Best Practices for Adopting BPMN 2.0

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1. Introduction and welcome

2. What is BPMN?

3. Why use BPMN 2.0?

4. Best Practices

5. Getting Started with BPMN 2.0

6. BPMN 2.0 News / Upcoming events?

- BPMN training since February 2007
  - The leading provider of BPMN training and certification, on a variety of BPMN tools
- Member of BPMN 2.0 technical committee in OMG
- Author of *BPMN Method and Style 2nd ed.* (www.bpmnstyle.com)
- *BPMS Watch,* commentary on BPMN and BPM Suites (www.brsilver.com)
- Developer of tools to support the "Method and Style" approach of BPMN training
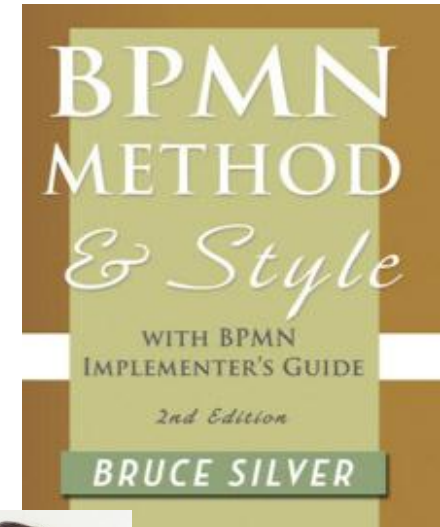
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1. A diagramming notation for business process models
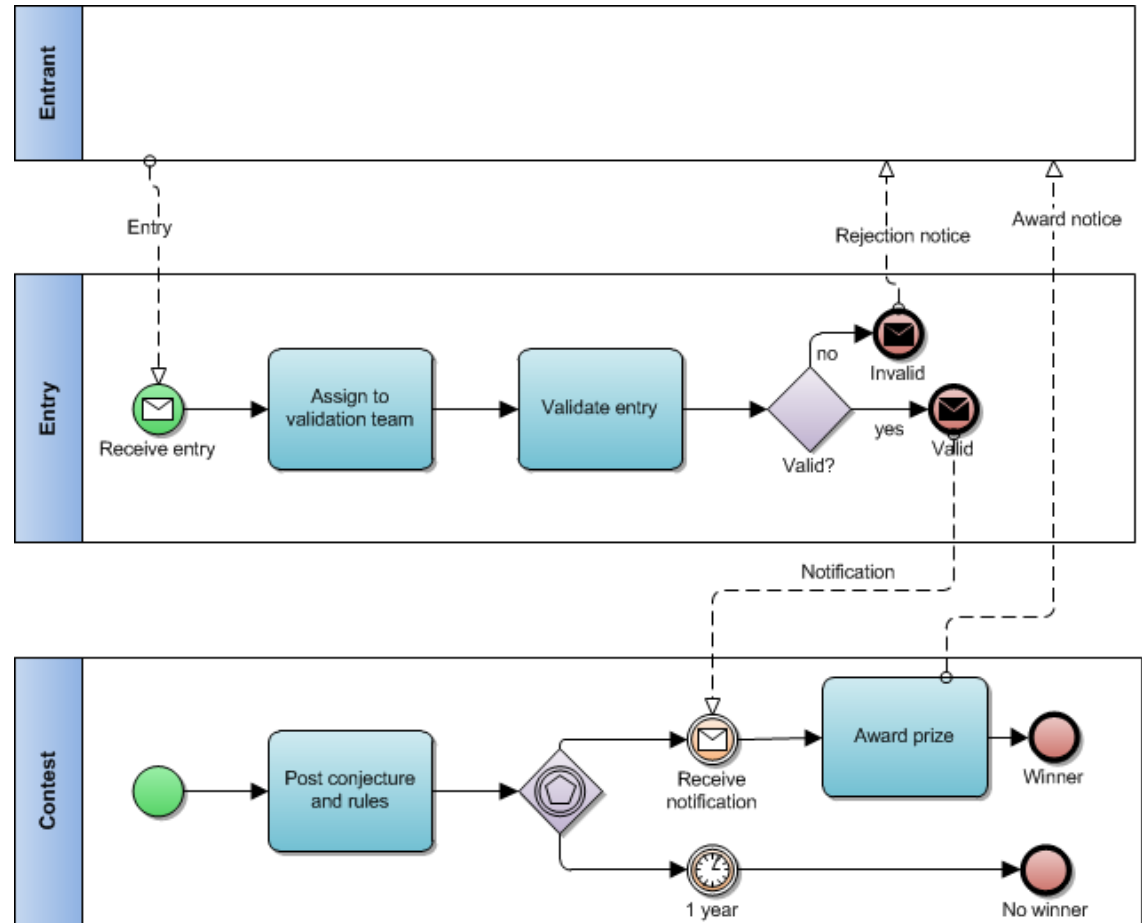
1. A diagramming notation for business process models
2. An OMG standard

