## 8. Business Process Modeling

#### **Abdus Sattar**

Assistant Professor

Department of Computer Science and Engineering

Daffodil International University

Email: abdus.cse@diu.edu.bd



## **Discussion Topics**

- ☐ Business process modeling(BMP)
- Notation defining workflows
- □ Some rules for creating BPN
- BPM example and practicing
- ☐ Why does BPM uses?
- □ Integrating Requirements and Business Process Models in BPM Projects(Online Materials)

## **Business Process Model(BPM)**

- □ Business process modeling is the graphical representation of a company's business processes or workflows, as a means of identifying potential improvements.
- ☐ Business process modelling represents:
  - Business activities,
  - Information flow and,
  - Decision logic in business processes.

#### **Elements of BPS**

Start Event

A Start Event indicates where a particular process will start.



**Intermediate Event** 

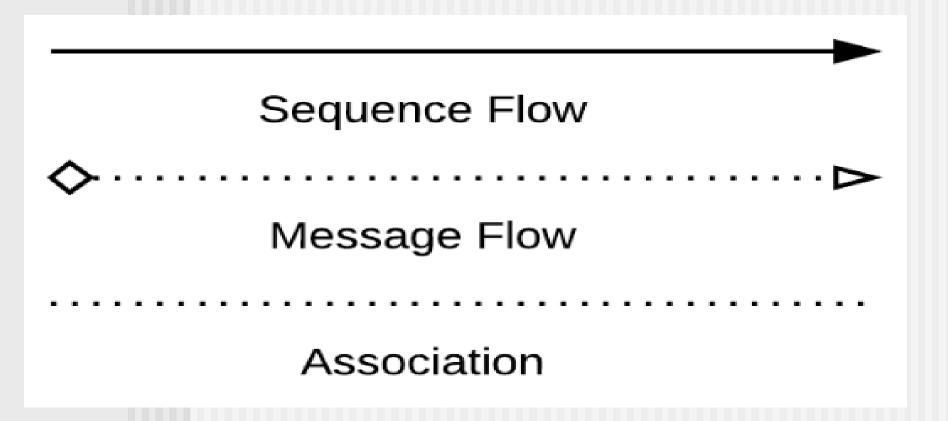
Intermediate Events occur between a Start Event and an End Event. It will affect the flow of the process, but will not start or (directly) terminate the process.



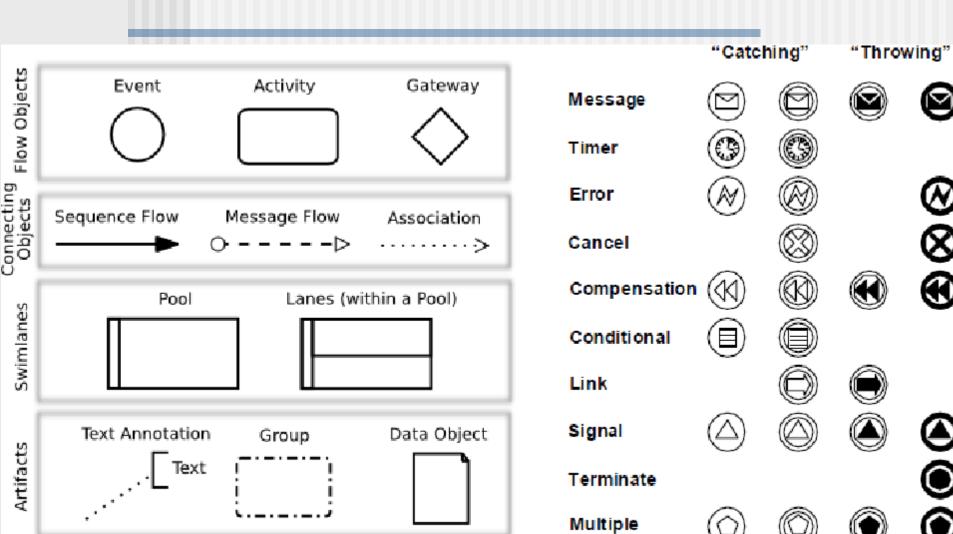
**End Event** 

An End Event indicates where a process will end.

#### **Elements of BPS**



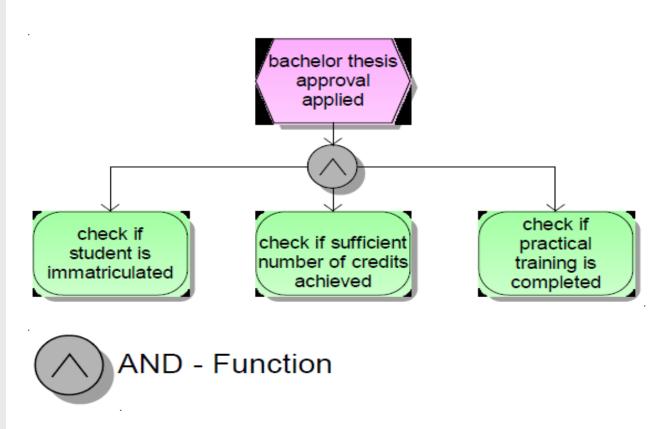
#### **Elements of BPS**



# **Gateway Types**

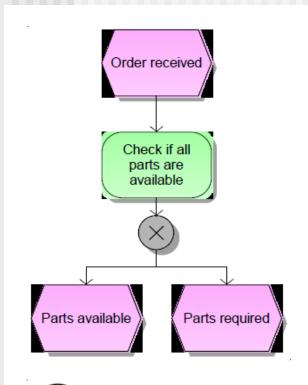
Konnectors:	AND	Split	
		Join	<b>→</b>
	OR	Split	<b>←</b> →
		Join	<b>→</b>
	XOR	Split	<b>←</b>
		Join	<b>→</b>

