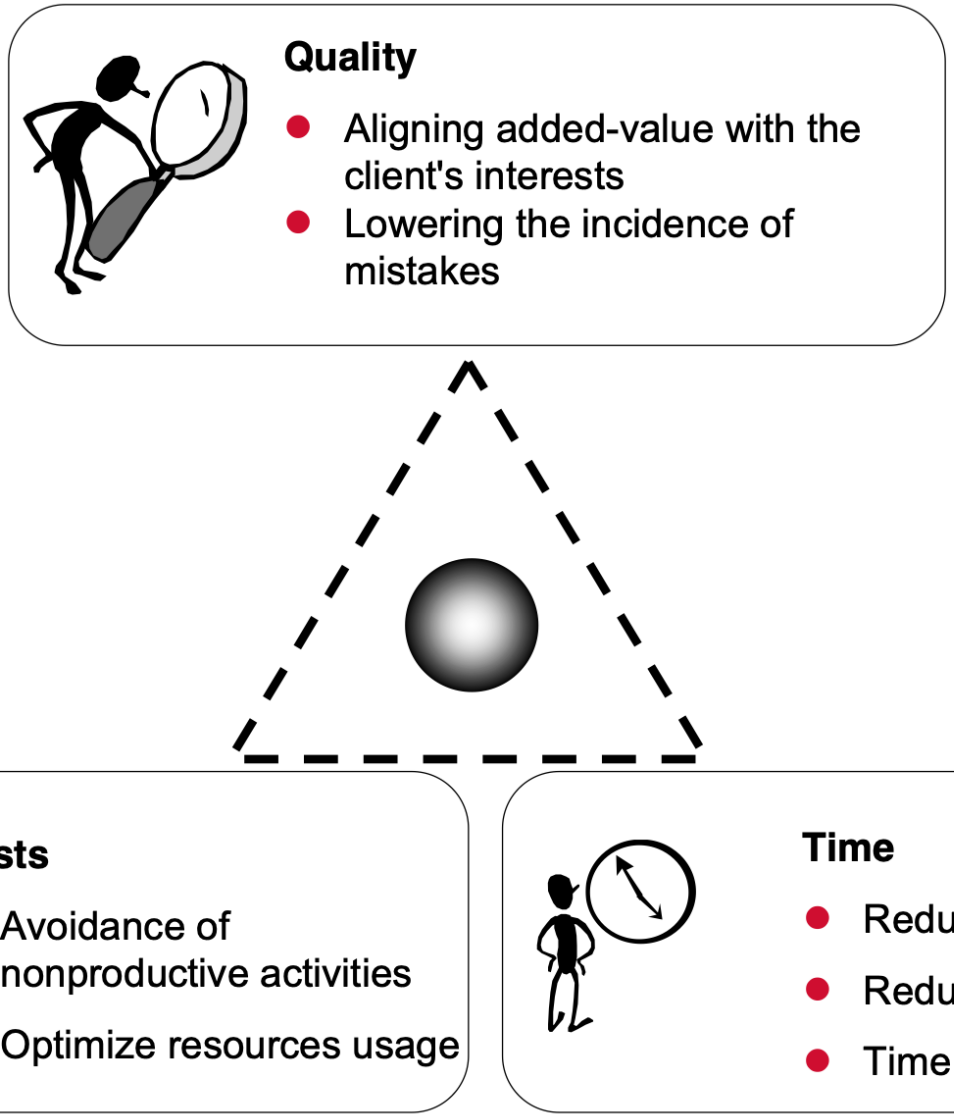
BPM Key objectives

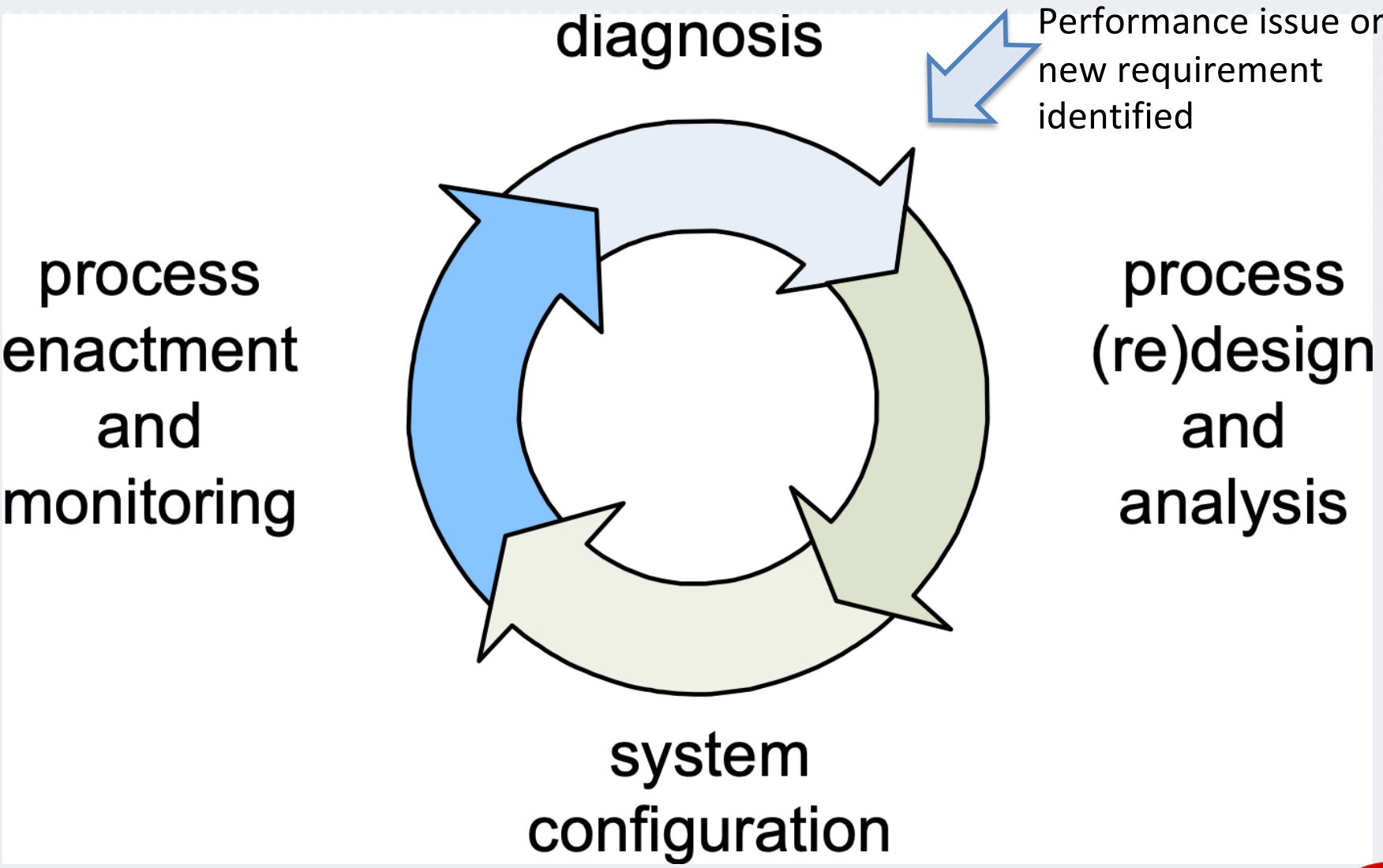


Business Process Modelling Life Cycle

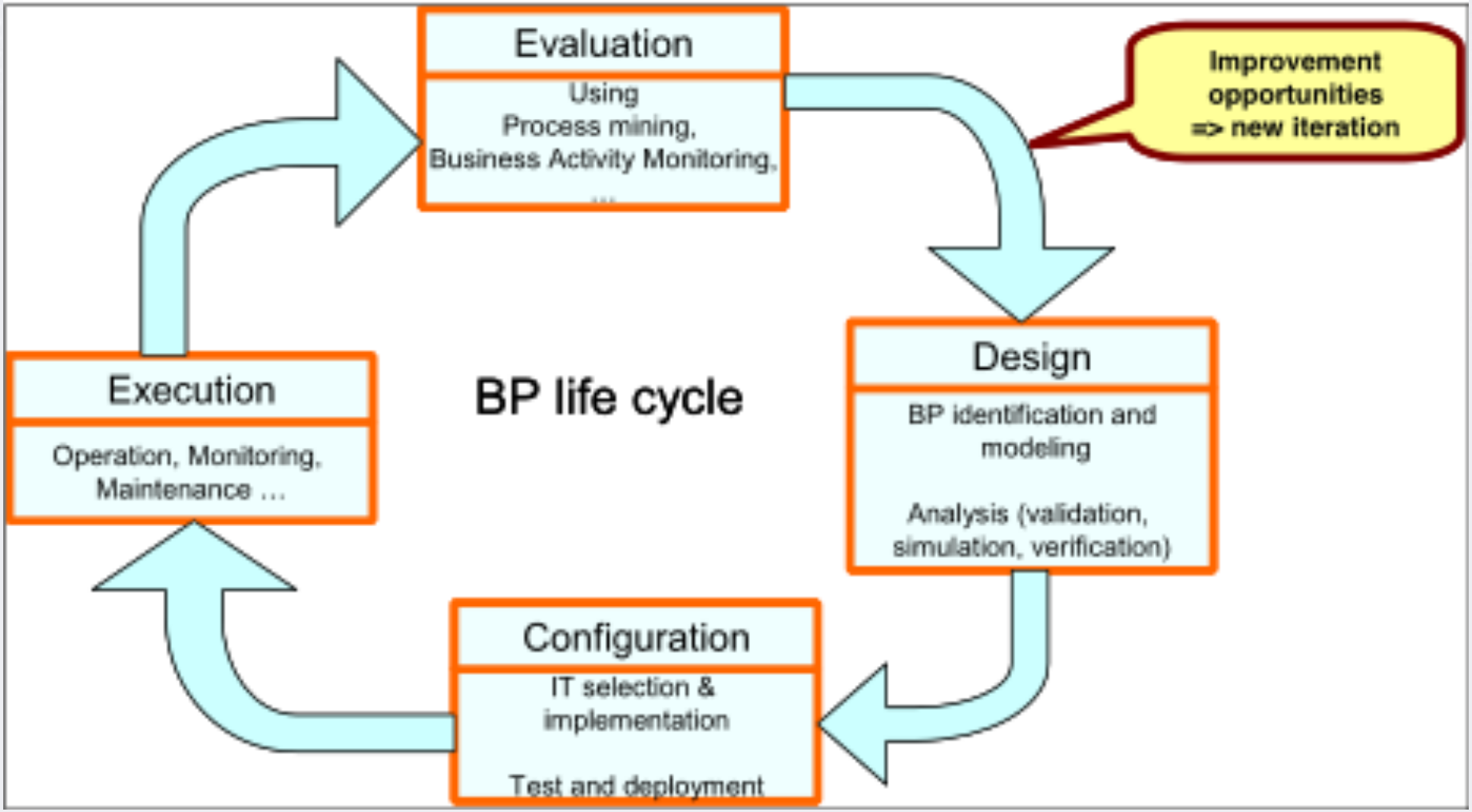
- **Design phase**: designs the process structure
- **Configuration phase**: creates/codes process model into organisational software systems.
- **Enactment** (execution) / **monitoring** phase: runs and monitors process execution, to see if the new design or the made changes improved efficiencies.
- **Adjustment** phase: adjusts processes based the previous phase outcomes.
- **Diagnosis**/requirements phase: evaluates the process and monitors new requirements (new policies, laws, etc.).