Business Process Model and Notation (BPMN)

Version 2.0

OMG Document Number: formal/2011-01-03
Standard document URL: http://www.omg.org/spec/BPMN/2.0
Associated Schema Files:
 dtc/2010-05-04 -- http://www.omg.org/spec/BPMN/20100501
  XMI: BPMN20.cmof
             BPMNDI.cmof
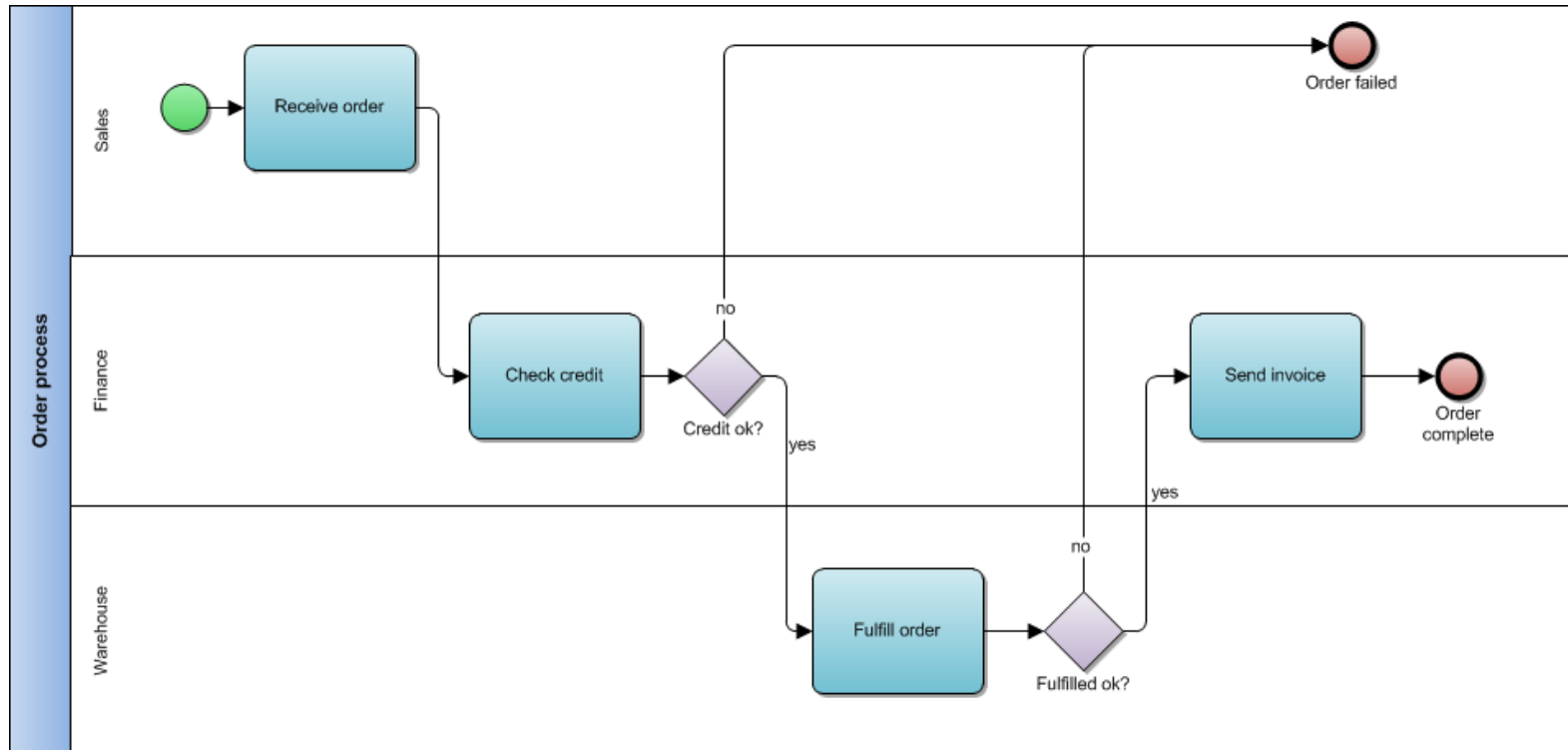   DC.cmof
             DI.cmof
  XSD: BPMN20.xsd
             BPMNDI.xsd
             DC.xsd
             DI.xsd
             Semantic.xsd
  XSLT: BPMN20-FromXMI.xslt
             BPMN20-ToXMI.xslt
 dtc/2010-05-15 -- http://www.omg.org/spec/BPMN/20100502
             Infrastructure.cmof
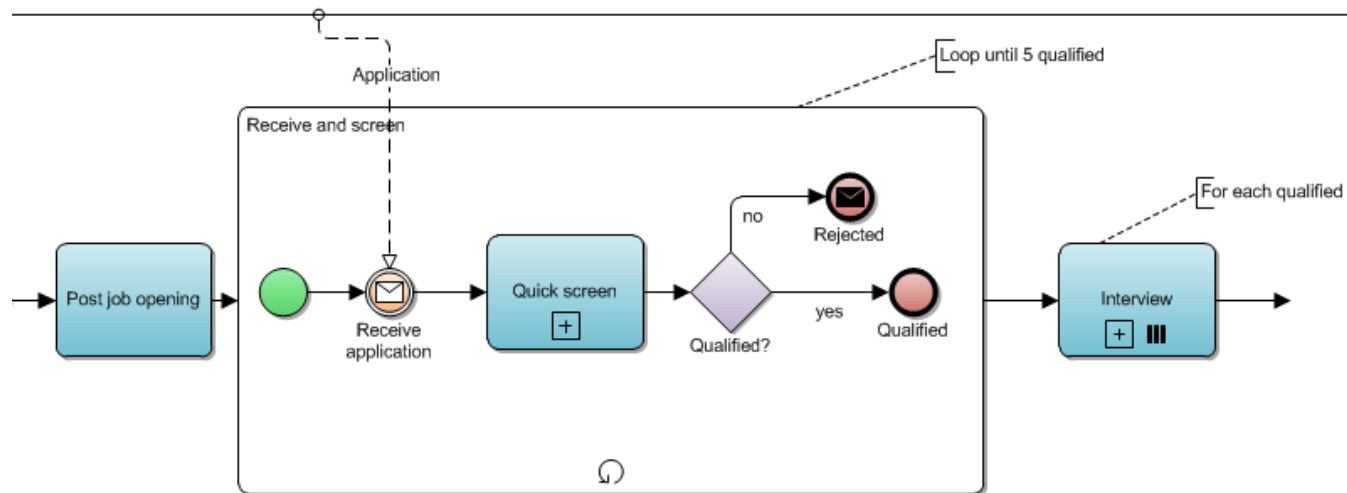   Semantic.cmof