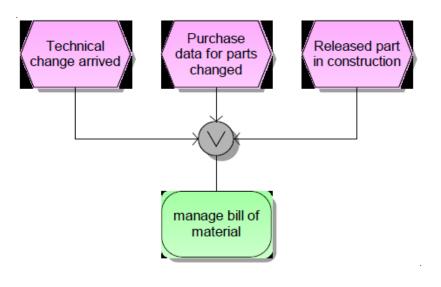
## **Logical Connectors**



After the event, all the functions are started

## Different Types of "OR"





Exclusive OR - Function

After the Function just one event is occuring

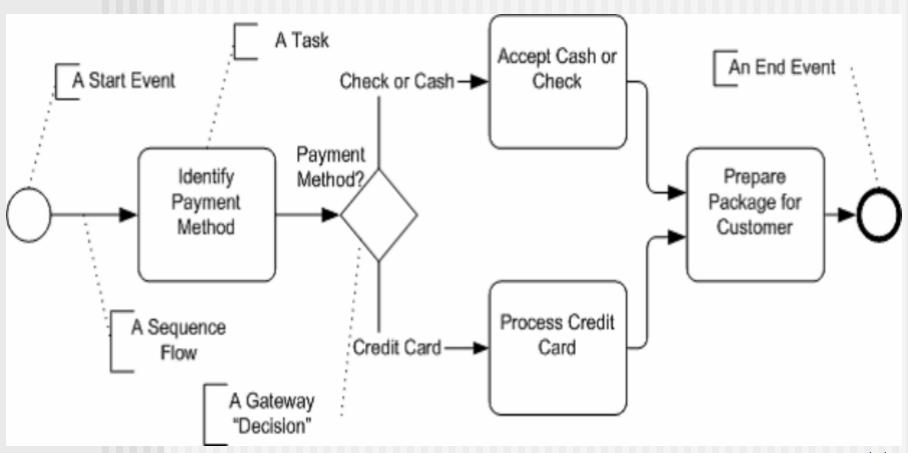


Function can only be started if one or more events have occurred

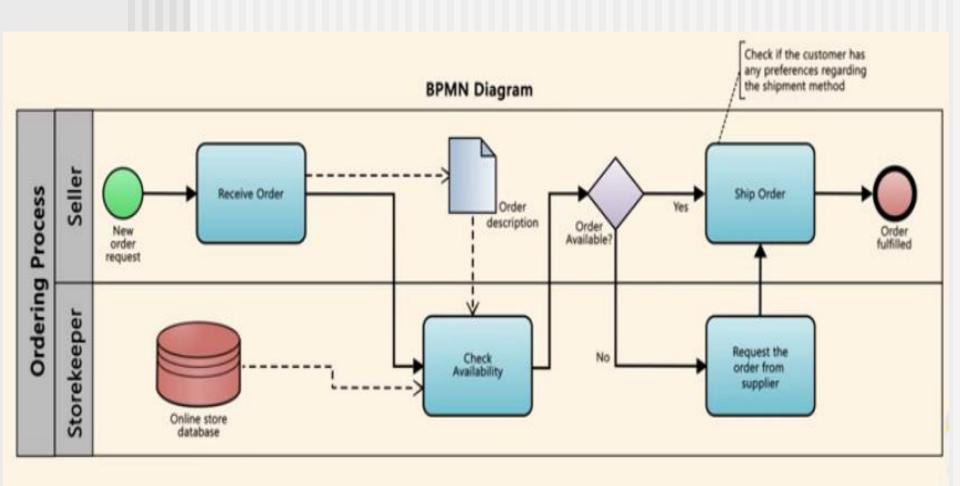
#### Some rules for EPCs

- at least one function
- at least one start event
- at least one end event
- each function is preceded and followed by an event
- an event is preceded and followed by a function, except the start and end events
- each event and function has, at most, one ingoing and one outgoing flow
- splits and joins are realised via connectors
- an OR or XOR split cannot be invoked by an event (events cannot decide anything)

