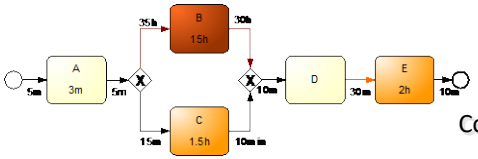
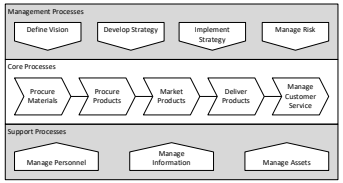
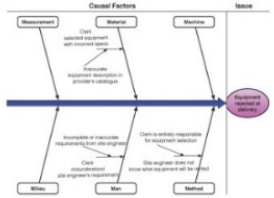
Business Process Management (9)

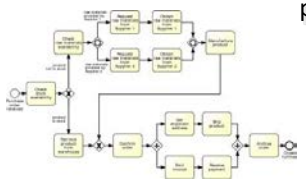
Slides adapted from: Dr. Marlon Dumas

Process Redesign









Process identification

Process architecture

Process discovery

As-is process model

Process analysis

Insights on weaknesses and their impact

Process redesign

To-be process model

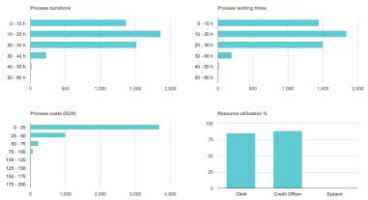
Process implementation

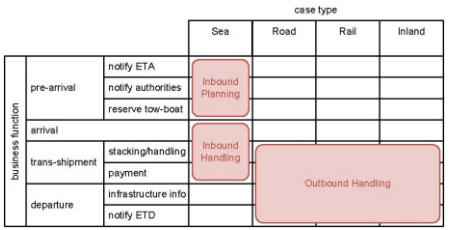
Executable process model

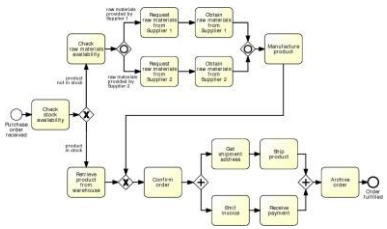
Process monitoring

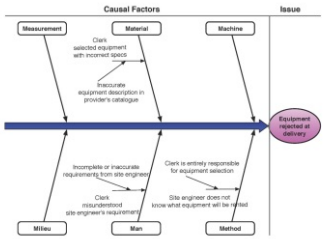
Conformance and performance insights

Where are we?









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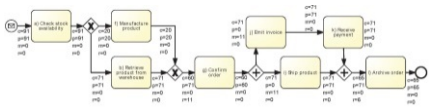
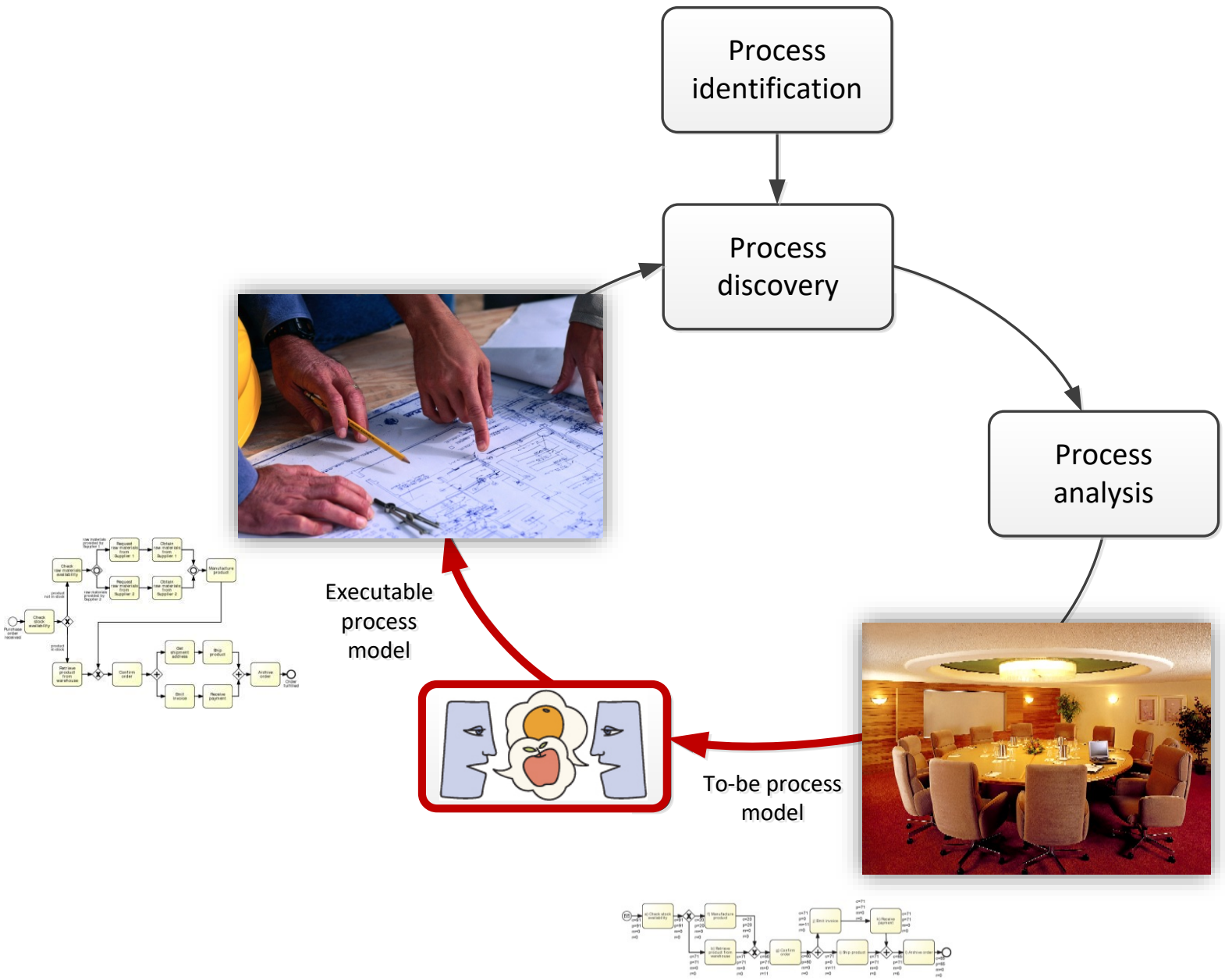


