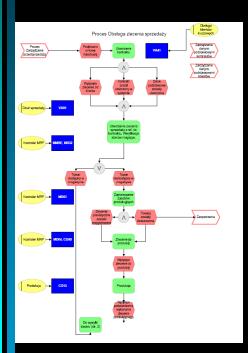
## International Logistics Logistics Business Process Management (Logistics BPM) Workshop 3



dr . Marian Krupa





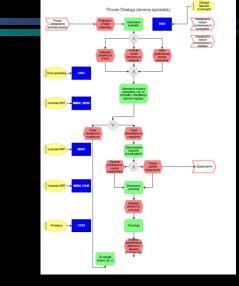
Business Process Management (EPC):

### How to design an efficient and integrated logistics process (SCM)?





#### **TASK:**



The consulting firm Business Processes Ltd. has a contract to develop a selected business process for its key customer.

The first step is to design a "Sales and Distribution" process by EPC

So, please project, draft a graph of the given process by using EPC (Event-driven Process Chain) methodology.

You support the graph development process by Diagram Designer or any other softwer.

### Integrated business process

#### Sales and Distribution (ERP)

1. Contract creation.

SD

SD

WM

WM

WM

SD

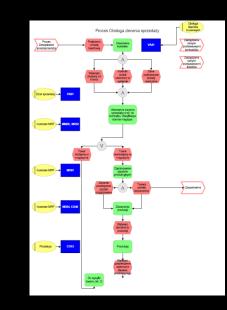
FI

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BI

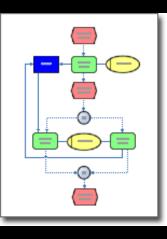
QM

- 2. Sales order (SO) with reference to the contract
- 3. Warehouse order creation with reference to the SO.
- 4. Material movement / picking-up the stock.
- 5. Posting the material movement.
- 6. Invoice posting and publishing.
- 7. Receivables analysis.
- 8. Payment posting.
- 9. The contract status analysis.
- 10. Quality evaluation of the process.



# **EPC methodology**

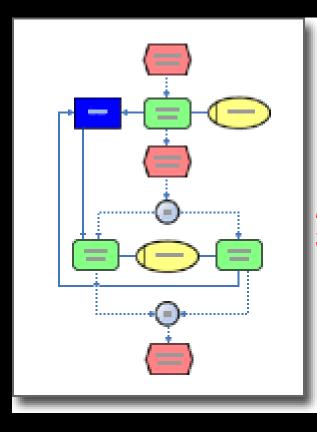
overview

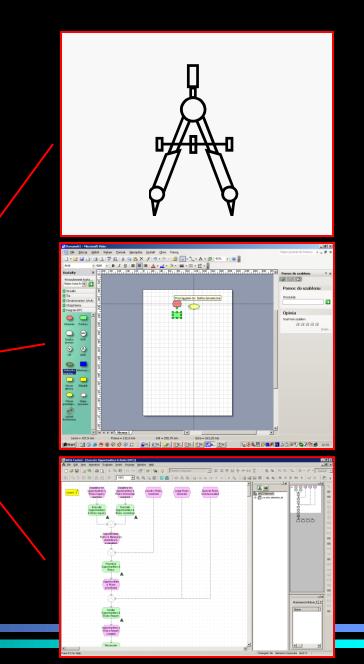


### EPC - (Event-driven Process Chain)

- EPC diagrams are used to lay out business processes (Logistics, SCM), workflows, originally in conjunction with software ARIS IDS Sheer / SAP R/3 modeling.
- Now we can use it more widely.
- In general, EPC is an ordered graph of events and functions.

#### There are a number of tools for creating EPC diagrams





#### "baber

#### VISIO

ARIS

#### Elements of an event-driven process chain

- EVENTS passive elements in EPC. They present inputs or outputs – all conditions and requirements for any given function. EPC diagram must start with an event and end with an event.
- FUNCTIONS active elements in EPC and they represent tasks, activities in the process. They describe transformations from an initial state to a resulting one.
- Logical connectors (LC) logical relationships between elements in the control flow. There are 3 types LC: AND, OR and exclusive OR (XOR).