1. A diagramming notation for business process models
2. An OMG standard
3. Flowchart-based

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3. Flowchart-based

4. Conceptually simple

Element	Description	Notation
Event	An Event is something that "happens" during the course of a Process (see page 242) or a Choreography (see page 346). These Events affect the flow of the model and usually have a cause (*trigger*) or an impact (*result*). Events are circles with open centers to allow internal markers to differentiate different *triggers* or *results*. There are three types of Events, based on when they affect the flow: Start, Intermediate, and End.	
Activity	An Activity is a generic term for work that company performs (see page 153) in a Process. An Activity can be atomic or non-atomic (compound). The types of Activities that are a part of a Process Model are: Sub-Process and Task, which are rounded rectangles. Activities are used in both standard Processes and in Choreographies.	
Gateway	A Gateway is used to control the divergence and convergence of Sequence Flows in a Process (see page 147) and in a Choreography (see page 351). Thus, it will determine branching, forking, merging, and joining of paths. Internal markers will indicate the type of behavior control.	
Sequence Flow	A Sequence Flow is used to show the order that Activities will be performed in a Process (see page 97) and in a Choreography (see page 326).	

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5. Expressive

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6. A common language shared by business and IT

Business analyst

IT architect/ Developer

BPMN

Process Owner

Business User

1. Built-in semantics and rules

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1. Built-in semantics and rules

2. Hierarchical view
   - Drilldown to any level of detail...while retaining integrity of a single model end-to-end

Collapsed

Hierarchical expansion
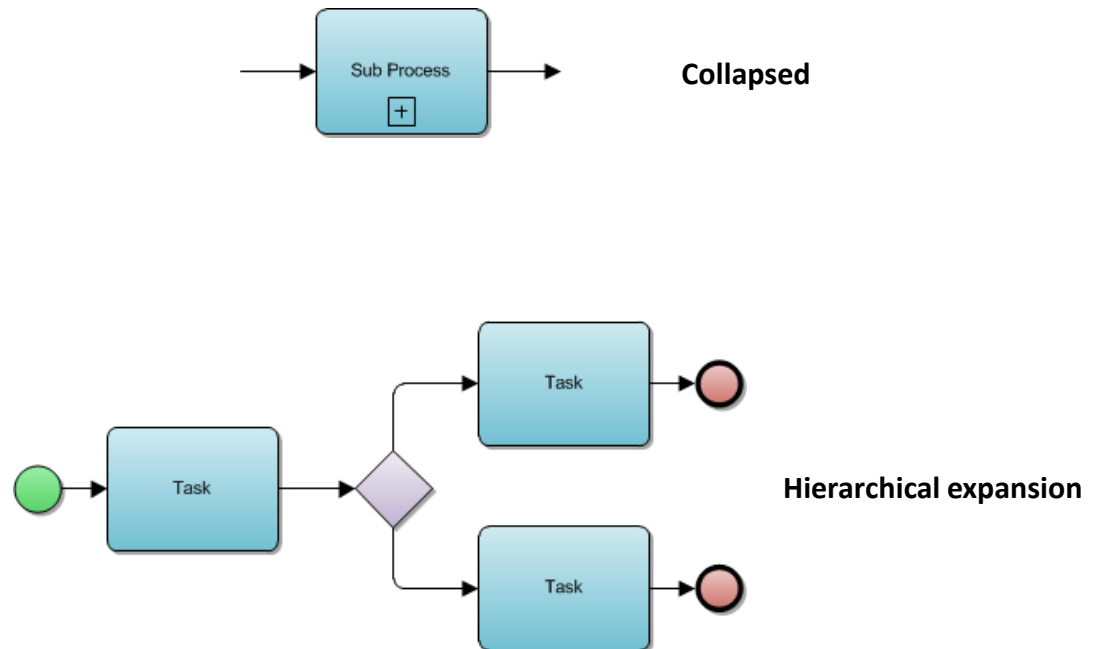
1. Built-in semantics and rules