The business-engineering gap…



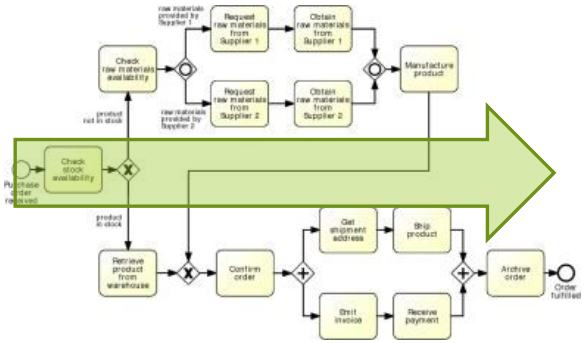
Two sides of the BPM story

Conceptual “to-be” process models

- are made by domain experts
- provide a basis for communication amongst relevant stakeholders
- must be understandable
- must be intuitive and may leave room for interpretation
- contain purely a relevant set of process information

Executable process models

- are made by IT experts
- provide input to a process enactment system - BPMS
- must be machine readable
- must be unambiguous and should not contain any uncertainties
- contain further details that are only relevant to implementation



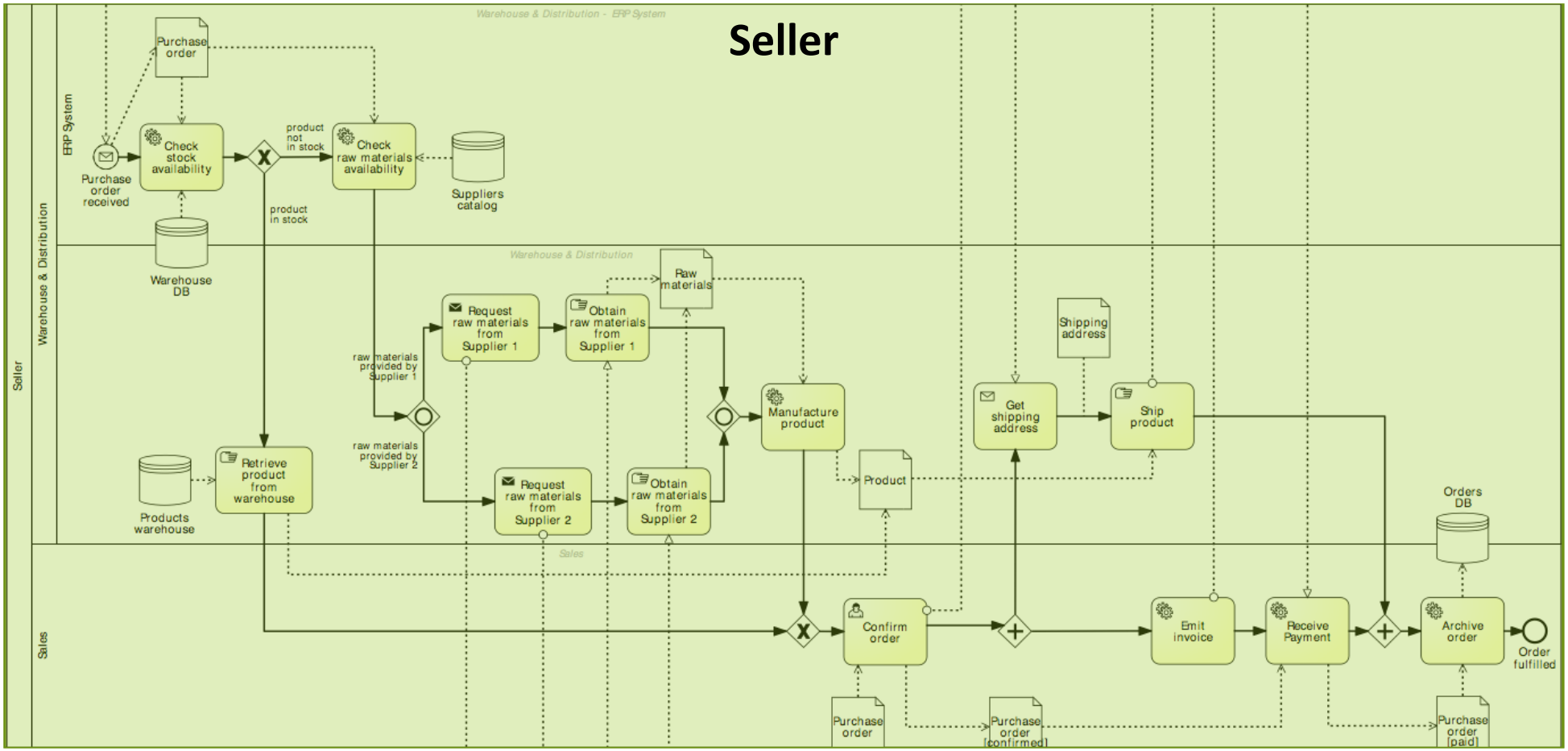
“to-be executed” process model

Bridging the gap: A five-step method

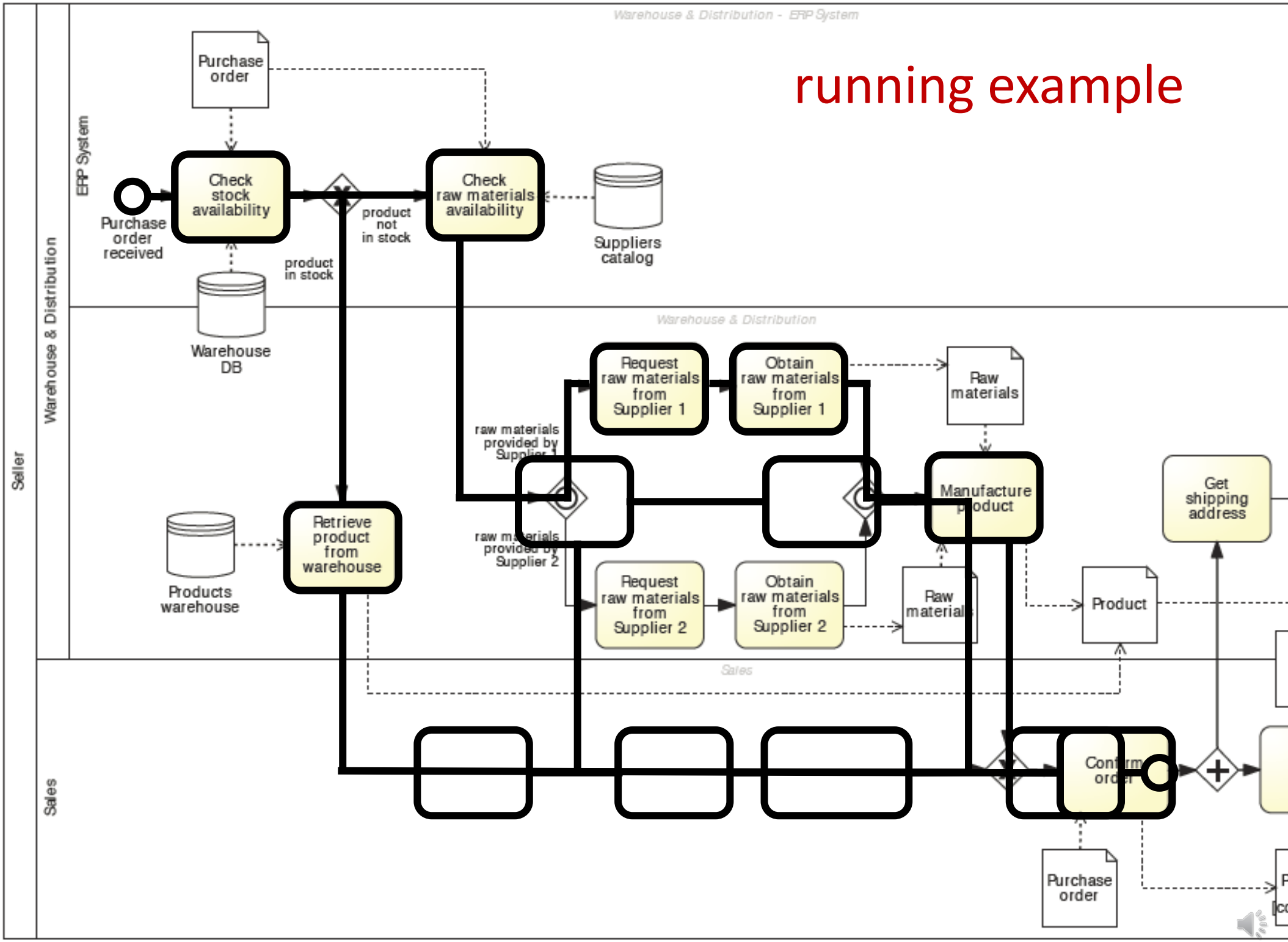
1. Identify the automation boundaries
2. Review manual tasks
3. Complete the process model
4. Adjust task granularity
5. Specify execution properties