=> Poor performance or new requirements may require a new iteration of all the lifecycle.

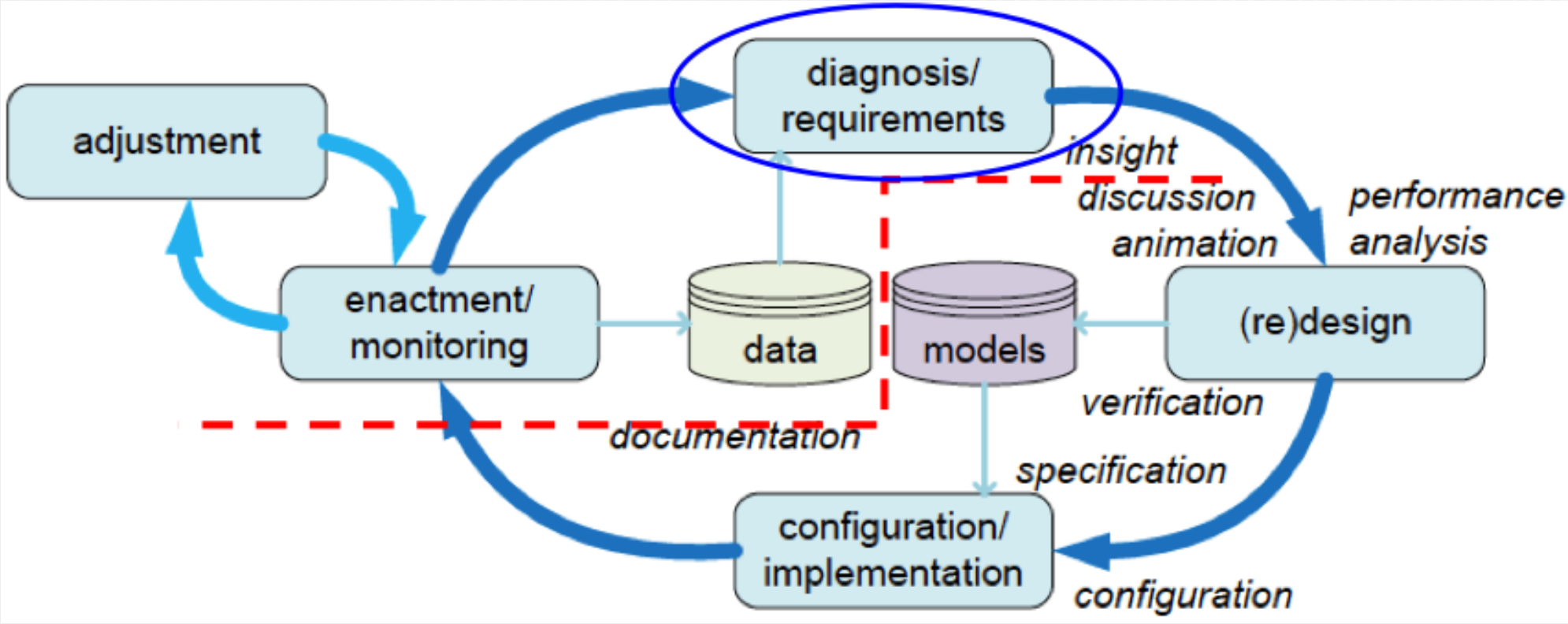
Business Process Model Life Cycle



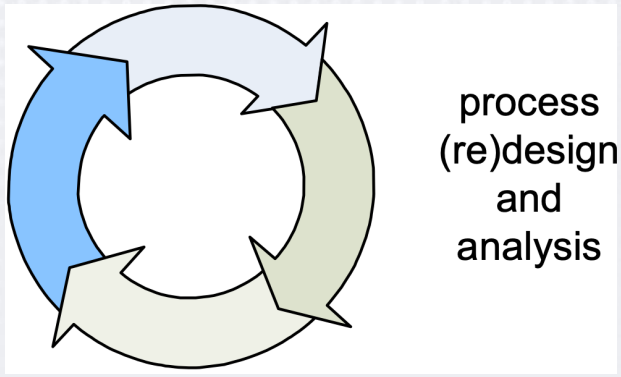
BP life Cycle

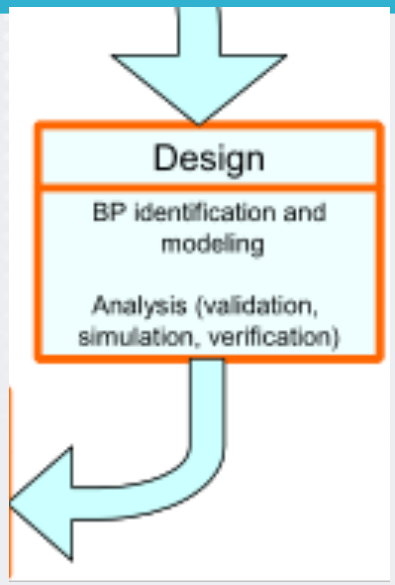


Business Process Modelling Life cycle



Modelling in EPC

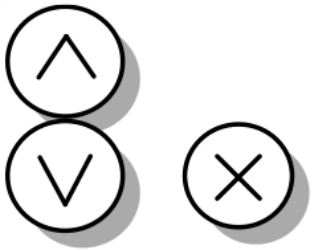




Design: Developing a business process Model

Modelling in Event-driven Process Chain (EPC)

Objects of EPC

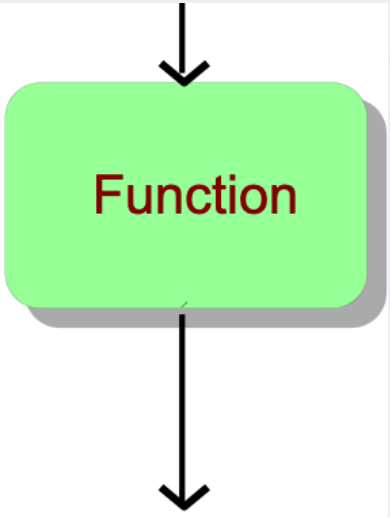
	Describes a specific state the process arrives at. Events can trigger further actions or describe results. An eEPC always has start and an end event.
	Describes an action which is executed because a certain state was reached and also triggers a new state. A purely manual action is depicted by a **green** function. Further objects may be connected to a function.
	Describes the interface to an up- or downstream process. Is named after the corresponding process and is also a type of function.
	Arrows connect objects.
	Connectors connect an object indirectly with other objects. As events and functions may only possess one ingoing and one outgoing arrow, connectors offer the possibility of connecting, for example, a function and two downstream events. The connector type describes which relationship exists between the events: Either only one of the events occurs or multiple events occur siloultaneously.

