

A pragmatic guide to business process modelling

Dr. Jon Holt
Brass Bullet Ltd.

'If you're looking for trouble, you came to the right place'

Elvis Presley

1. The magic of processes
2. Modelling
3. The seven views
4. Conclusions

‘Process and procedure are the last hiding place for people who don’t have the wit or wisdom to do their jobs properly’

David Brent

1. The magic of processes

- ...> Processes are an integral part of life
 - ♠ every time we do anything
 - ♠ the way we do it
- ...> Process describes the approach
- ...> Effective processes
 - ♠ replication rather than copying
 - ♠ perception
- ...> Requires views

- ...> Different view points
 - ♠ observer/executor
- ...> Traceability
 - ♠ steps involved
 - ♠ evolution of information
- ...> Roles
- ...> Why?
 - ♠ initial requirements

- ...> Who follows processes?
 - ♠ people
 - ♠ organisations
- ...> Process modelling, aka
 - ♠ business process modelling, business process management, business process re-engineering, operations management, process mapping, process re-alignment
- ...> Modelling techniques may be applied to all of the above

- ...> Too long
- ...> Too short
- ...> Written by committee
- ...> Too many
- ...> Unrealistic
- ...> Language
- ...> Awareness
- ...> Fear of failure
- ...> Perception

*(“Camelot, Camelot”
‘It’s only a model’*

Patsy

- Modelling helps to combat the ‘three evils’ of life
 - ♠ Complexity
 - ♠ Lack of understanding
 - ♠ Communication problems
- Impossible to eliminate, but essential to minimise

- ...> Many techniques exist
 - ♠ flow charts
 - ♠ RACI matrix tables (and variations)
 - ♠ BPML
 - ♠ I-DEF
- ...> Technique we will be looking at is the UML

→ The Unified Modelling Language

- ♠ visual modelling language
- ♠ origins in software engineering
- ♠ open standard modelling
- ♠ now an ISO standard