EVENT

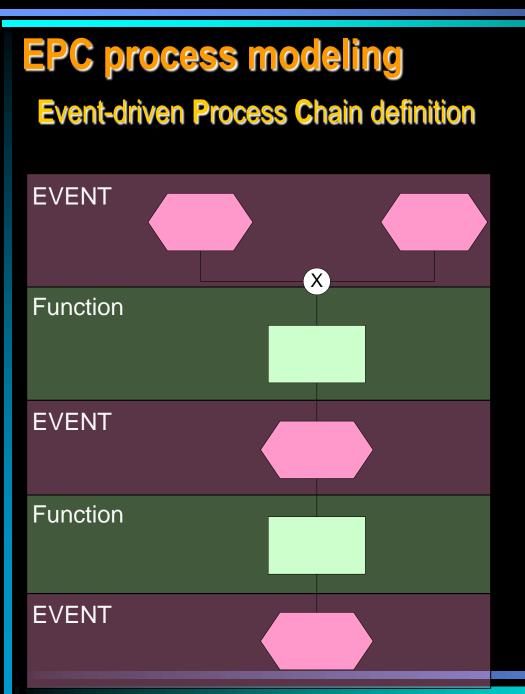
**FUNCTION** 

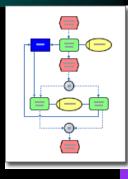
**EVENT** – presents inputs or outputs – all conditions and requirements for any given function.

Description	Mean of Information (noun)	ACTION: What has happened?
There is an order from our customer	Sales Order	was delivered

**FUNCTION** – represents a task, activity in the process. They describe transformations from an initial state to a resulting one.

Description	ACTION: What do you do? (verb)	Mean of Information
The Sales order was created in the system	Create	Sales Order in the system





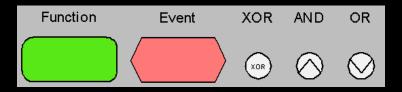
Functions depend on events.

- Event/ Events start the EPC flow.
- The function is started by an event and is finished by an event.
- A new event leads to a new function.

 By setting events-functions and events you create a chain.



### **Logical connectors:**





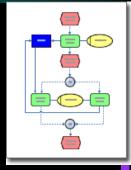
XOR (Branch/Merge) – just one, and only event activates / ends the following function)

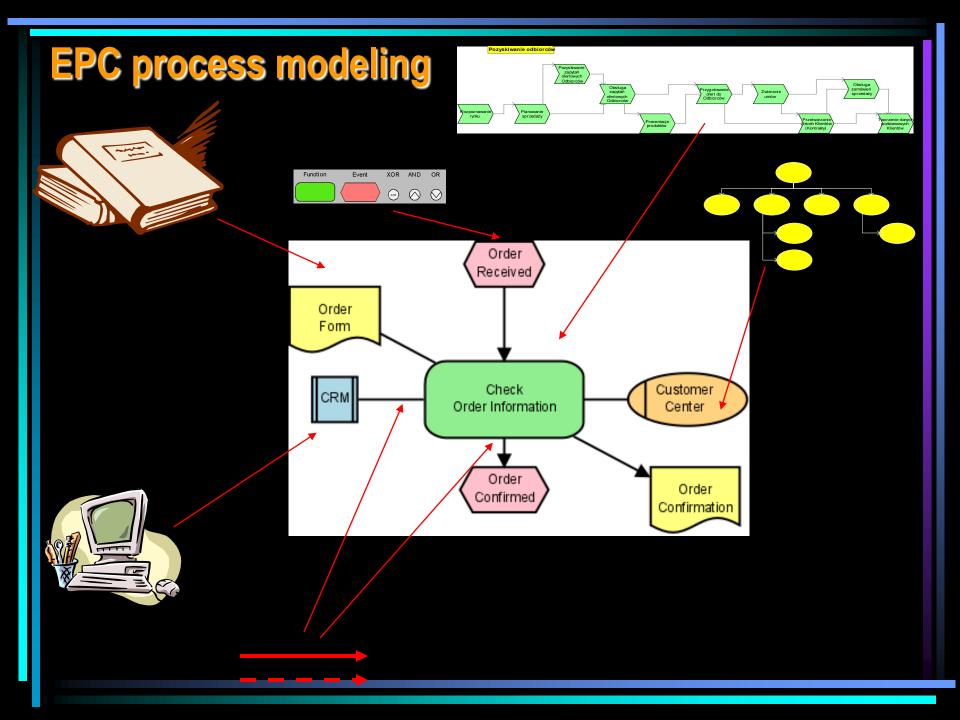


AND (Fork/Join) – all events activate / end the following function)