Rules for EPC Design

- Process chains always start and end with an event (or a process interface)
- Event name corresponds with state (for example: e-mail arrives)
- Function name corresponds with the given task (for example: answer e-mail)
- Set order: event → function → event
- ”Trivial events“ may be omitted
- Functions and events always possess an entrance and an exit
- Connection via logical operators

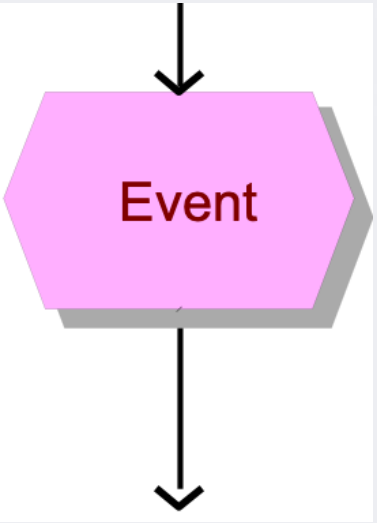
EPC Function

- " a ***Function*** is a task or action performed on a specific object in order to reach one or more business goals. A function is always time consuming"

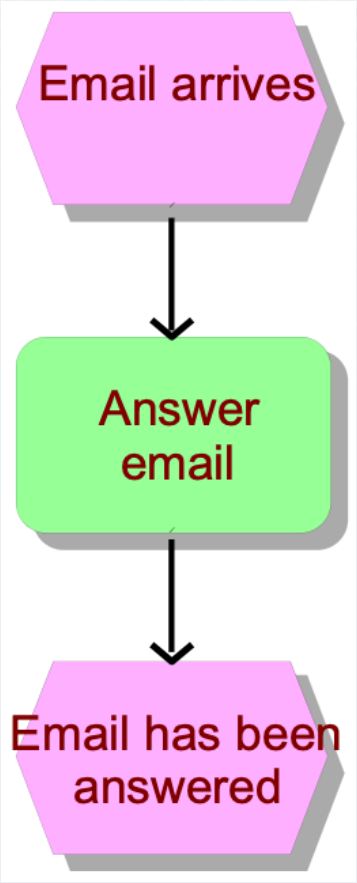


EPC Event

- An **event** is the occurrence of a business relevant state of an information object
- An Event steers or influences a business process.
- Events trigger functions and are in turn the results of functions.
- An event is always related to a point in time.



EPC Structure



- By connecting alternating events and functions so called event driven process chains arise.
- An event driven process chain shows the logical and temporal progress of a business process.

Types of Connectors

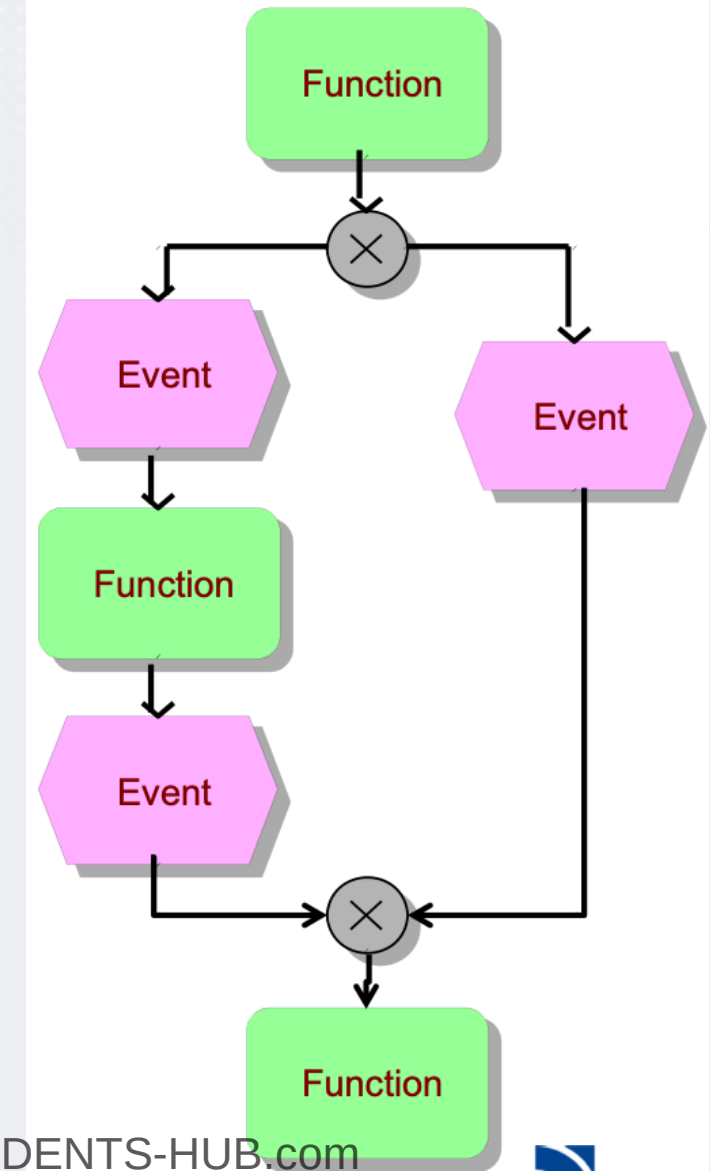
✓ OR (and/or – connector):
If it‘s raining or snowing i won‘t go out.

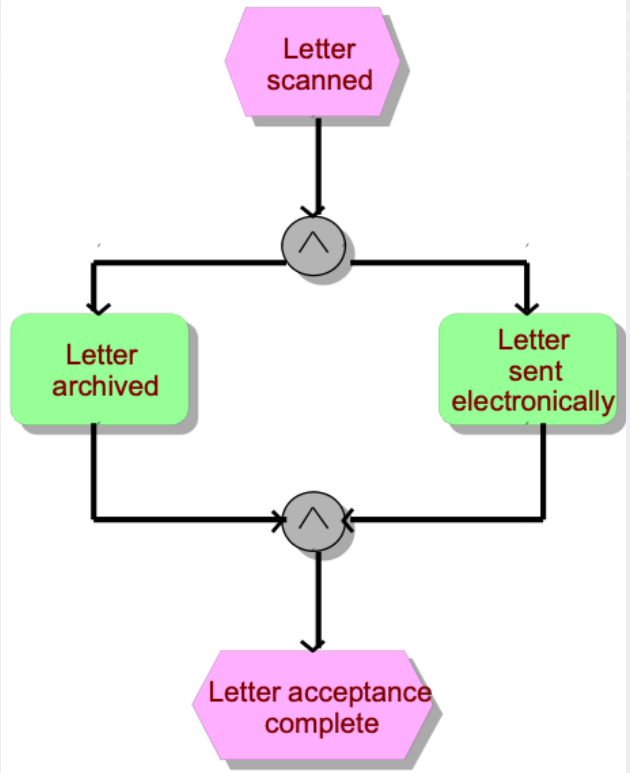
✓ AND (Parallelisation of actions):
Mail is sent and electronically archived.

✓ X-OR (exklusive or: either – or):
Request is conveyed either via mail or by telephone

