Business Process Modeling using BPMN

Course code: GOC27

The course is designed for those who want to learn how to create non-executable business process models in BPMN 2.0 (Business Process Model and Notation). Non-executable models are oriented to the graphic description of the process and are primarily intended for process documentation, support communication between people and support process improvement. According to statistical surveys, the objective of 90% of projects in BPMo (Business Process Modeling) to create non-executable model of business processes, it is called. "Paper projects". On the course you will learn the BPMN model: the hierarchy of business processes, business process flow activities, event-driven, process relationships with the environment in which the process is implemented (ie. The context of the process). The aim of the course is to show and hands-on exercise to showcase best practices in modeling non-executable business process in BPMN.

What we teach you:
- Create a valid, correct and legible process models in BPMN.
- To model the flow of activities in the BPMN process.
- Process modeling relationships with the environment in which the process is implemented. Process environment (ie. The context of the process) may constitute objectives, metrics, organizational structure, supportive information systems, etc.
- Create a complete business process project.

Who the course is for:
- The course is designed for business process analysts, architects IS and all others who want to use business process models in BPMN 2.0 in their work.

Required skills:
- Knowledge of UML is an advantage but not essential.

Teaching methods:
- Professional explanation with practical samples and examples.

Teaching materials:
- Powerpoint handouts and module printouts.

Course syllabus:
Introduction to business process modeling
- The definition of Business Process.
- What is a Business Process Management.
- Effects of the introduction of company processes.
- Context process.

Introduction to BPMN
- Levels of customization BPMN for modeling processes.
- Basic elements of BPMN.
- Participant versus Top-level process.
- Methods of communication Top-level processes.
- Process classification according to the benefits.
- Process model and process instance.
- Executable and non-executable process model.
- The classification process according to the specification BPMN.

Basics of modeling in BPMN
- Categories of activities according to BPMN.
- Modelling the beginning and end of the process (None Event Link Event Terminate End Event).
- The sequence of activities driven by events (event-driven process chain).

- Exclusive decision (Exclusive Gateway).
- Distribution process parallel branches (Parallel Gateway).
- Implicit Termination pattern.
- The construction and use of a sub-process.

Modeling process hierarchy
- Modeling in BPMN process hierarchy.
- Hierarchy Process according to clasification Process Framework.
- Table describe the process.

Advanced process modeling in BPMN
- Modeling activities depending on the time (Timer Event).
- Sending and intercepting messages (Message Event Task Send, Receive Task).
- Intrinsic dynamic properties of activities (Loop, Parallel Multi instance, Sequential Multi Instance).
- Ad Hoc Sub-Process.
- Branching flow activities according to events and conditions.
- Postponing a decision on the future (Event-Based Exclusive Gateway).
- Interrupting a course of unfinished activities (Attached Error Event).
- Decisions about multiple variants (Inclusive Gateway).
- A pattern discriminator (Gateway Complex).
- Modeling data flow in a process.
- Modeling process response to changing conditions caused by the environment process (Conditional Event).
- Alternative boot process.
- Modeling reusable processes and sub-processes (Call Activity).
- Capture and error correction (Compensation Activity, Transaction).
- Modeling sub-processes triggered event (Event Sub-Process).
- Modeling Business Rules (Business Rule Task).

To create a complete business process models in BPMN
- Recommended structure of the project.
- How to extend BPMN, we can better model the process context.
- Modeling the context of processes, sub-processes and activities.

Modelling of resource location process.
- Modeling of organizational structure in relation to the processes (Table RASCI and other techniques).
- Modelling of supporting computing systems and structures used information.
- Modelling of processes, goals, performance measurement process modeling using KPI and KRI.
- Modeling of risks arising in the implementation process.
- Presentation process technology SIPOC.

Creating a complex project BPMo
- Overview appropriate tools for modeling.
- Samples of published projects BPMo.
- During the course we will demonstrate the topics discussed at the gradual establishment of a project business processes in BPMN. Entering and build the project participants are allowed to interact.

For model creation process, we use a standard tool Enterprise Architect, course participants but they can also use other modeling tools of their choice.