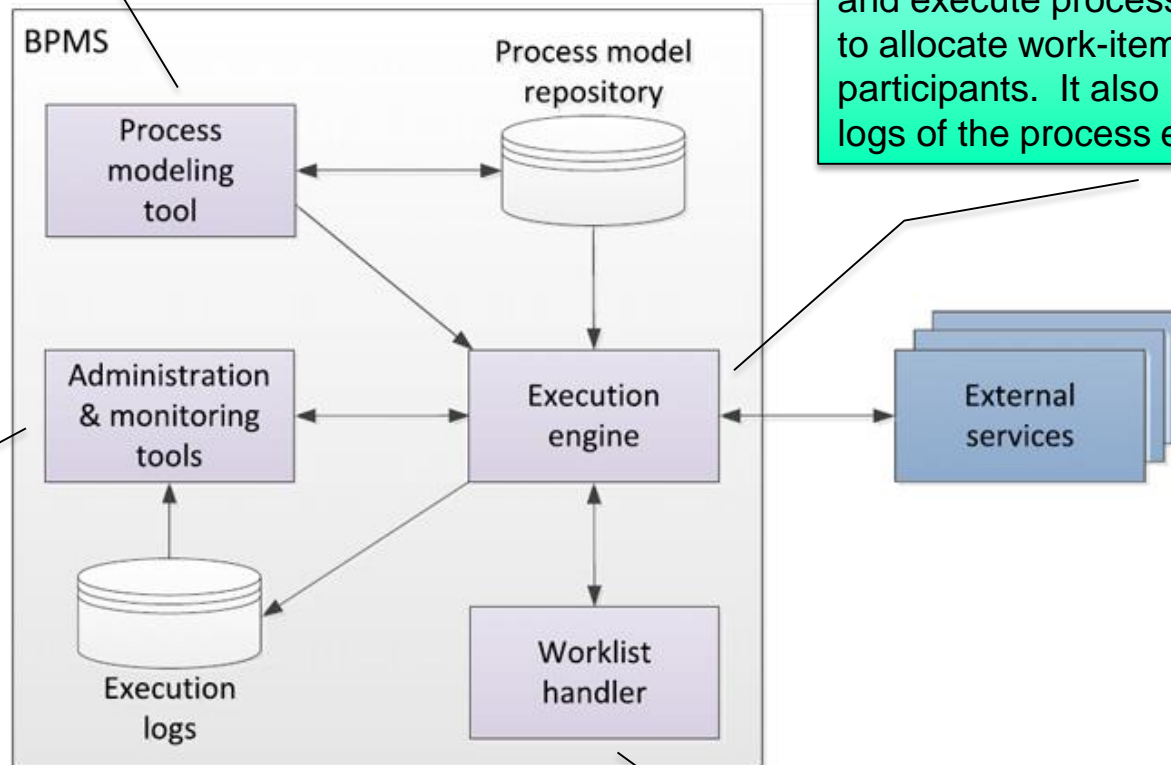
Participants are provided with a Task Handler

It allows to automate a process and manage the process routing

BPMS

Ship Product

Send Invoice

user

system

It takes a process model as input

It assigns tasks to proper participants

It allows to design, simulate and evaluate business processes.

It is responsible to create, control and execute process instances and to allocate work-items to process participants. It also records specific logs of the process execution.

BPMS

- Process modeling tool
- Process model repository
- Administration & monitoring tools
- Execution engine
- Execution logs
- Worklist handler
- External services