2. Hierarchical view

3. May show inter-process "collaboration"
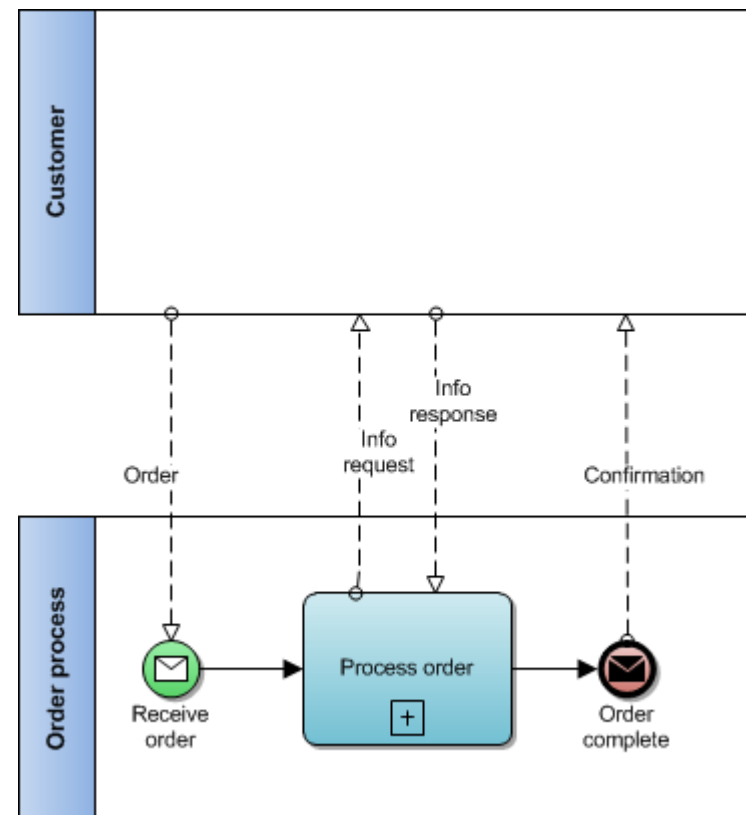
1. Built-in semantics and rules
2. Hierarchical view
3. May show inter-process "collaboration"
4. Depicts event-triggered behavior
   - Event can start a process, resume a paused process, abort an activity and redirect to exception flow, start a new parallel thread…

Start a process

Resume a process

Abort and redirect a process

Normal flow

Exception flow

Initiate parallel thread in a process

Normal flow

Exception flow
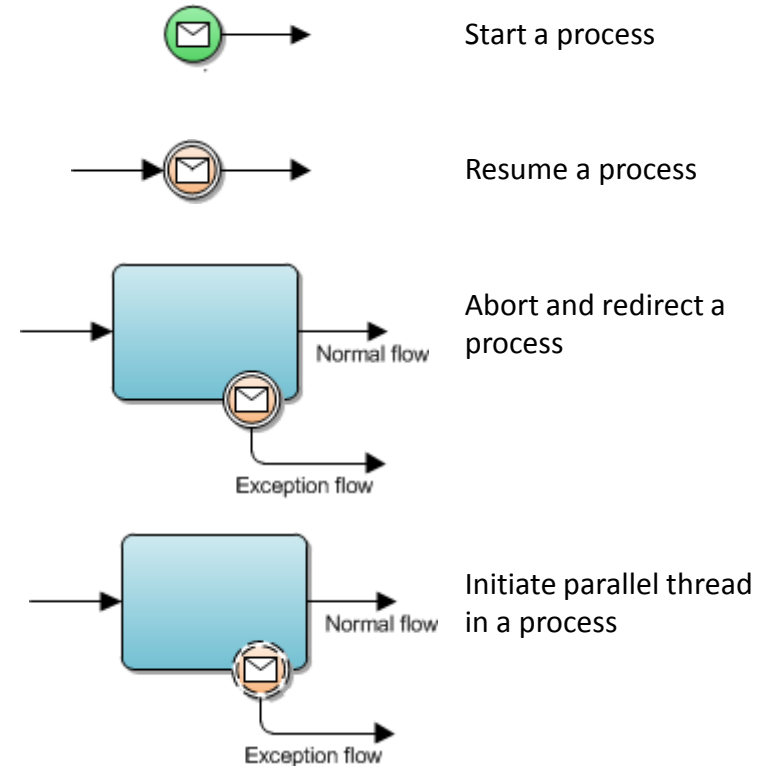
- Finalized August 2010, formally adopted January 2011