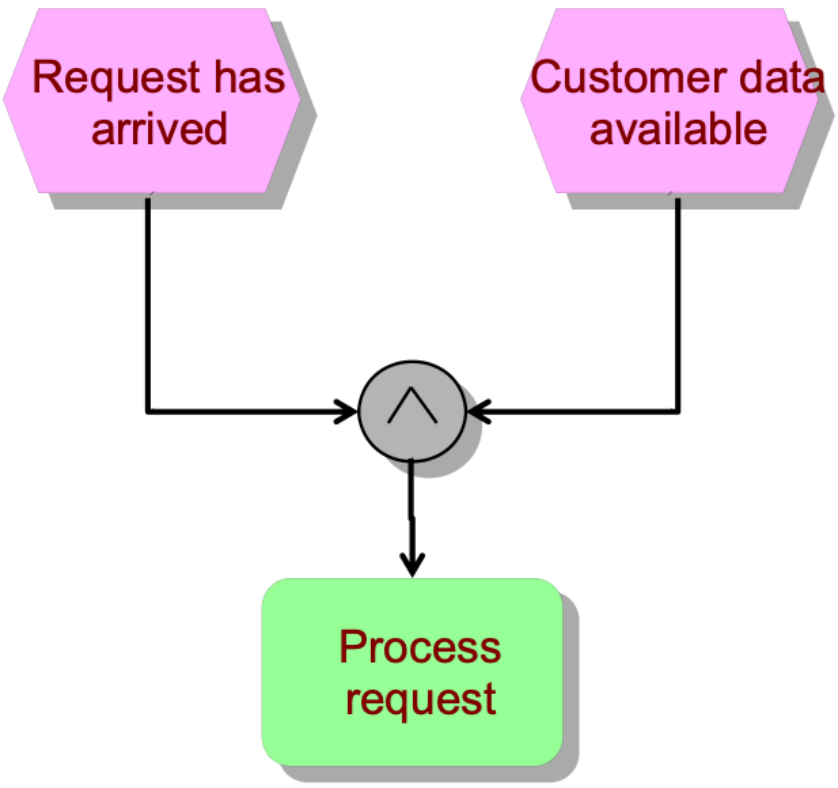
Connectors

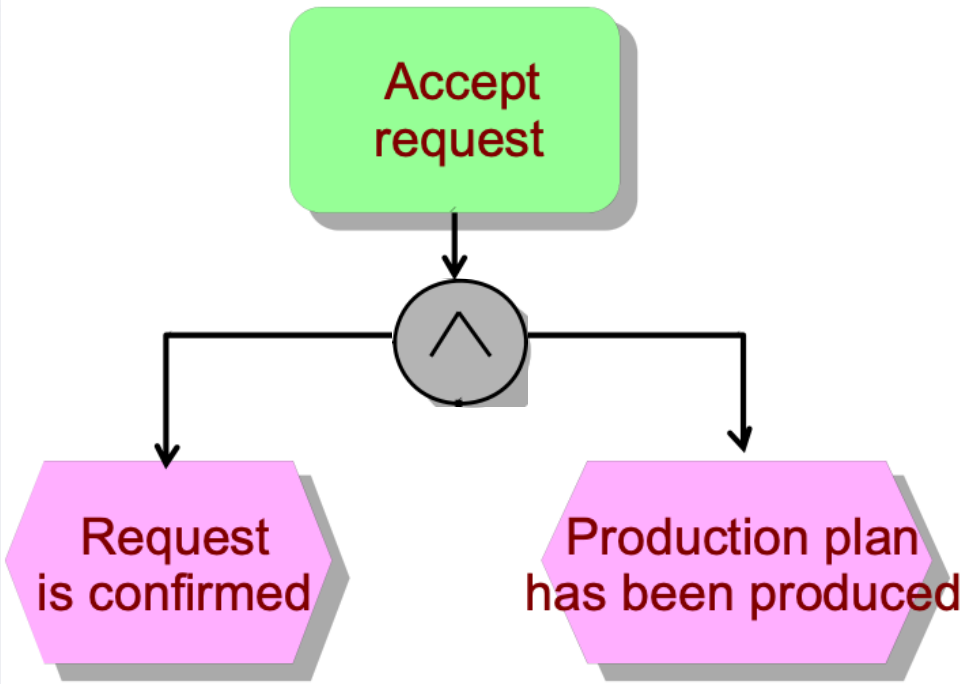
- Opening and Closing connectors



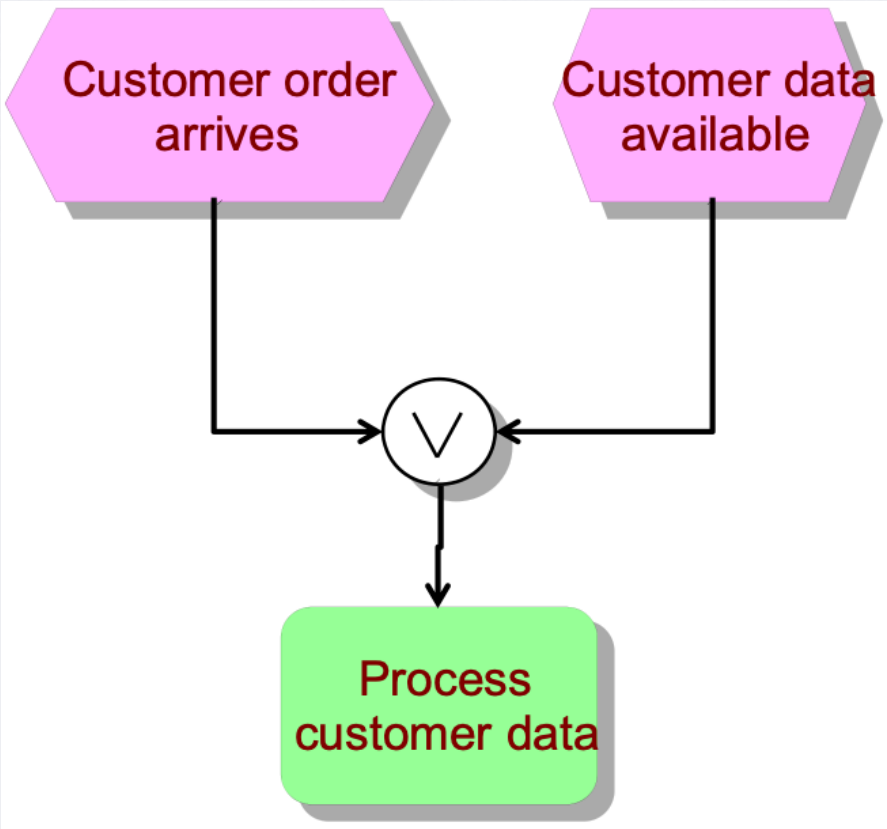


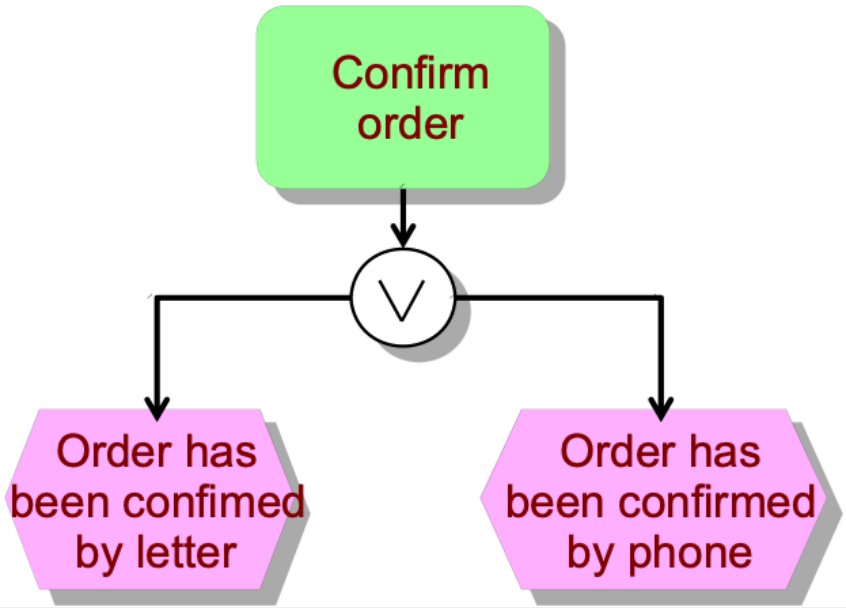
AND connector