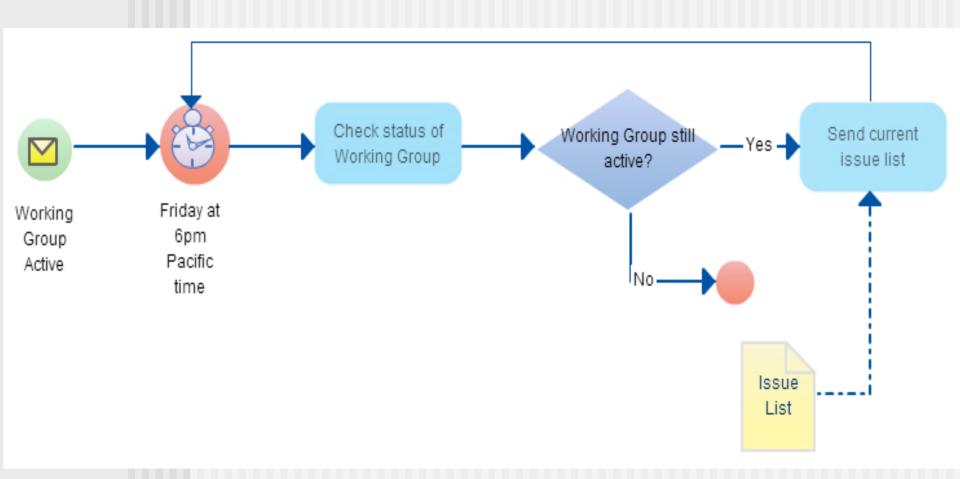
#### **Business Process Model for Payment Process**



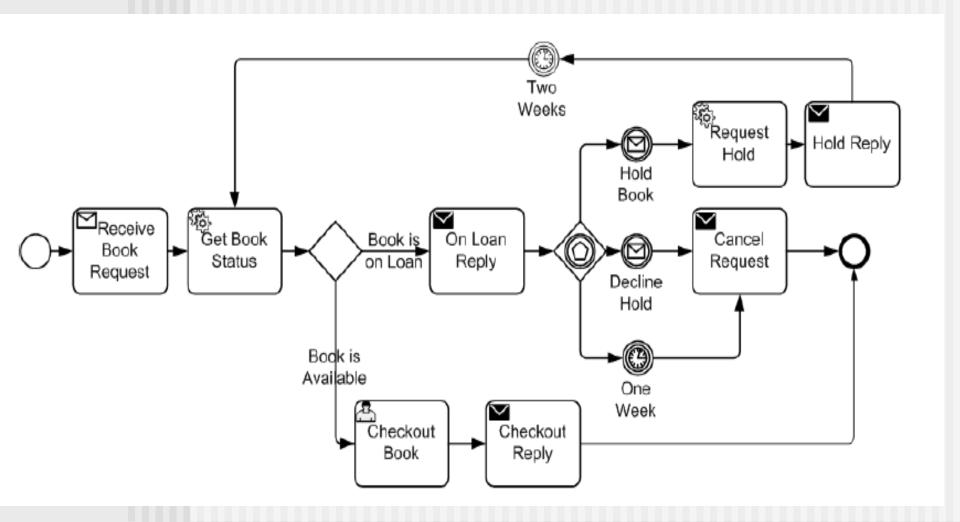
# **BPM for Ordering request**



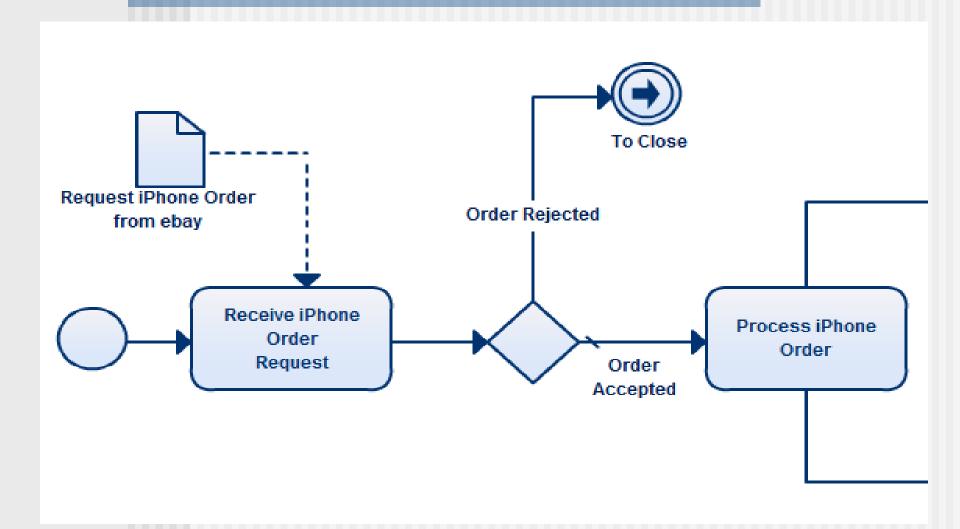
# A Business Process Modeled Using BPN Notation



# Business Process Model for Book Requisition Request



# **Business Process Model for product** order from ebay



# Why Use Business Process Modeling

- 1. Align Operations with Business Strategy
- 2. Improve Process Communication
- 3. Increase Control and Consistency
- 4. Improve Operational Efficiencies
- 5. Gain Competitive Advantage