1. A few important new elements in the notation
   - Non-interrupting events
   - Event subprocess
   - Data store

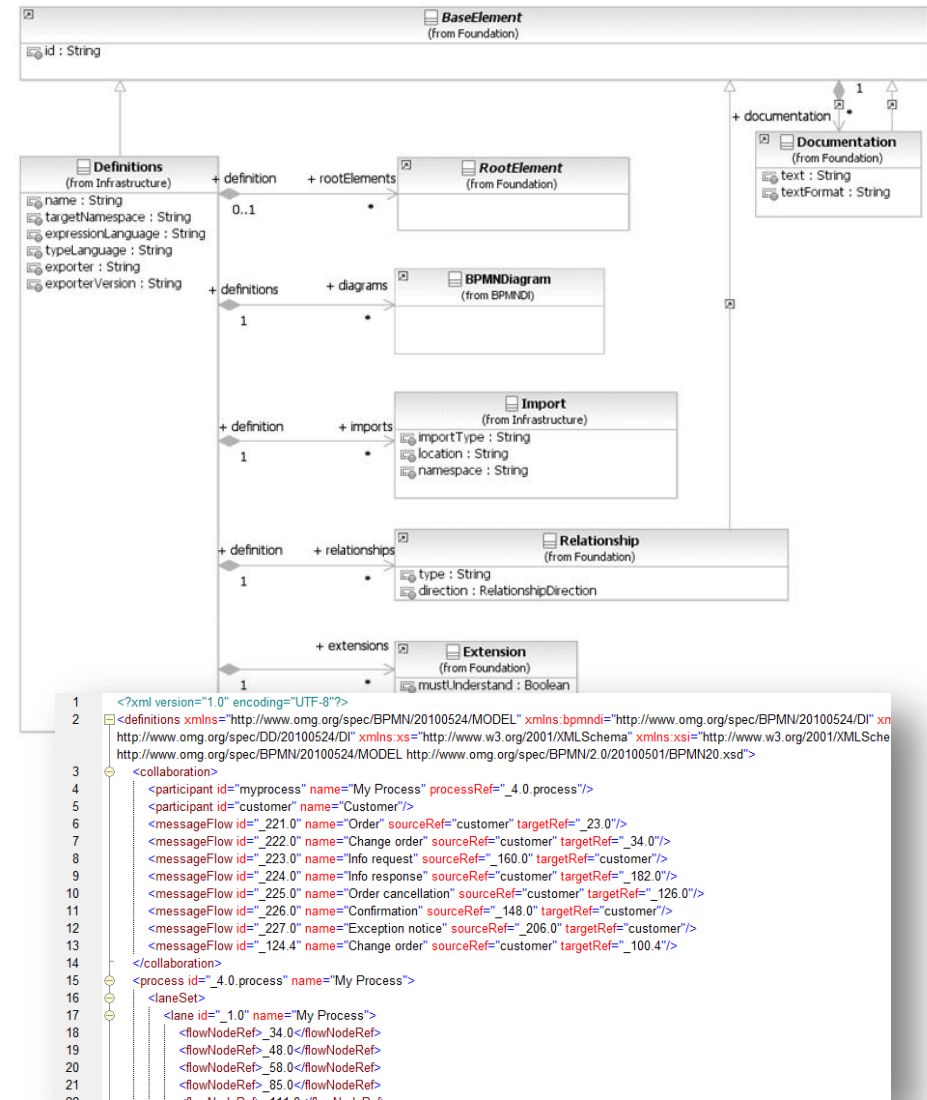2. An XML language… no longer just a notation
   - Most of the changes in BPMN 2.0 are "below the waterline"
   - Model interchange
   - Model validation services

3. Tool conformance specification
   - Formal metamodel clarifies the rules
   - Descriptive and Analytic subclasses = Level 1 and Level 2 palettes

4. Executable BPMN

1. Document existing processes

    - Communicate process logic via the diagram
    - Analyze for potential improvement

2. Design improved processes

    - Communicate with stakeholders
    - Project performance improvement via simulation

3. Specify business requirements for IT process solution

    - Leverage "common language" shared by business and IT

4. Implement an automated process in a BPMS

    - Almost all today base flow logic on BPMN
    - … whether or not they use BPMN 2.0 xml for the execution details