It includes features for the addition/removal of resources at run-time, the monitoring of the status of ongoing process instances, etc.
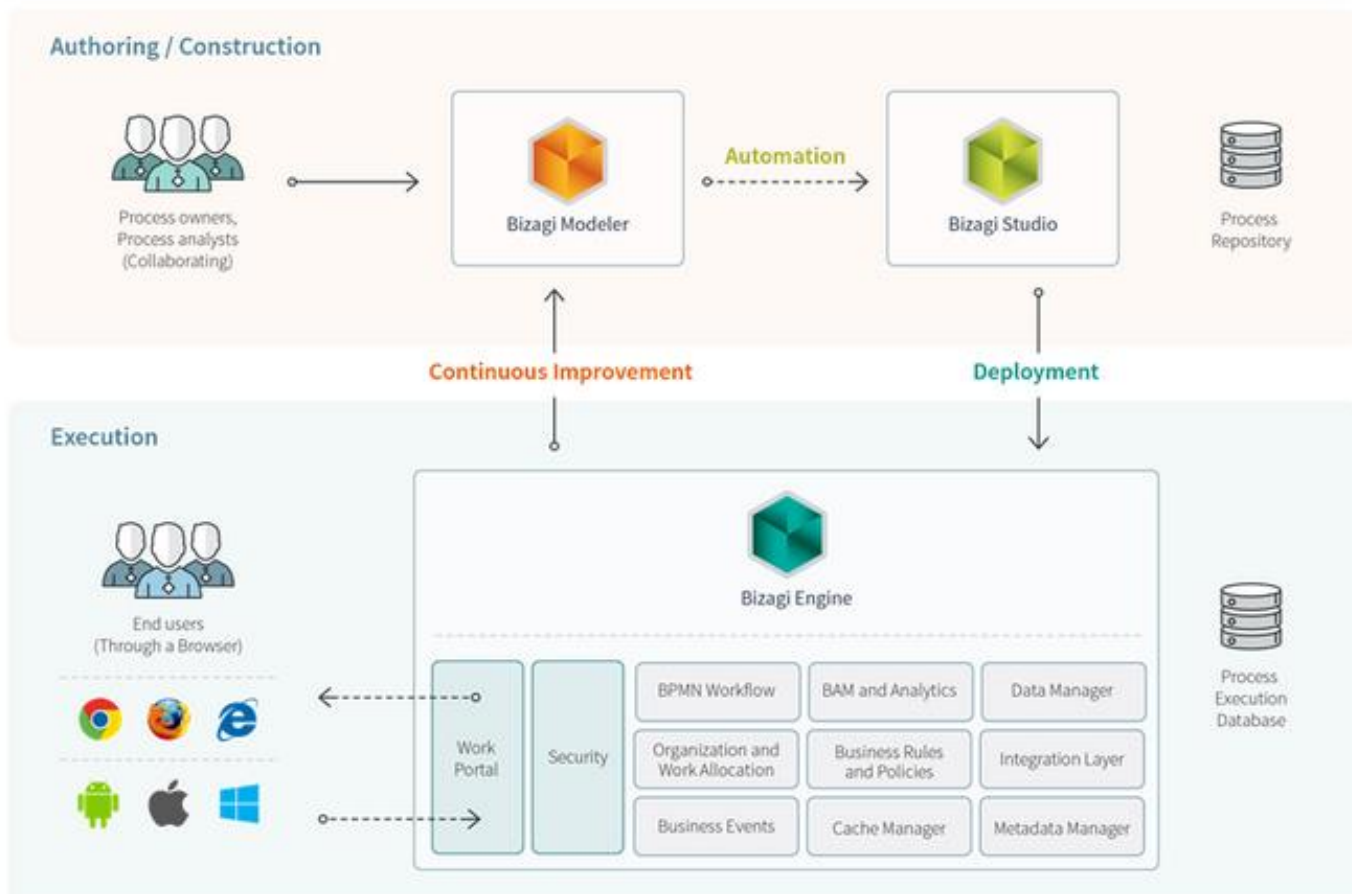
It provides to the process participants an interface to select and execute tasks.

Bizagi BPM Suite
Offical Tool for the labs

- **Bizagi BPM Suite** is a BPMS that handles the complete life cycle of a business process: Model, Build and Execute.

Downloading and Installing the Bizagi BPM suite

- To setup and install the Bizagi Suite you have to download separately **Bizagi Modeler** and **Bizagi Studio**.
  - *Bizagi Modeler* is a freeware application to graphically diagram, document and simulate **conceptual process models** in BPMN.
  - *Bizagi Studio* is a freeware BPM tool that allows organizations to build (automate) conceptual business processes, in preparation for process execution.

- You can download the tools at: http://www.bizagi.com/en/products
  - To use the tools is required to create a personal account on the Bizagi web site.
  - The tools are only available to be installed on a 64-bit based Windows environment.
    - However, you can instead use a virtual machine with Windows OS on your MAC/Linux platform to run your BPMN projects.