













BPMN Basics

	Event	Events represent something that will happen during a process.
	Activity	Activities represent the steps performed within a process.
	Gateway	Gateways represent point of decision within a process.
	Flow	A flow represents the order that activities will be performed.

Activities

Tasks

A task is a simple activity that is used when the work performed within the process is not defined at a more detailed level. BPMN defines different types of tasks:

	Abstract Task		User Task
	Service Task		Manual Task
	Send Task		Business Rule Task
	Receive Task		Script Task

Understanding Each Task

Service Task: Done by software.

Send Task: Technical, executed by a process engine.

Receive Task: Receive a message to begin a task.

User Task: Performed by a person as assigned by process engine.

Manual Task: Done by a person, outside of process engine.

Business Rule Task: Used to apply business rules.







Script Task: Script executes directly in process engine.

Sub-Process

A Process that is included within another Process. The Sub-Process can be in a collapsed view that hides its details. A Sub-Process can be in an expanded view that shows its details within the view of the Process that it is contained in.






	Sub Process		Ad hoc Sub Process
	Transaction		Event Sub Process

Start Events







-  **None Start Event**
Does not specify any particular behaviour. It is also used for a Sub-Process.
-  **Message Start Event**
A process starts when a message is received from another participant.
-  **Timer Start Event**
Indicates that a process starts at a certain time or on a specified date.
-  **Conditional Start Event**
A process starts when a business condition becomes true.
-  **Signal Start Event**
A process starts when a signal coming from another process is captured, Note that the signal is not a message.
-  **Multiple Start Event**
Indicates that there are many ways to start the process. Only one of them will be required to start the process.

Gateways


A gateway doesn't perform any work or make decisions; it is simply a visualisation of *divergence* or *convergence* of flow.





-  **Exclusive Gateway**
Used to create alternative flows in a process. Because only one of the paths can be taken, it is called exclusive.
-  **Event Based Gateway**
The condition determining the path of a process is based on an evaluated event. It is always followed by catching events or receive tasks.
-  **Parallel Gateway**
Used to create parallel paths without evaluating any conditions.
-  **Inclusive Gateway**
Used to create alternative flows where all paths are evaluated. When merging, it awaits all active incoming branches to complete.
-  **Complex Gateway**
Used to model complex synchronisation behavior, triggering one or more branches based on complex conditions or verbal descriptions.

Intermediate Events









-  **None Intermediate Event**
Indicates something that can occur within the process. It can only be used within a sequential flow of a process.
-  **Message Intermediate Event**
Indicates that a message can be sent or received. If the event is reception, it indicates that the process has to wait until the message has been received.
-  **Timer Intermediate Event**
Indicates a waiting time within the process. This type of event can be used within the sequential flow indicating a waiting time between the activities.
-  **Conditional Intermediate Event**
Is used when the flow needs to wait for a business condition to be fulfilled, It can be used within the sequential flow, indicating that it should wait until a business condition has been fulfilled.
-  **Signal Intermediate Event**
Is used to send or receive signals. If it is diagrammed within the sequential flow of a process, it can send or receive signals. If it is diagrammed attached to a boundary of an activity, it can only receive signals and indicating an exception flow that is activated when the signal is captured.
-  **Multiple Intermediate Event**
This means that there are multiple triggers assigned to the event.

Data

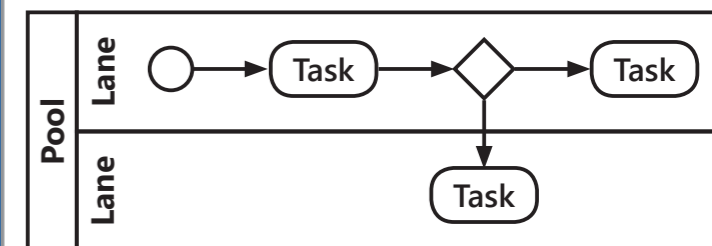
 A Data Object represents information flowing through the process, such as business documents, e-mails or letters.

-  Data Object Collection
-  Data Input
-  Data Output
-  Data Store

End Events

-  **None End Event**
Indicates that a route of the process has reached its end. A process can only finish when all the routes of the flow arrive at an end.
-  **Message End Event**
Indicates that a message is sent to another process when the process arrives at the end.
-  **Signal End Event**
Indicates that a signal is generated when the process ends.
-  **Multiple End Event**
Indicates that many results can be given at the end of the process. All the results should occur.
-  **Cancel End Event**
Is only used in Transaction Sub-Processes and indicates that the Transaction should be cancelled.
-  **Error End Event**
Indicates that a named Error is generated when the process ends.
-  **Compensation End Event**
Indicates that the process has finished and that a compensation is necessary.
-  **Terminate End Event**
Used to indicate that the process has completely finished. This event ends the process immediately.

Swimlanes



Pool

Represents major participants in a process and typically separates different organisations.

Lane

Used to organise and categorise activities within a pool according to function or role. A lane contains the flow objects, connecting objects and artifacts.