BPMN to software functions

After modeling

- BPMN model of processes are available
- UML Class diagram model of conceptual entities is available
- UML deployment diagram of infrastructure is available
- Organizational model is available

- How to transition to software applications and database?
 - Software functions view
 - Data view

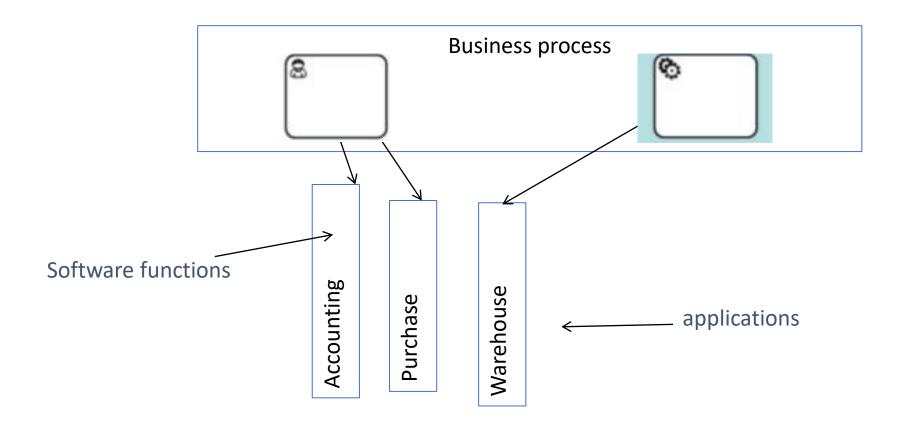
Software applications

- Consider each task in BPMN
 - Notably





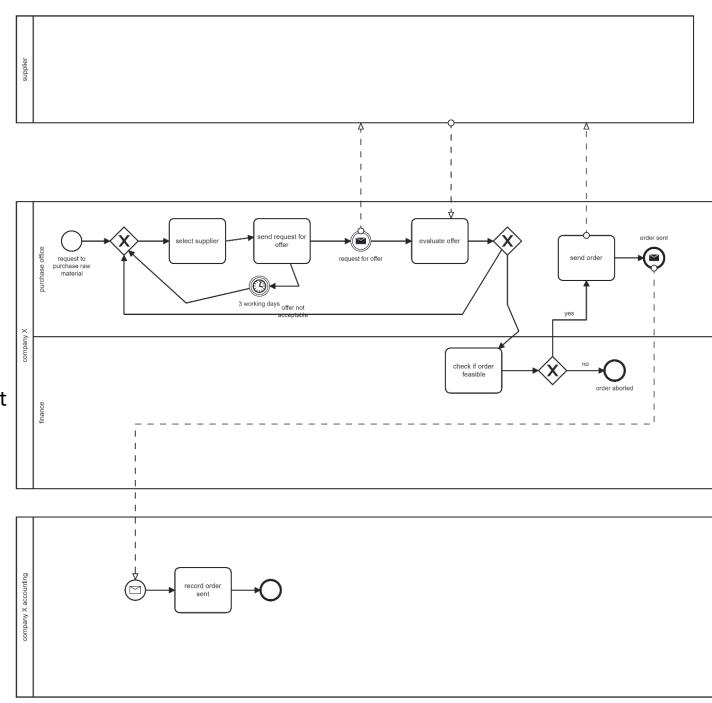
- List software functions needed to support the task
- Group software functions
 - Logically
 - Or by software application possibly providing them (here the problem overlaps with selection of software products from external providers)



Purchase raw material

Software functions needed, per task

- Task 'Select supplier'
 - Given raw material code, find suppliers that sell it
 - Create request for offer
 - Attach request for offer to request to purchase
 - Transform request of offer in json
 - Call web api of supplier to send request to it
- Task 'Evaluate offer'
 - Receive json file with offer from supplier
 - Transform json in offer
 - Attach to request for offer
 - User enters yes no about accepting offer
 - Create request of order, attach request of order to offer, send to finance



Software functions needed, grouped per application providing them

- Supply management application
 - Given raw material code, find suppliers that sell it
 - Create «request for offer»
 - Attach request for offer to request to purchase
 - Attach to request for offer
 - User enters yes no about accepting offer
 - Create «request of order», attach request of order to offer, send to finance
- Web service interaction
 - Transform request of offer in json
 - Call web api of supplier to send request
 - Receive json file with offer from supplier
 - Transform json in offer

Data model

 The conceptual data model is the starting point to define the DB schema (assuming a relational data base)