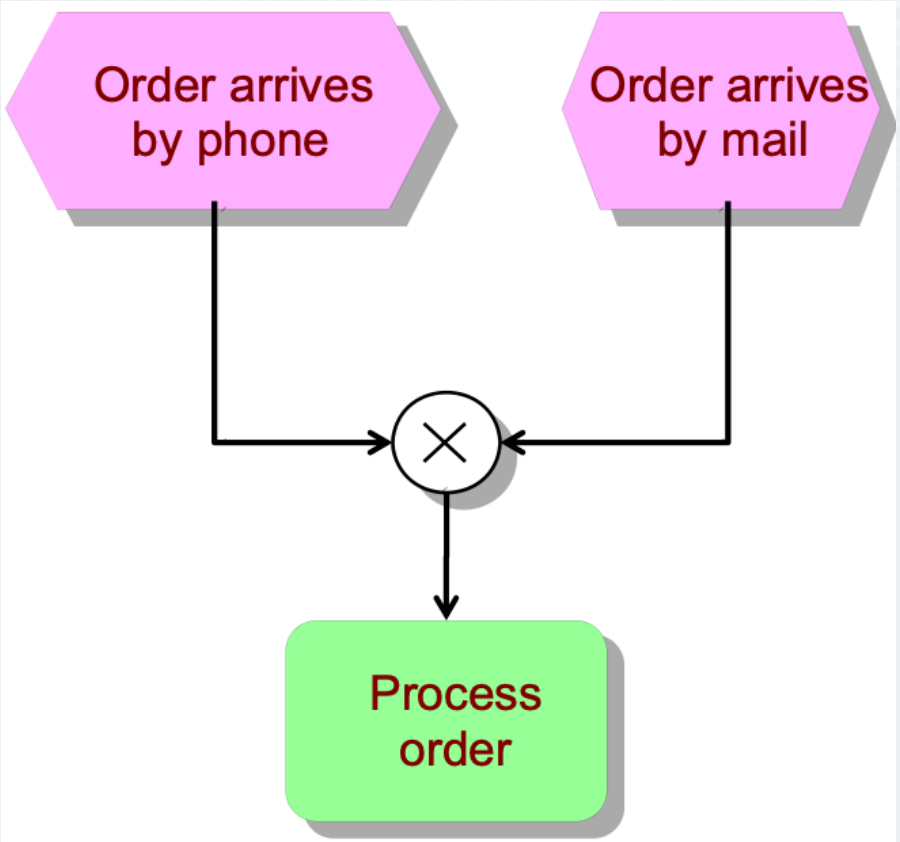


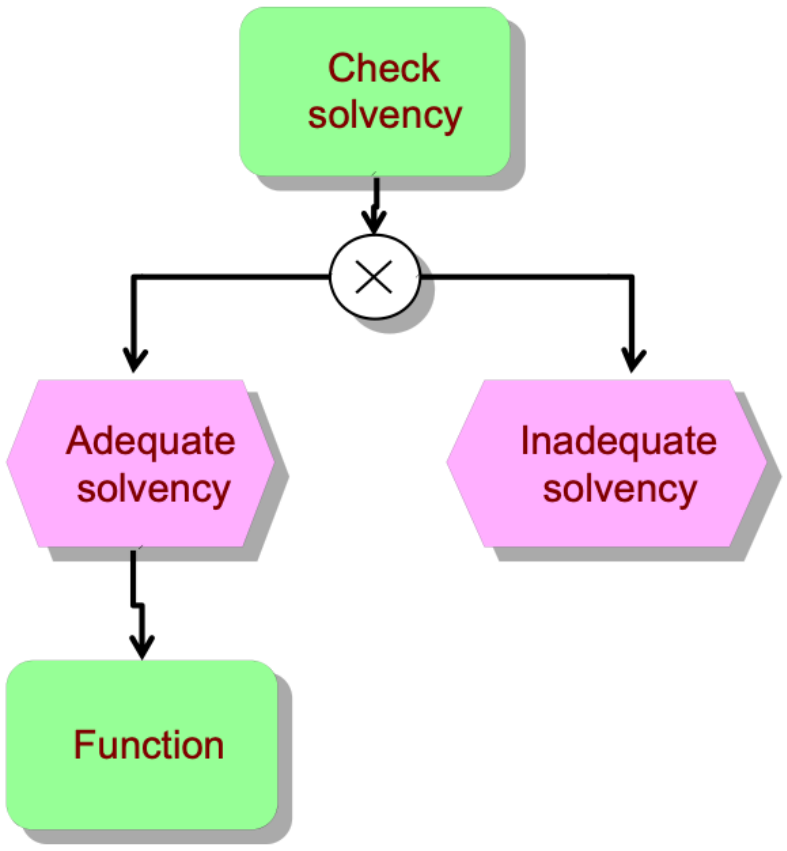
OR connector





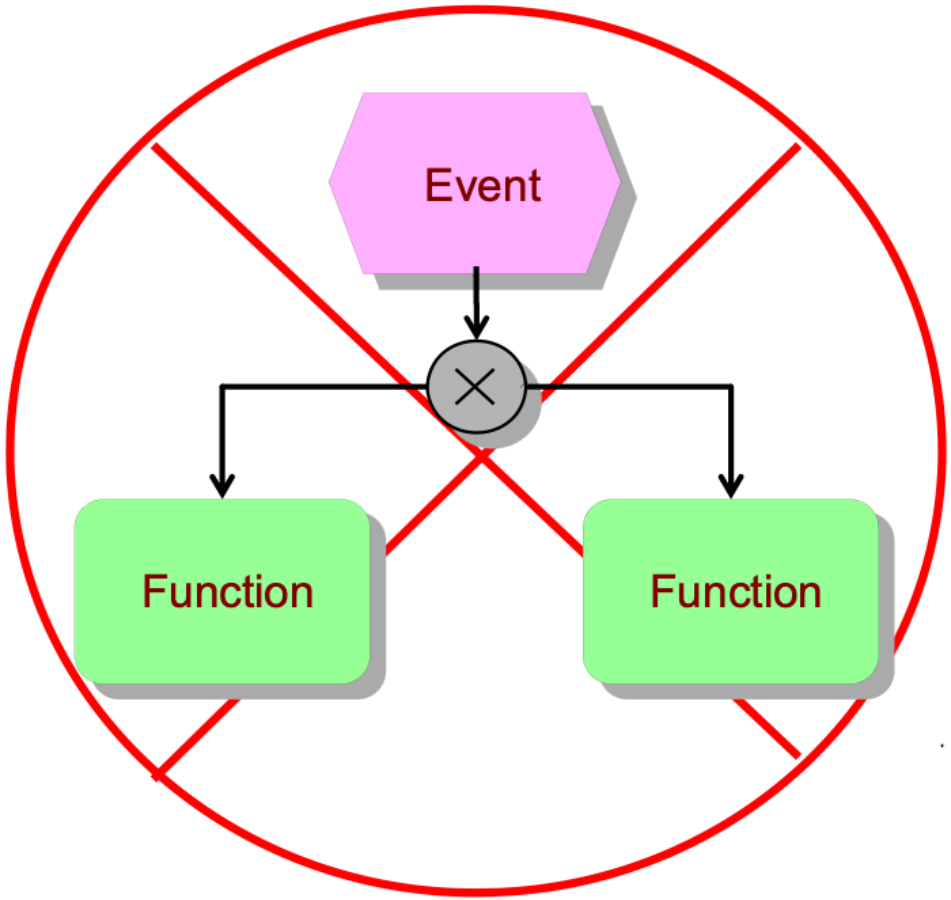
XOR connector

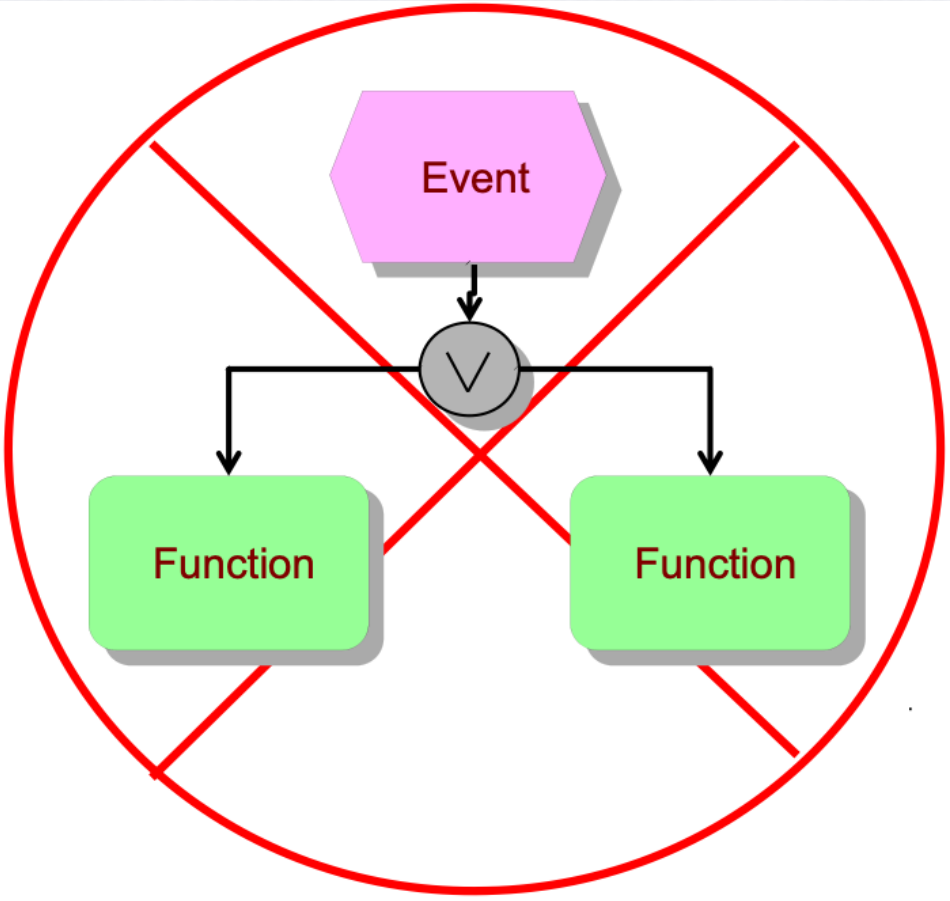




Wrong Connectors

- Wrong XOR, OR connectors, e.g.