- *BPMN has become the critical foundation skill for anything you do in BPM*

- *The basic purpose of BPMN is to communicate the process logic through a diagram*

- Basic principles of "good BPMN"

  1. Clarity
     - Process logic is unambiguous from the diagram alone
  2. Completeness
     - Essential features of the process as a whole are obvious at a glance
       - How the process starts
       - Its possible end states, including exceptions
       - Its interactions with the customer and other external entities
  3. Correctness
     - Conforms to the semantics and rules defined by the spec
  4. Consistency
     - Given same set of "facts", all modelers create (more or less) the same diagram

- Bad BPMN is the norm
    - Process logic not clear from the diagram
    - Incomplete – essential features of the process omitted
    - Incorrect – violates rules of the spec
    - Inconsistent – models not shareable between projects and groups
- Good BPMN requires training
    1. **Correct** usage of the BPMN shapes and symbols
        - Which ones you need, which you can forget
    2. A *methodology* for creating **complete** and **consistently structured** diagrams
    3. Principles of *BPMN style* to make the meaning **clear** from the diagram alone
- Only #1 above is part of the BPMN spec
    - The others are additional constraints: "BPMN Method and Style"
    - You need all 3 to achieve "good BPMN", so training should provide all 3
    - BPMN Method and Style training on Good e-Learning site provides this

- Background in IT development, architecture and business analysis
- Experience in various consulting organizations and software startups
- Lead consultant with Orbus since 2007
- 15 years in modeling techniques, including BPMN

1.   Common Pitfalls

2.   Choosing the Scope of Process Work

3.   Defining / Agreeing Process Modeling Standards

4.   Tools

5.   Training

Examples:

1. Process modelers have a poor understanding of BPMN and use notation incorrectly / inconsistently. Huge amount of potential future rework.

2. Process models are too technical or too detailed to be understood by the business

3. Projects run out of time by trying to cover too much

Consider, for example:

1. What is the Organisational Coverage / Scope?

2. What does the Sponsor want to know?

3. How much detail (levels) do we need to go into?

4. The level of BPMN detail required for the knowledge of the audience?

5. How much time to we have to document this?

Choosing a Level of BPMN Detail

1. BPMN 2.0 Introduces three Levels of conformance

- Level 1 – Descriptive
- Level 2 – Analytic
- Level 3 – Executable

2. Select a level of detail that suits both…

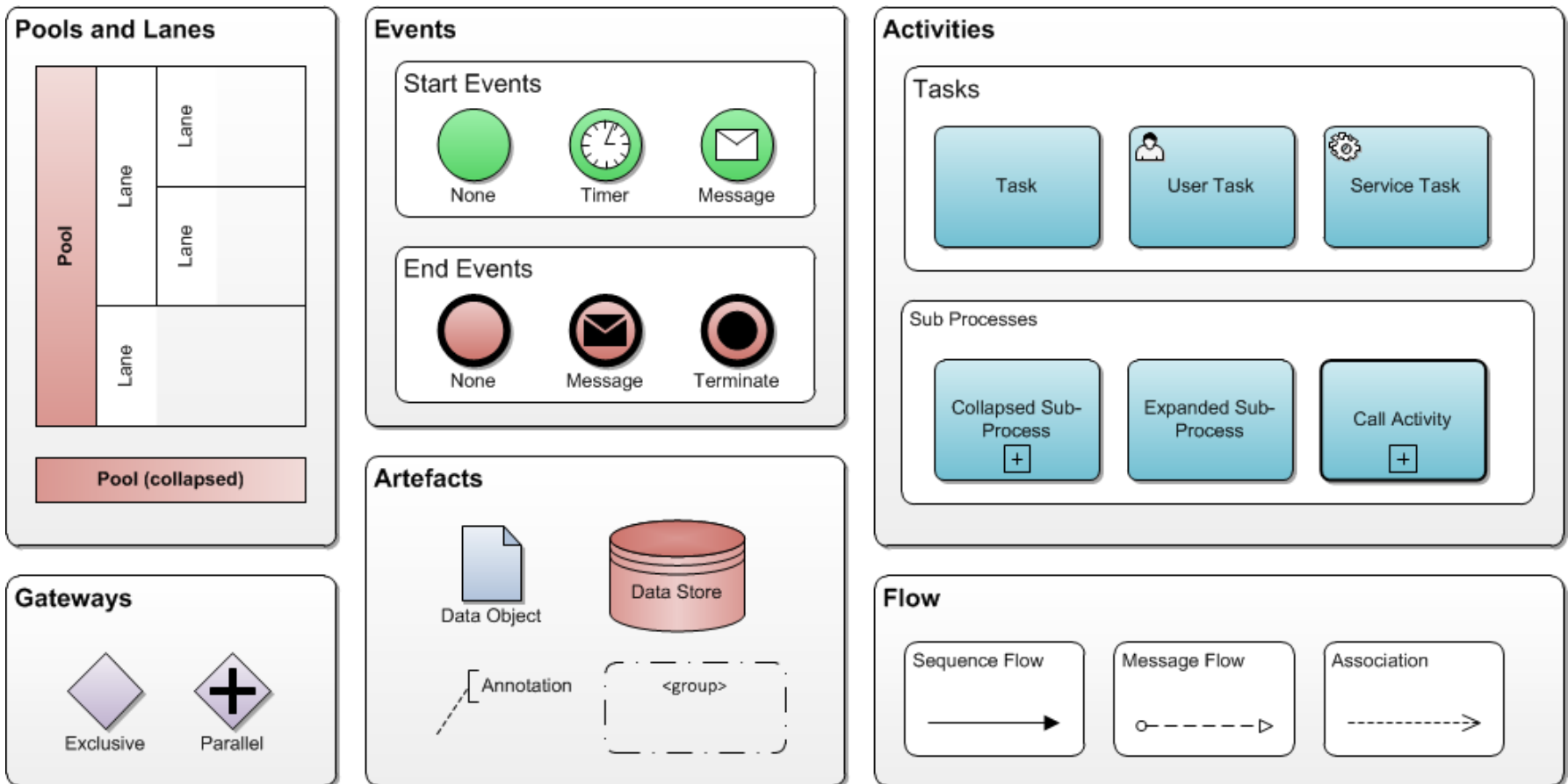- the experience of the process modelers
- the target audience for your models