**OR (Or)** – one or more events, any events activate / end the following function)

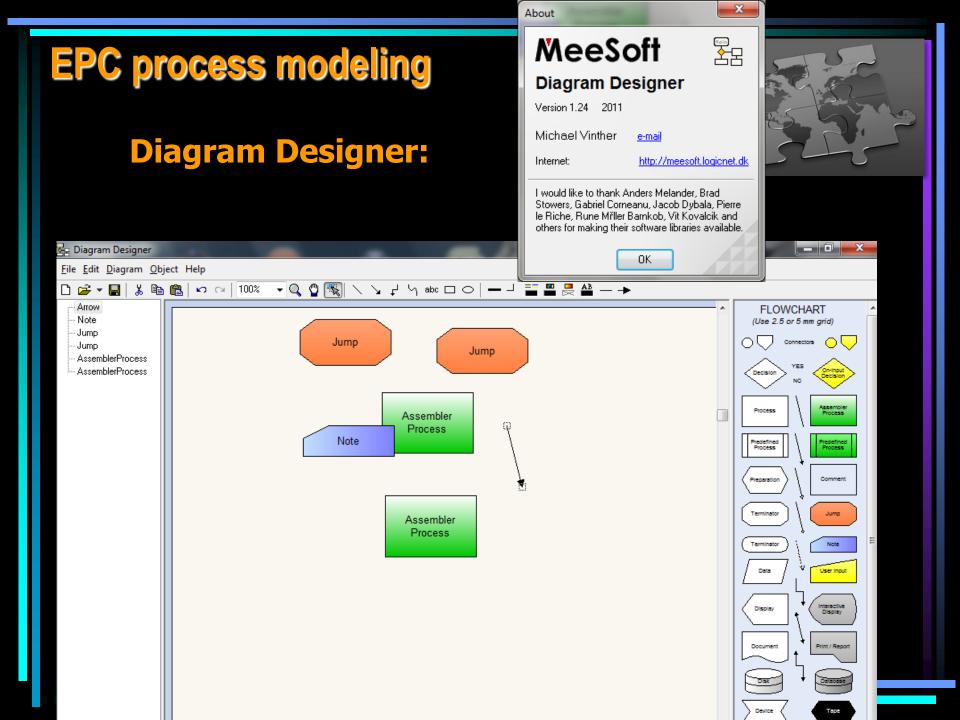




#### **EPC road map:**

- 1. Name the selected business process.
- 2. Define the main objective of the process.
- 3. Define <u>all the functions that you have in the process</u>.
- 4. Connect all functions to events and logical connectors.
- 5. Connect all functions to the organizational structure.
- 6. Link all documents to any given function.
- 7. Define IT support / name software and transactions
- 8. Describe all links between all processes.
- 9. Present all options for better process optimization (KPI).

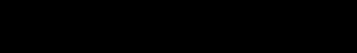


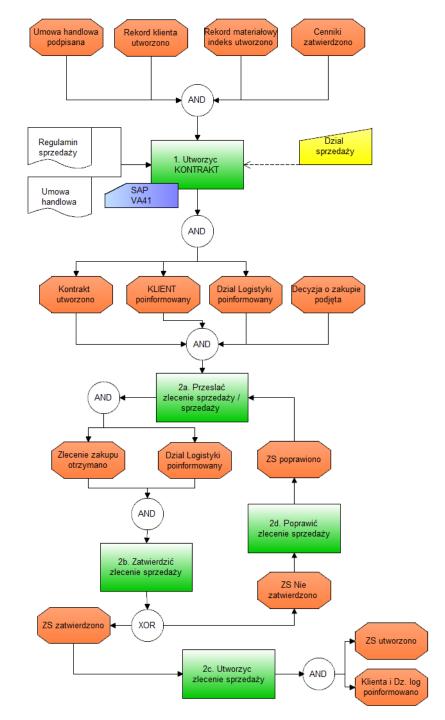




#### **Diagram Designer:**

#### example





# Questions?



#### • dr Marian Krupa