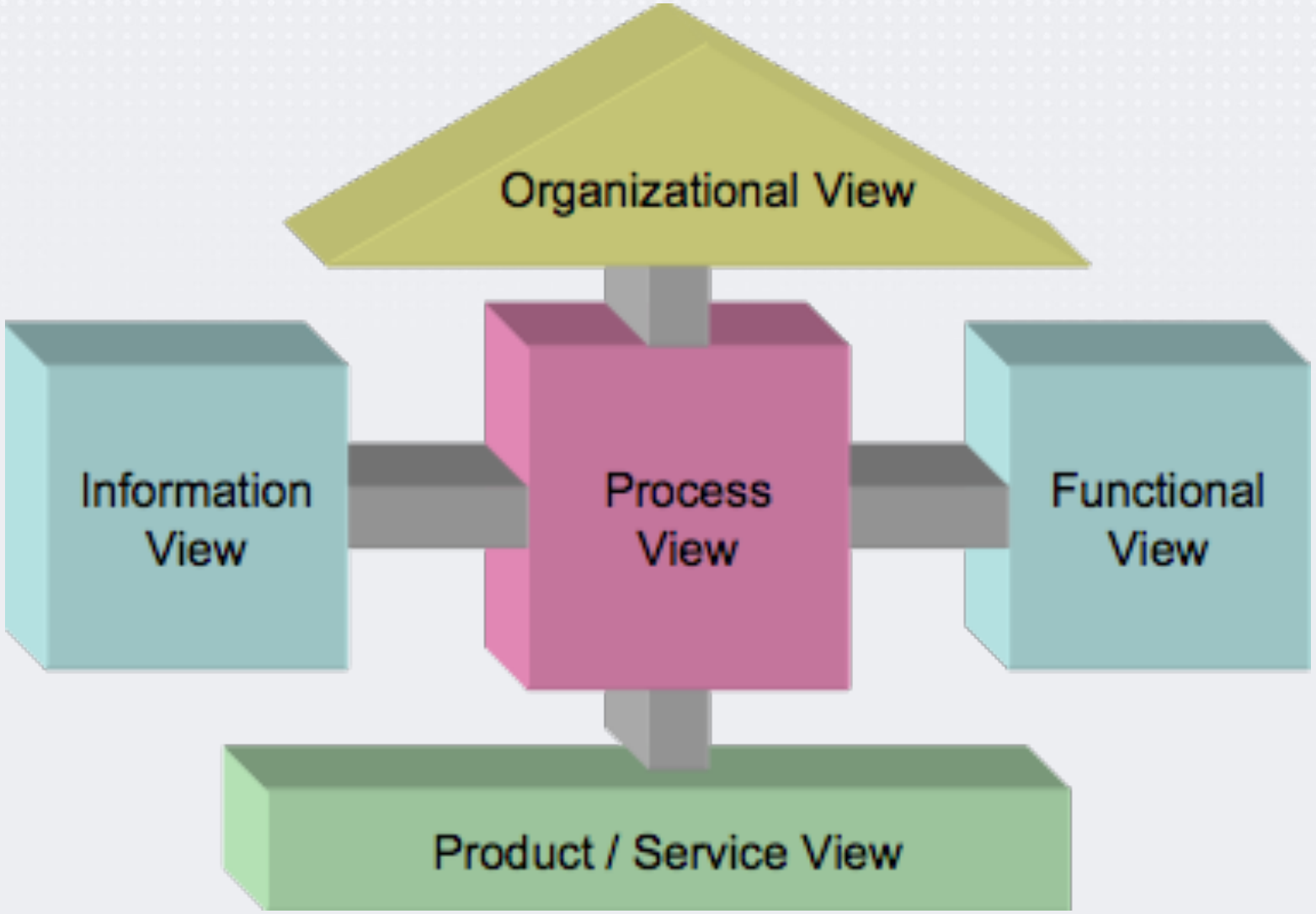




EPC Modelling Example

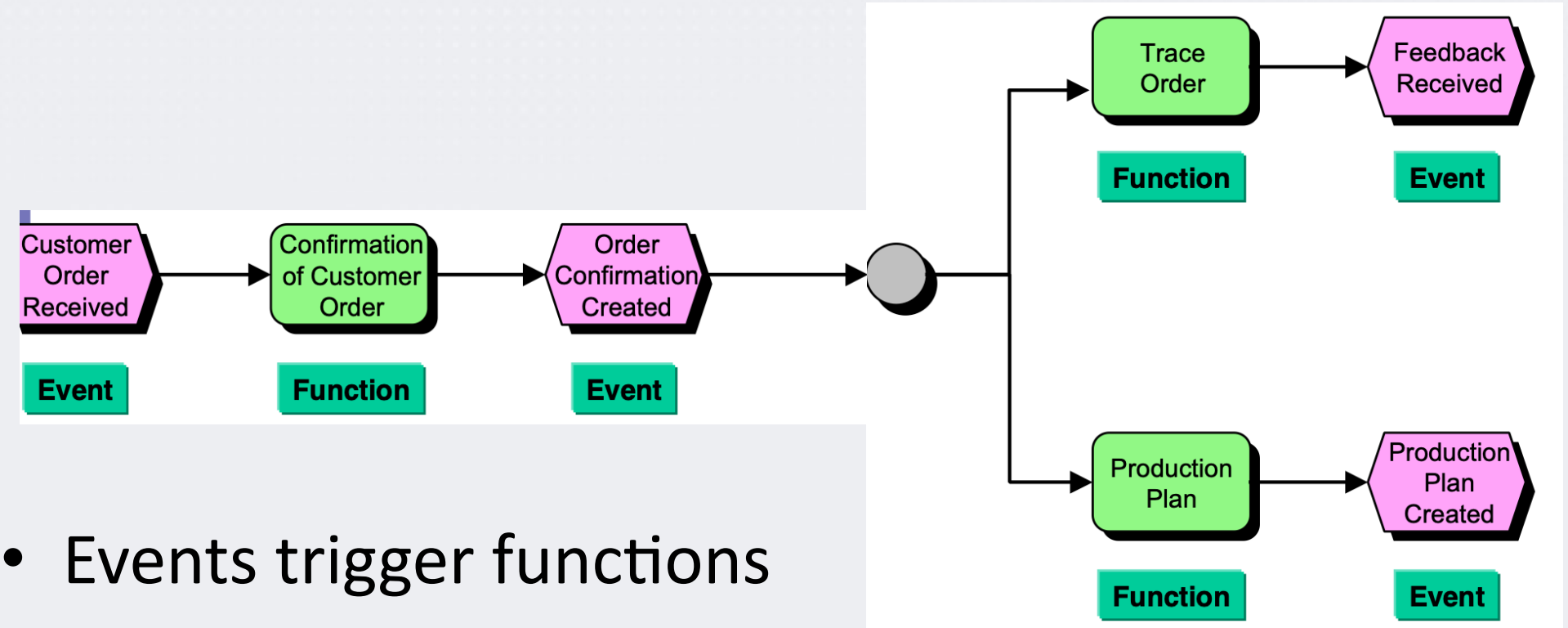
- EPC can generate complex models
- Complete EPC model must include:
  - Event process chains: Events and functions
  - Required/generate data
  - Employees/Roles undertake functions
  - Organisational units that include Employees/Roles

BP reduces complexity: through views



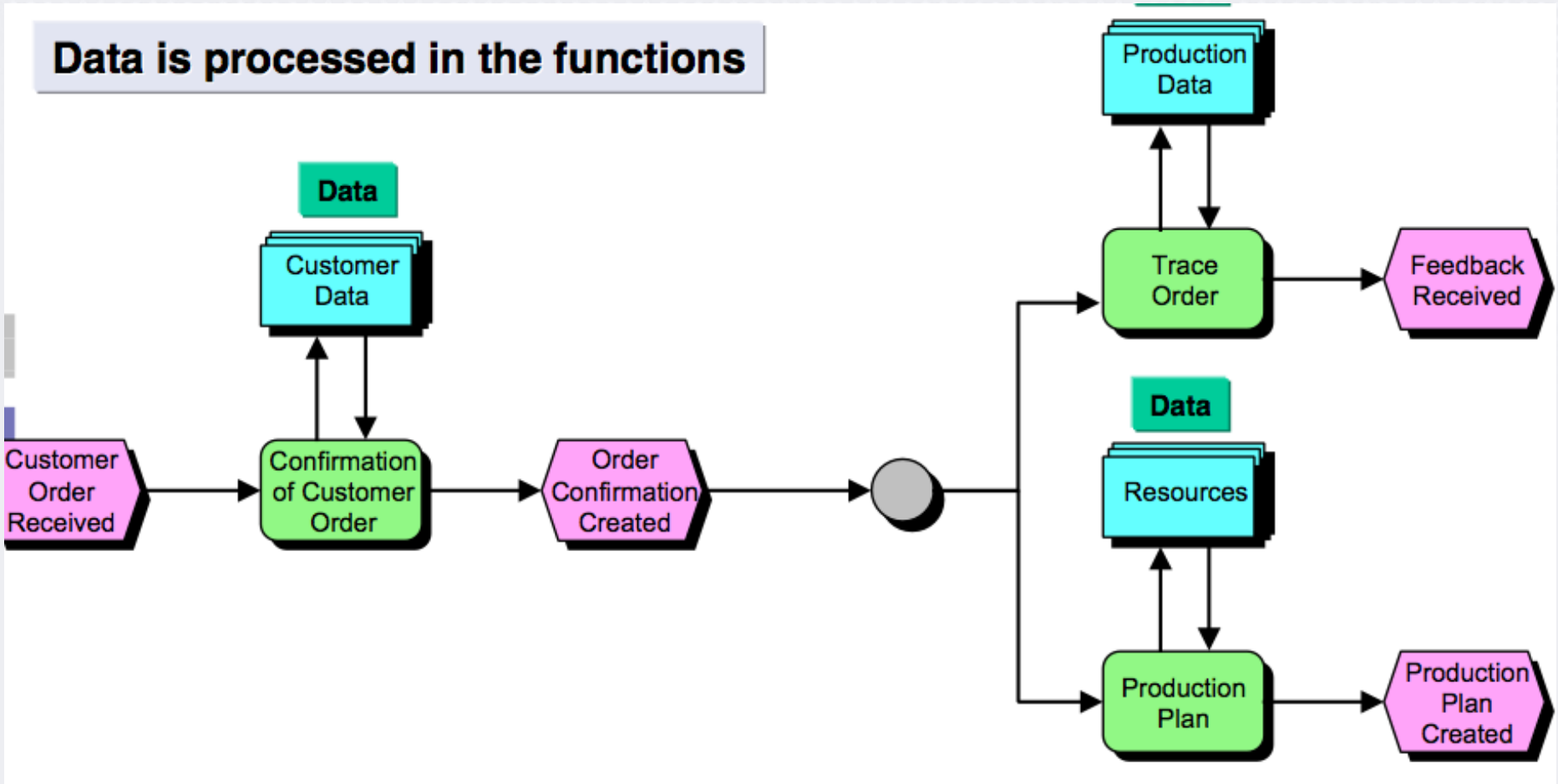
BPM life cycle: BP Components identification and Building