Adapted from teaching material of Remco Dijkman, TU/e.

Running example



running example



1. Identify the automation boundaries

Principle: not all parts of a process can be automated.

-> Start by identifying each task's type:

1

Automated tasks

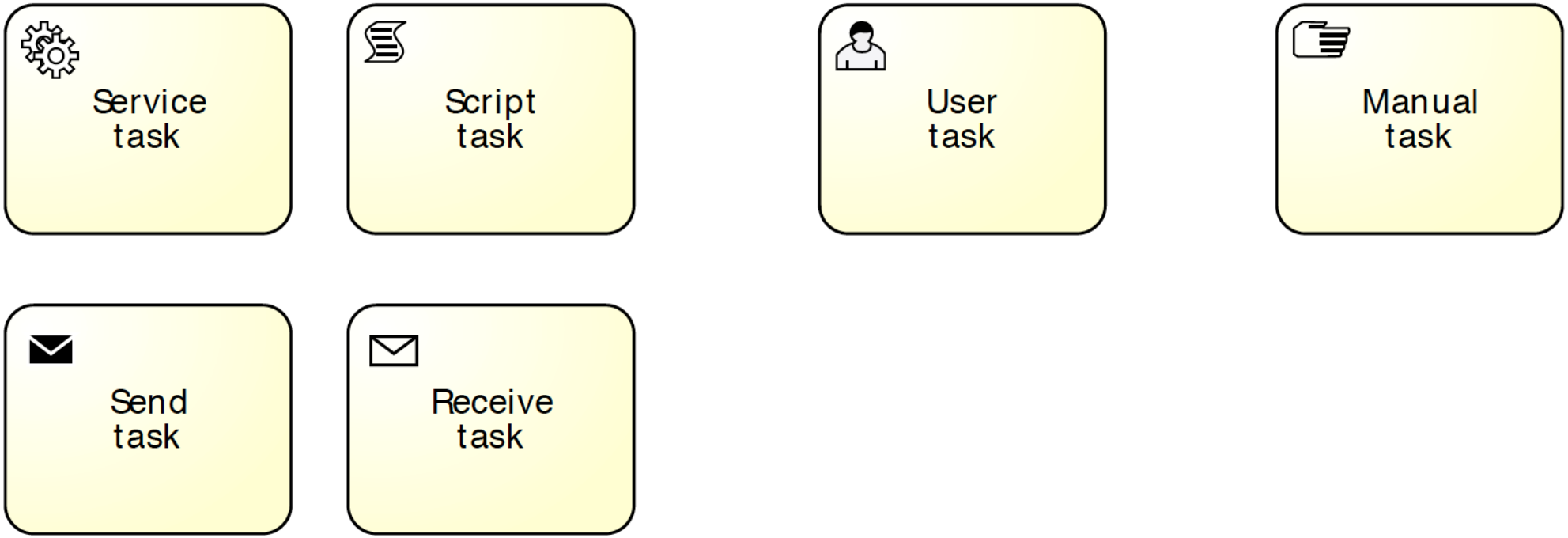
2

User tasks

3

Manual tasks