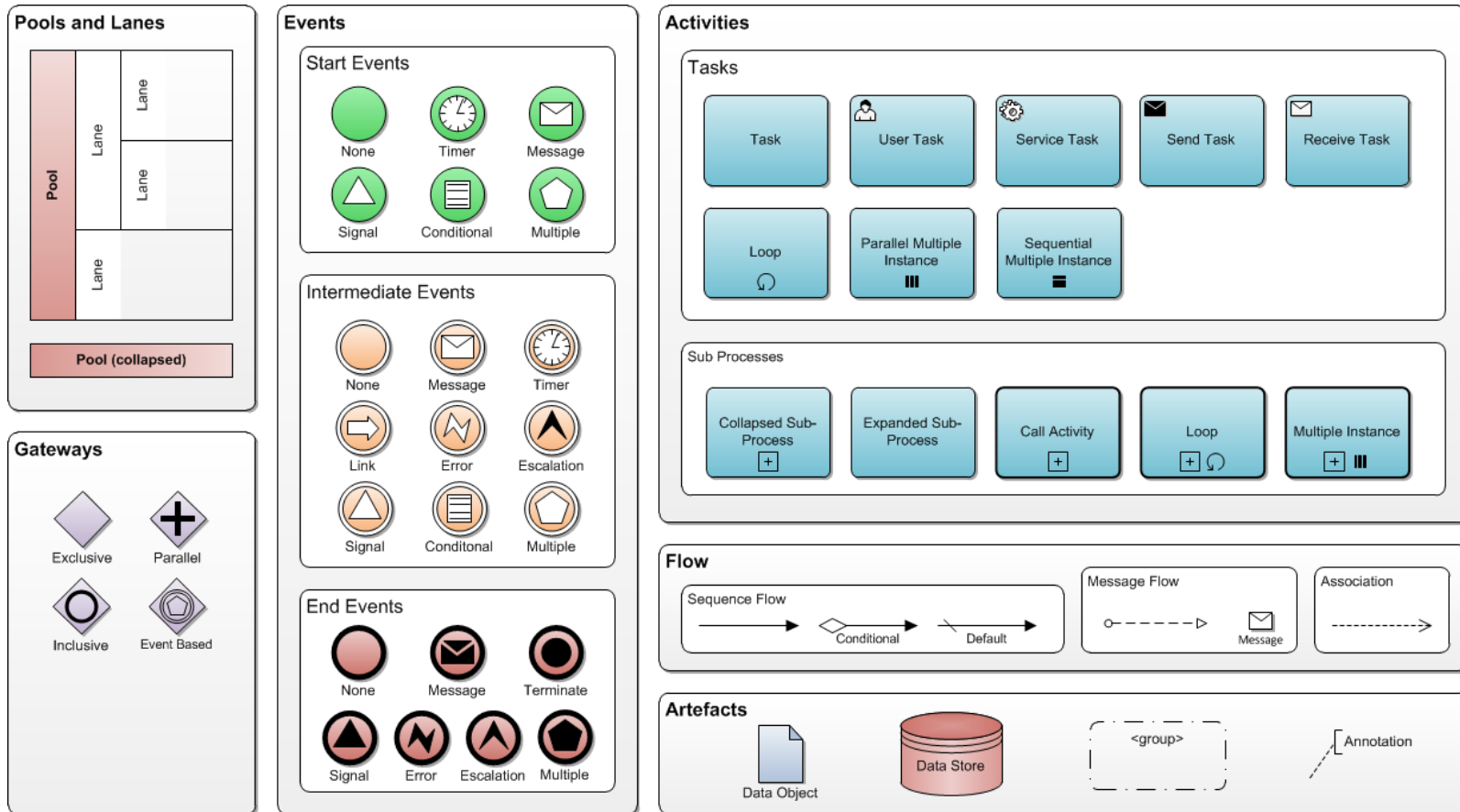BPMN diagrams can be misintepreted.