- Event-Driven Modelling: Event Process Chain

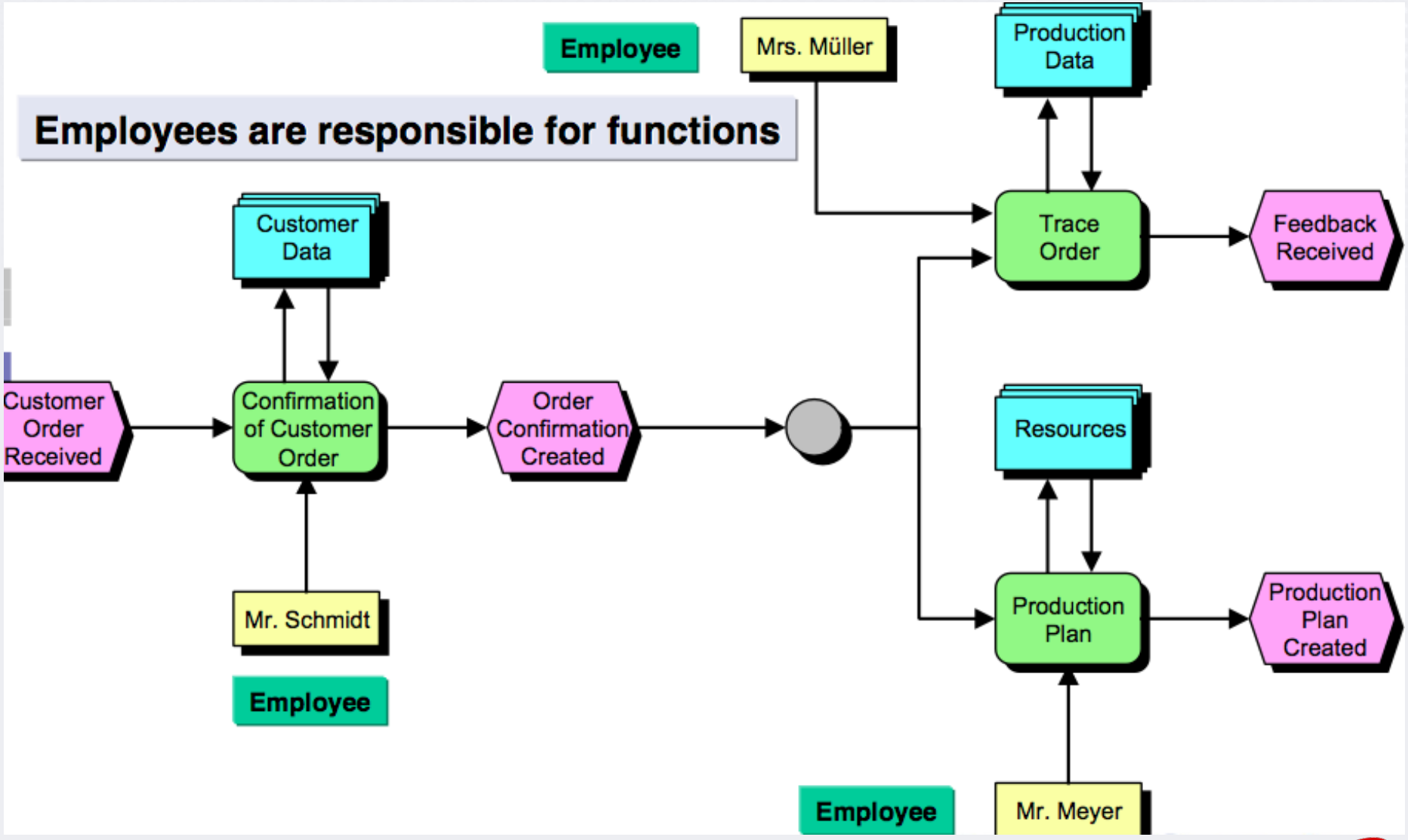


- Events trigger functions
- Functions generate Events

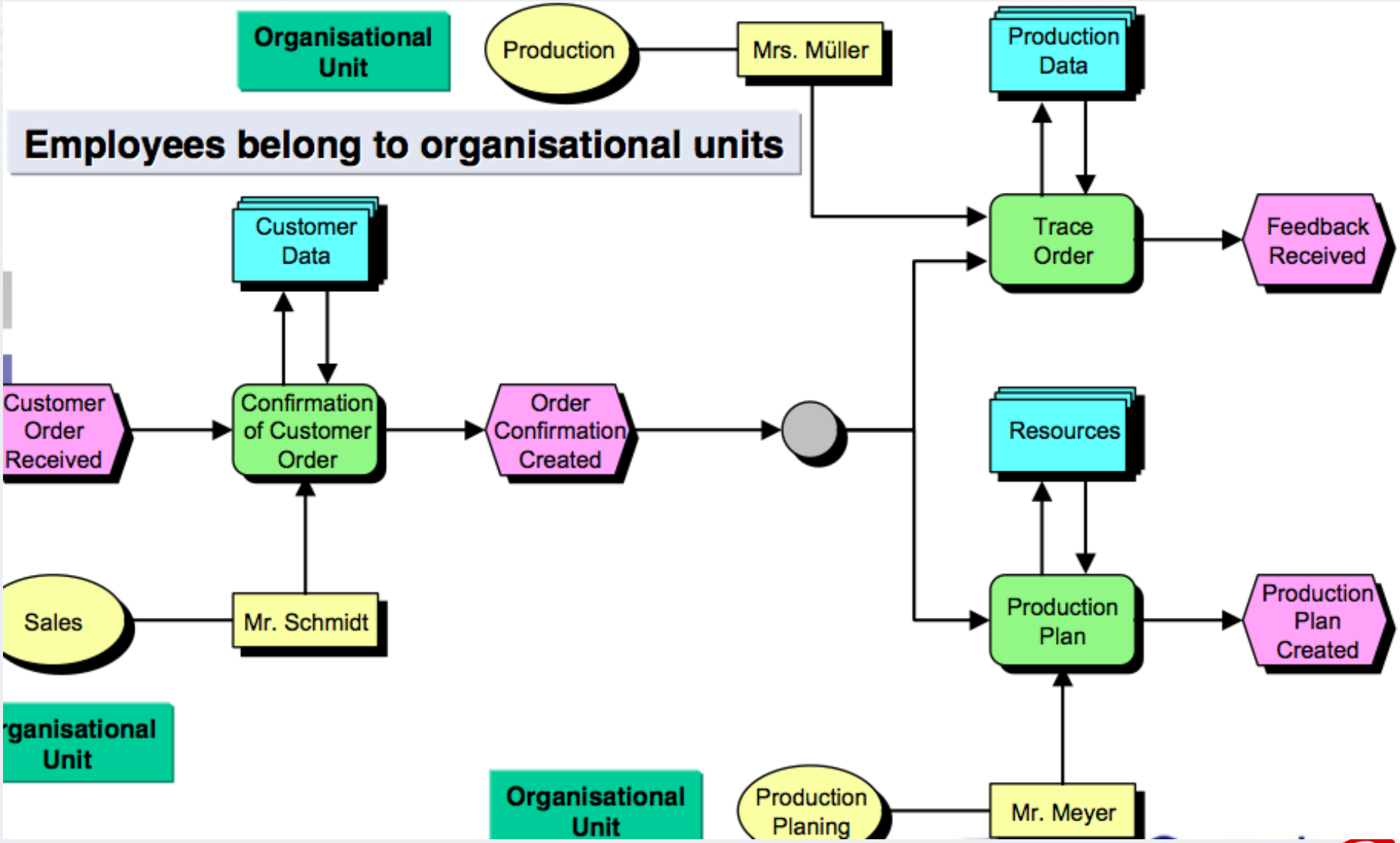
BPM life cycle: BP Components identification and Building



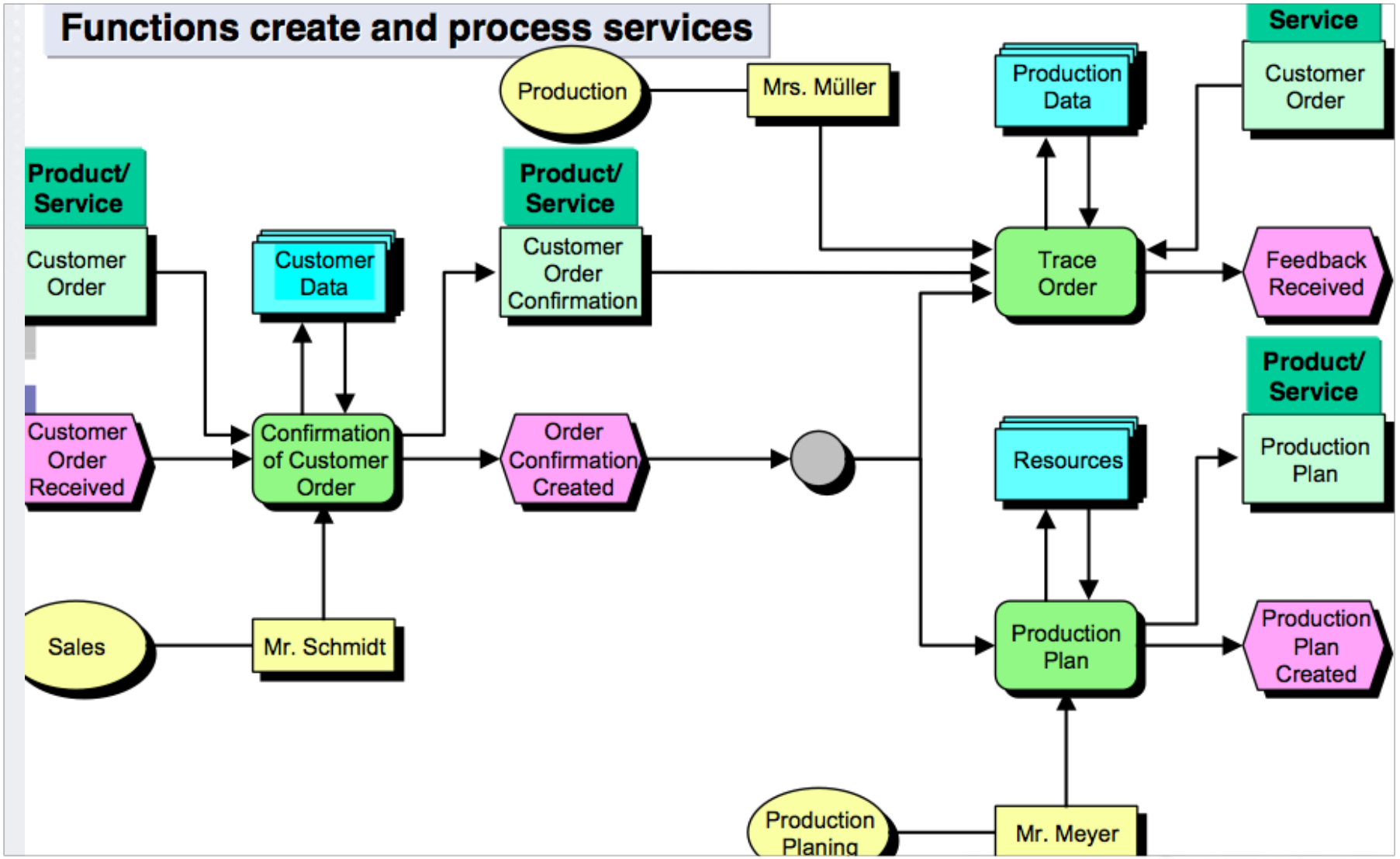
BPM life cycle: BP Components identification and Building