In BPMN: specify task markers



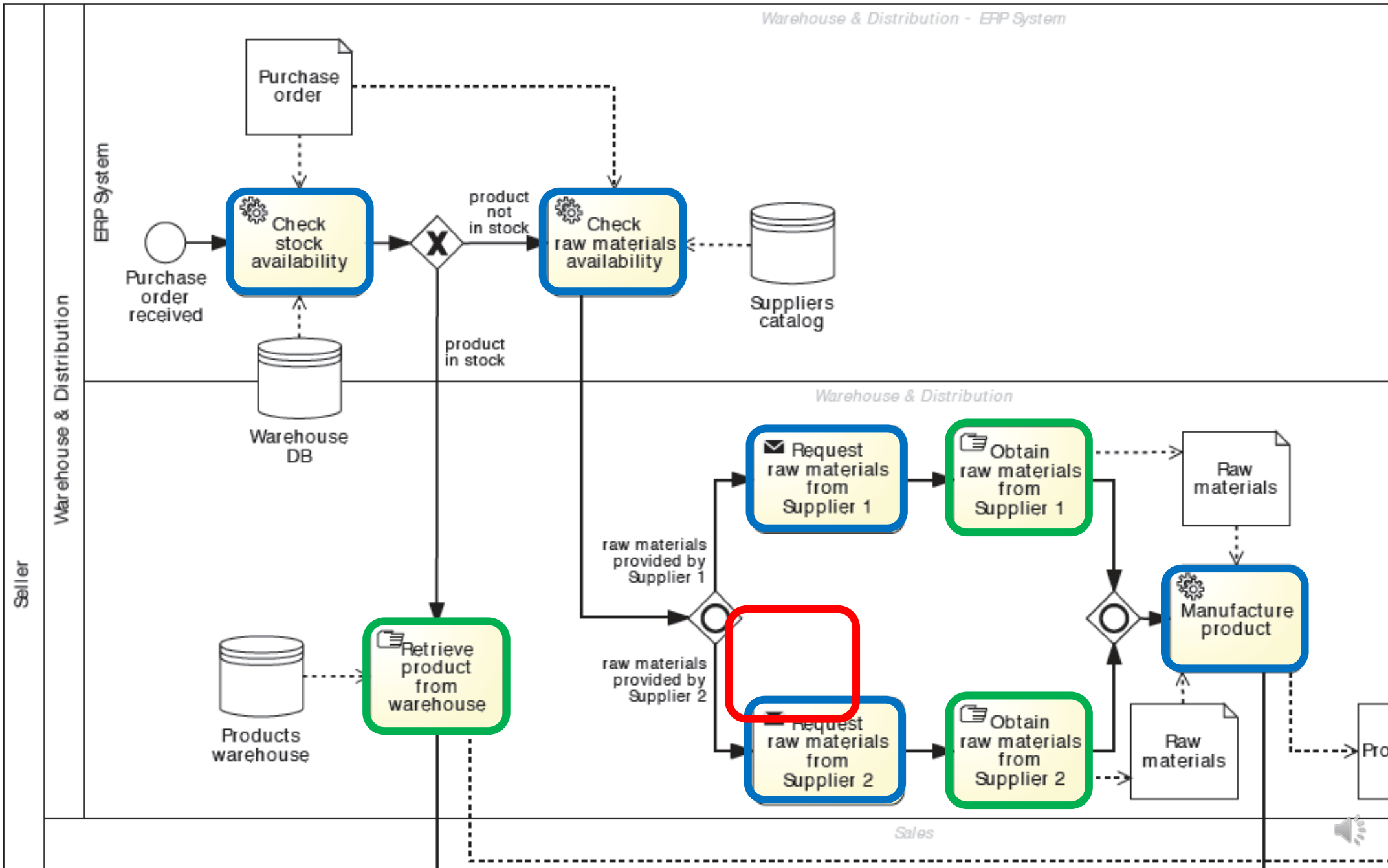
Automated tasks

User task

Manual task

In our example…

automated
user
manual



2. Review manual tasks

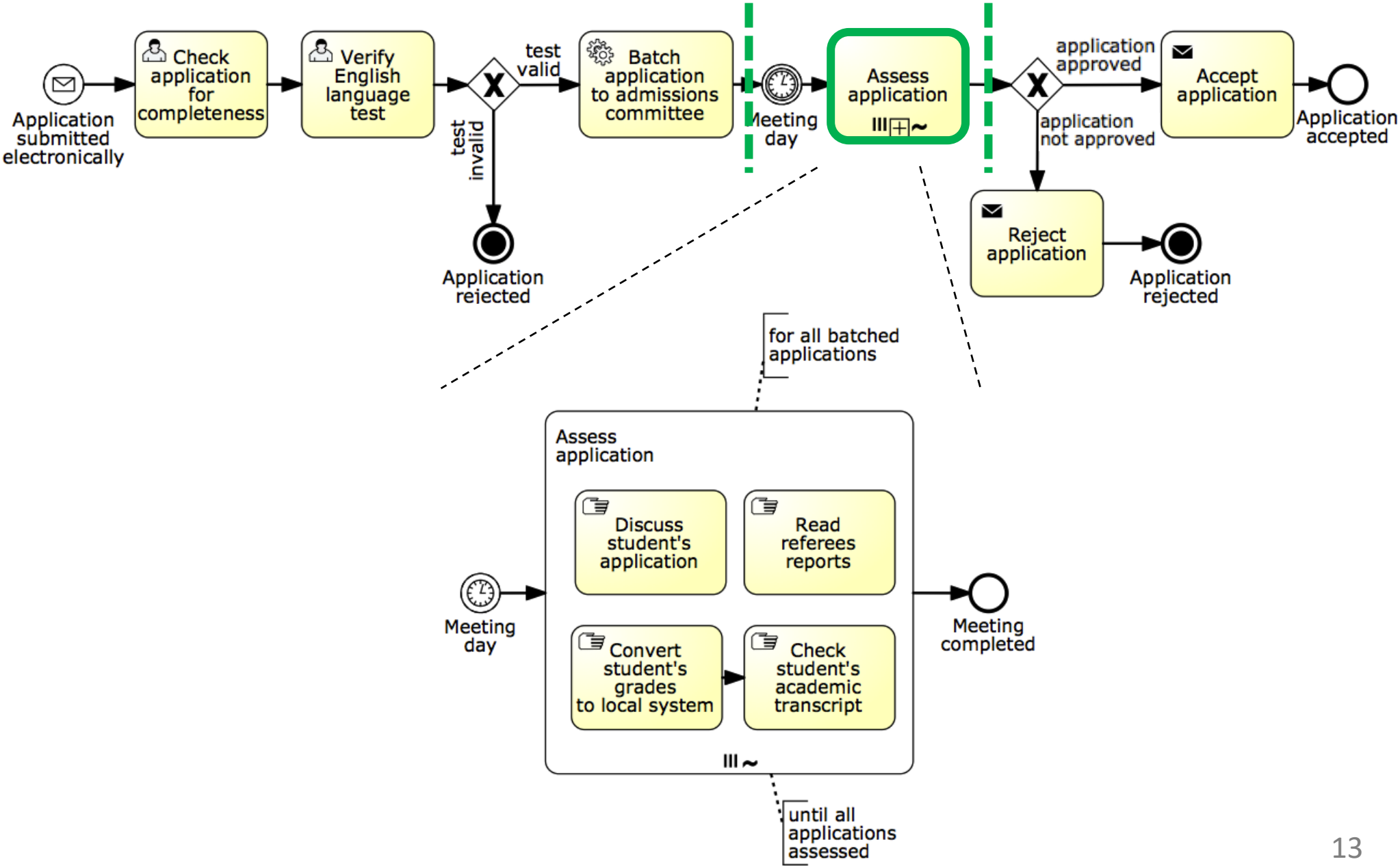
Principle: if it can't be seen by the BPMS, it doesn't exist.

-> Find ways to support manual tasks via IT:

- via user task
- via automated task

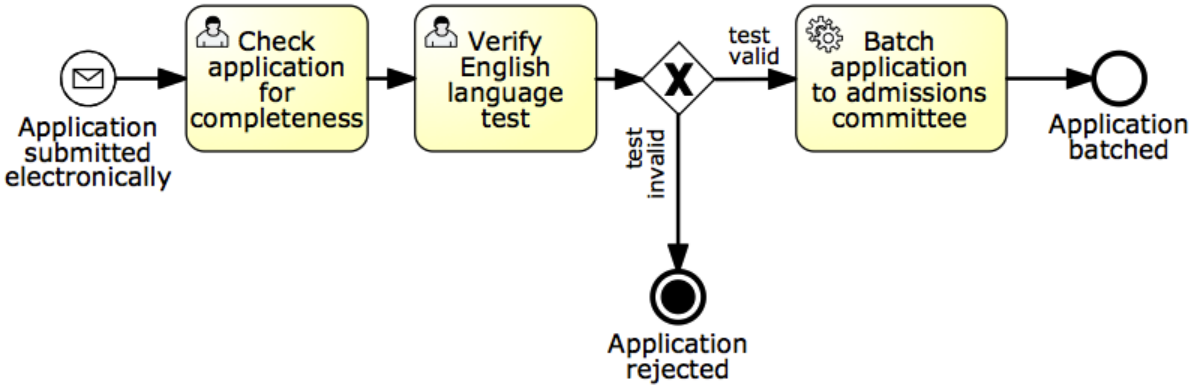
-> Isolate them and automate the rest

Alternative: isolate manual tasks

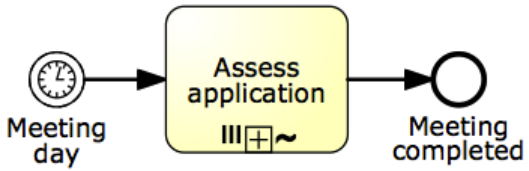


Alternative: isolate manual tasks

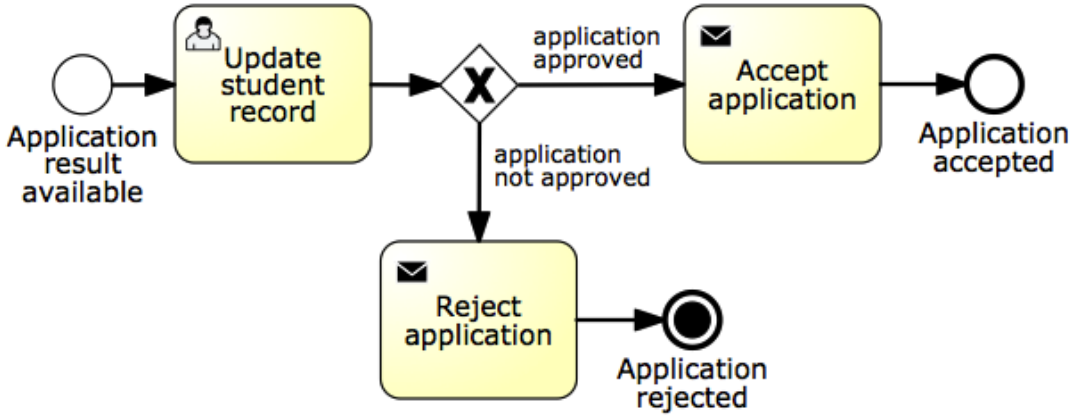
Segment 1



Segment 2



Segment 3

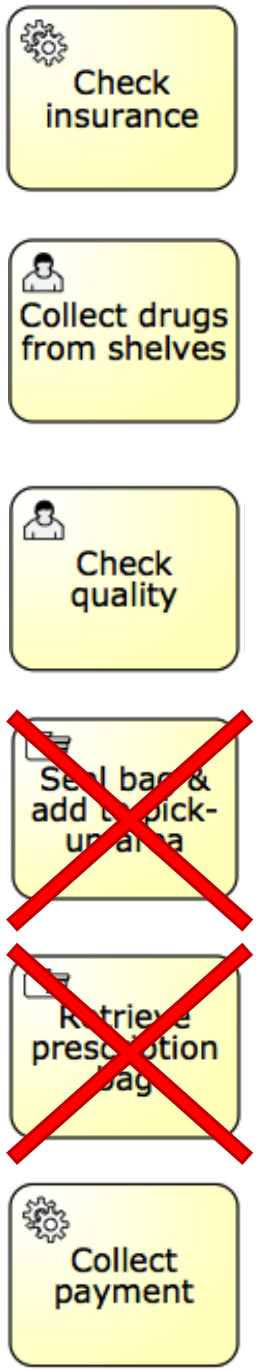


Quiz: let's consider this process fragment

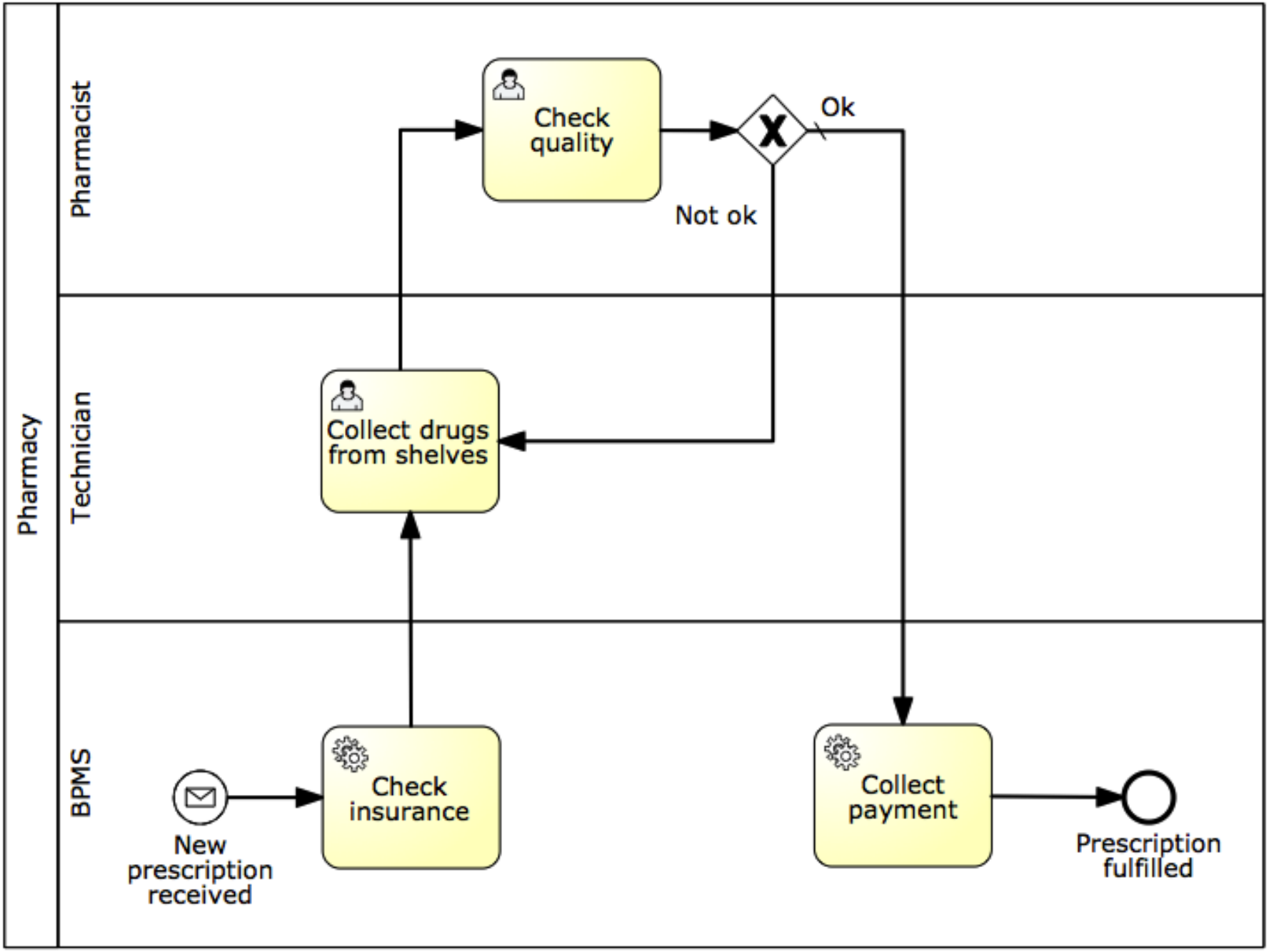
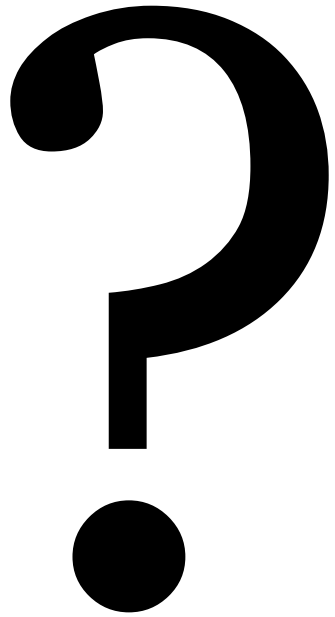
Prescription fulfillment process:

- Once the prescription passes the insurance check, it is assigned to a technician who collects the drugs from the shelves and puts them in a bag with the prescription stapled to it.
- After that, the bag is passed to the pharmacist who double-checks that the prescription has been filled correctly.
- After this quality check, the pharmacist seals the bag and puts it in the pick-up area.
- When a customer arrives to pick up their prescription, a technician retrieves the prescription and asks the customer for their payment.

Assume the pharmacy system automates this process. Identify the type of each task and link manual tasks to the system.



Possible solution



Questions