eg. Message Event NOT "Send an Email"

Level 1 - Descriptive

The basic set of diagram elements used to meet the needs of business users.

Pools and Lanes

Pool | Lane / Lane / Lane / Lane

Pool (collapsed)

Events

Start Events: None, Timer, Message

End Events: None, Message, Terminate

Activities

Tasks: Task, User Task, Service Task

Sub Processes: Collapsed Sub-Process, Expanded Sub-Process, Call Activity

Gateways

Exclusive, Parallel

Artefacts

Data Object, Data Store, Annotation, <group>

Flow

Sequence Flow, Message Flow, Association

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software

Level 2 - Analytic

Leverages the extended BPMN palette to create detailed models

Activities, Events

for example

Activities should be named VERB – NOUN

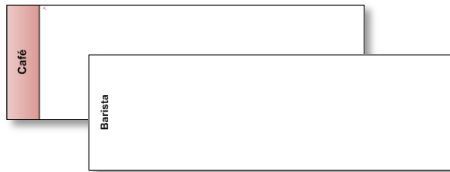Eg. "Capture Beverage Order", "Record Card Payment", ..

Events should be named NOUN - VERB

Eg. "Beverage Order Captured", "Card Payment Recorded"

Pools and Lanes

for example

Café

Barista

Decide what you would like to the Pools and Lanes to Represent

Pool: Organisation Unit? Name of the Process?
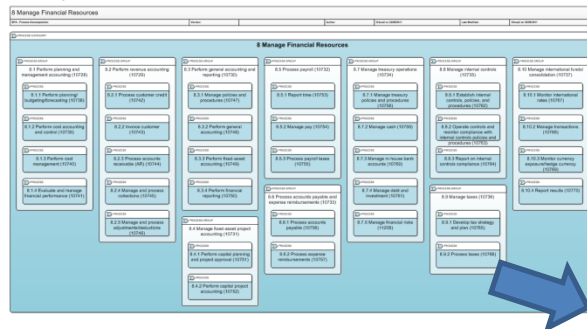**Lane:** Role? System?

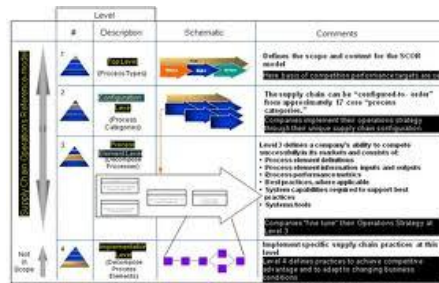**Agree on a Fixed List of Roles that can be used as Lanes**

Can these be sourced from your HR Team?

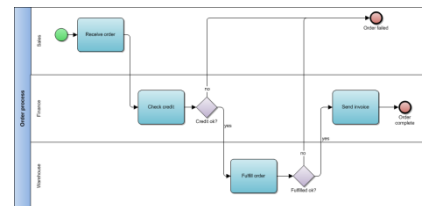# Classify your Processes within a framework

APQC PCF

SCOR

eTOM

1. Central Repository for Process Models

2. Enforce Process Modeling / Documentation Standards

3. Benefits of a BPA tool – Re-use, BPMN Validation Rules, Reporting, Simulation,..

4. Share Process Models with the Business Online

But… Choose an appropriate tool for the level of Process Maturity. A tool should speed up documentation of processes, not slow it down.

1. Document your chosen Process Modelling Standards, with examples, and use these to guide your team

2. Formal BPMN Training will help your team deliver accurate and consistently styled diagrams, that are easier for the business to understand

3. Launch of BPMN 2.0 eLearning course in partnership with Good e-Learning and Bruce Silver

Overview, Stencils and Templates for Visio

- BPMN 2.0 Starter Pack (MS Visio)

- For your free copy visit www.orbussoftware.com/bpmn

- View the iServer BPA Solution www.orbussoftware.com/bpa

- Register to download - free starter pack, this presentation & good elearning course brochure

Training

- Online BPMN 2.0 Course – Available in June 2012

- Learn online in your own time.

- Register by June 30th for a brochure and pre-release discount of 10% - www.goodelearning.com CODE: OMG201206

Reading

- Recommended reading: BPMN Method & Style, Bruce Silver

- www.brsilver.com