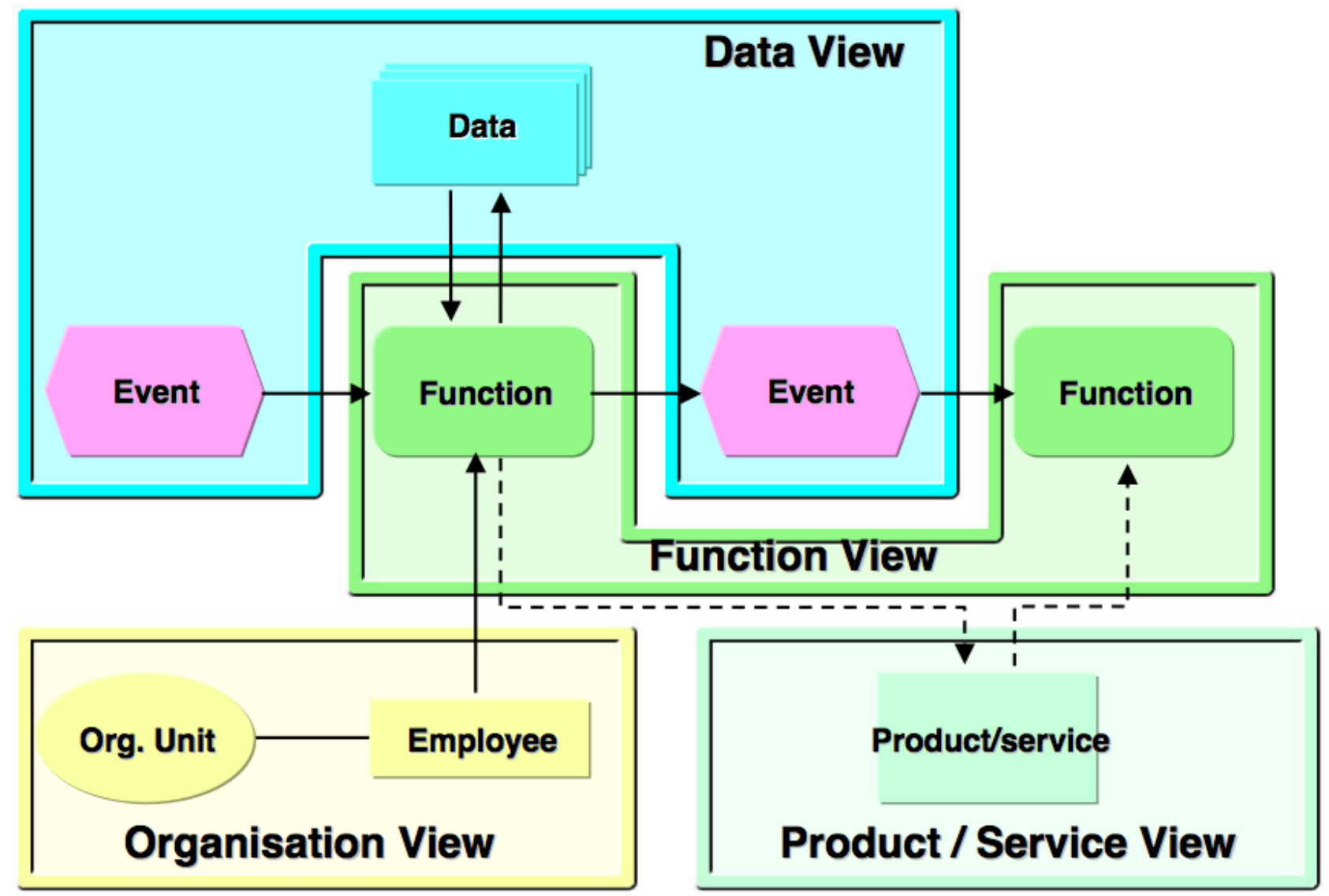
BPM life cycle: BP Components identification and Building



BPM life cycle: BP Components identification and Building

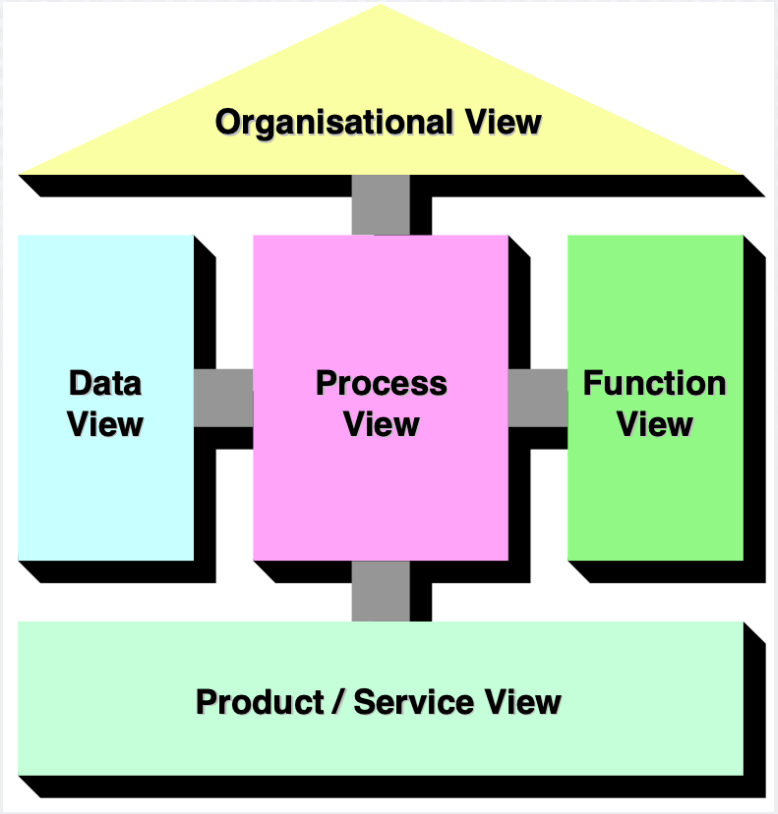


Reduced Complexity, through Views



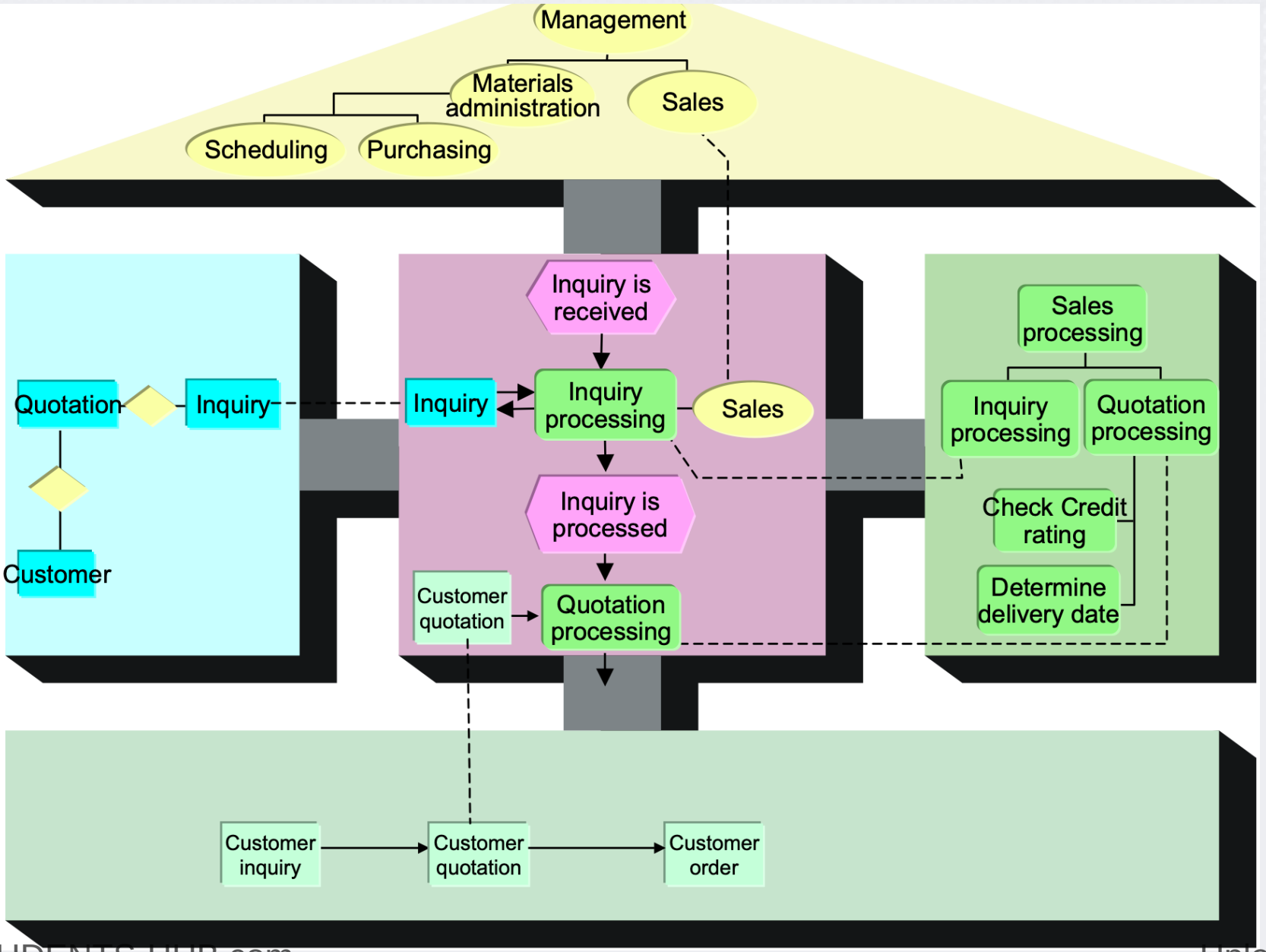
Simplified View

- Data View
  What information is important? (ie.: Customer, Supplier, Product, Material Calculation)
- Function View
  Which functions will be performed? (ie.: Production Plan Creation, Order Processing)
- Organisation View
  Which organisational units exist? (ie.: Purchasing, Sales, Accounts)
- Process View
  The relationship between data, functions and organisational units
- Product/Service View
  Which products/services are important? (ie.: checked order, customer invoice)



ARIS = Architecture of Integrated Information Systems

Integrated View



- ARIS framework