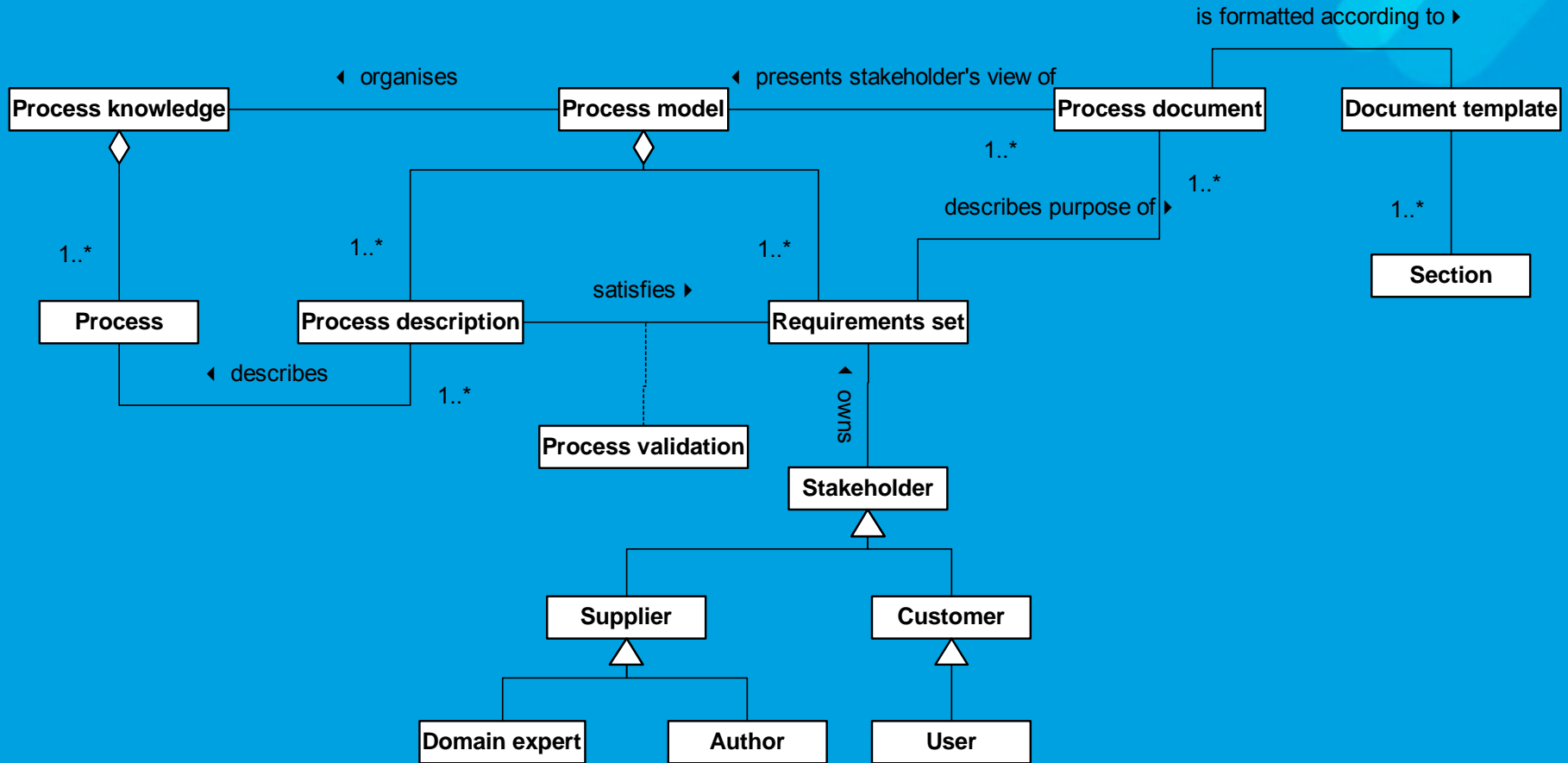
→ Created in 1997

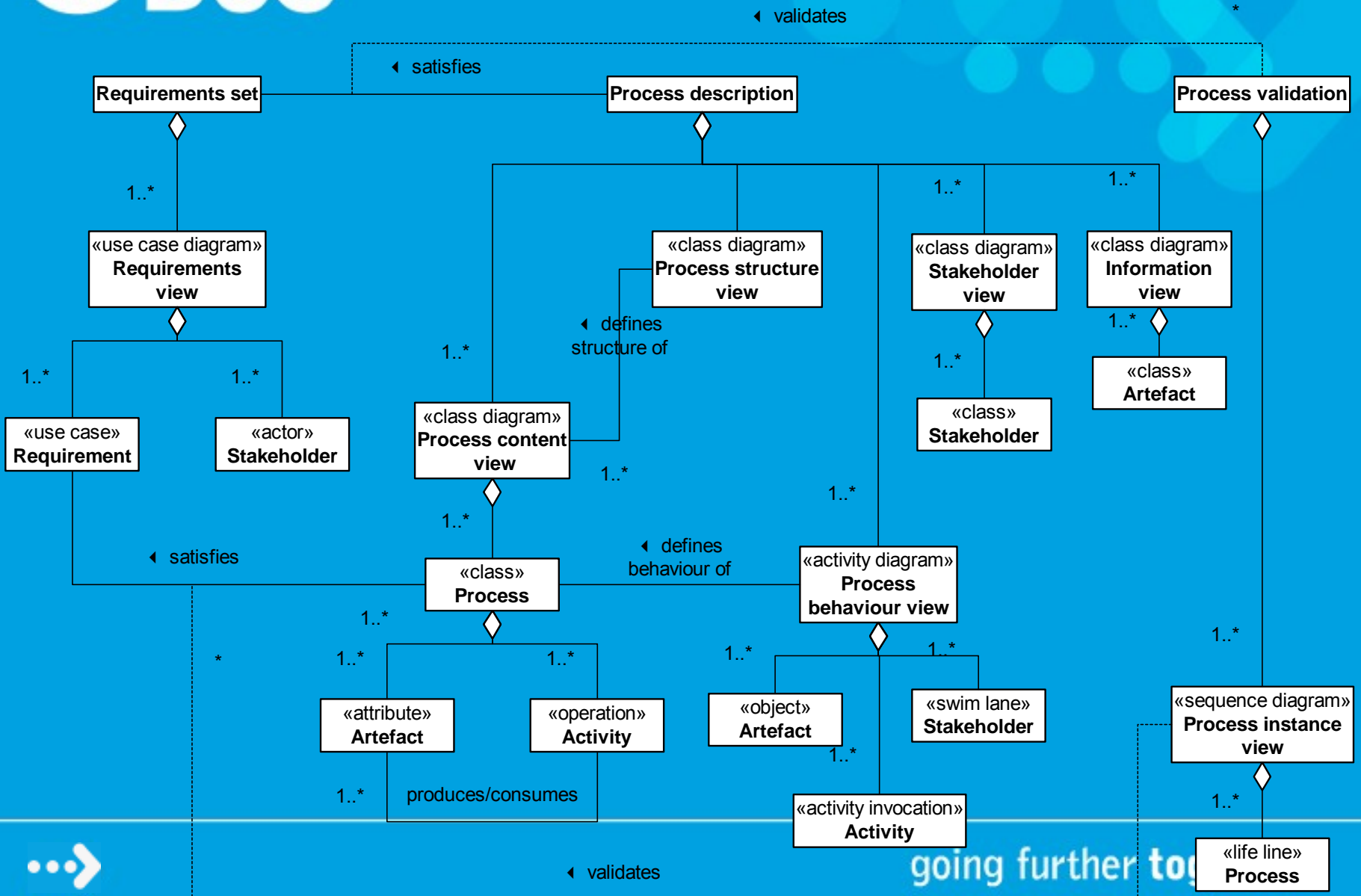
- ♠ evolution and consolidation of 120+ techniques and notations

- ...> Widespread use
- ...> Accepted internationally
- ...> ISO 19805
- ...> UK government mandate, under eGIF
- ...> Intuitive
- ...> Extensive use in other aspects of organisation

- ...> Processes are complex
- ...> Different types of process
 - ♠ very high level (ISO, IEC, BSI)
 - ♠ high level (industry standards, PAS)
 - ♠ medium level (in-house processes)
 - ♠ low level (procedures)
 - ♠ very low level (guidelines, work instructions)

- ...→ In order to fully specify any process, a number of concepts must be realised
- ...→ The process meta-model defines this
 - ♠ the concepts involved
 - ♠ how they may be realised
- ...→ Generic meta-model presented here
 - ♠ may be tailored for specific/organisational use





*'Da dah, da da da dah, da da da da da-da-da-da, da da
da-da-da-da- DAH-DAH'*

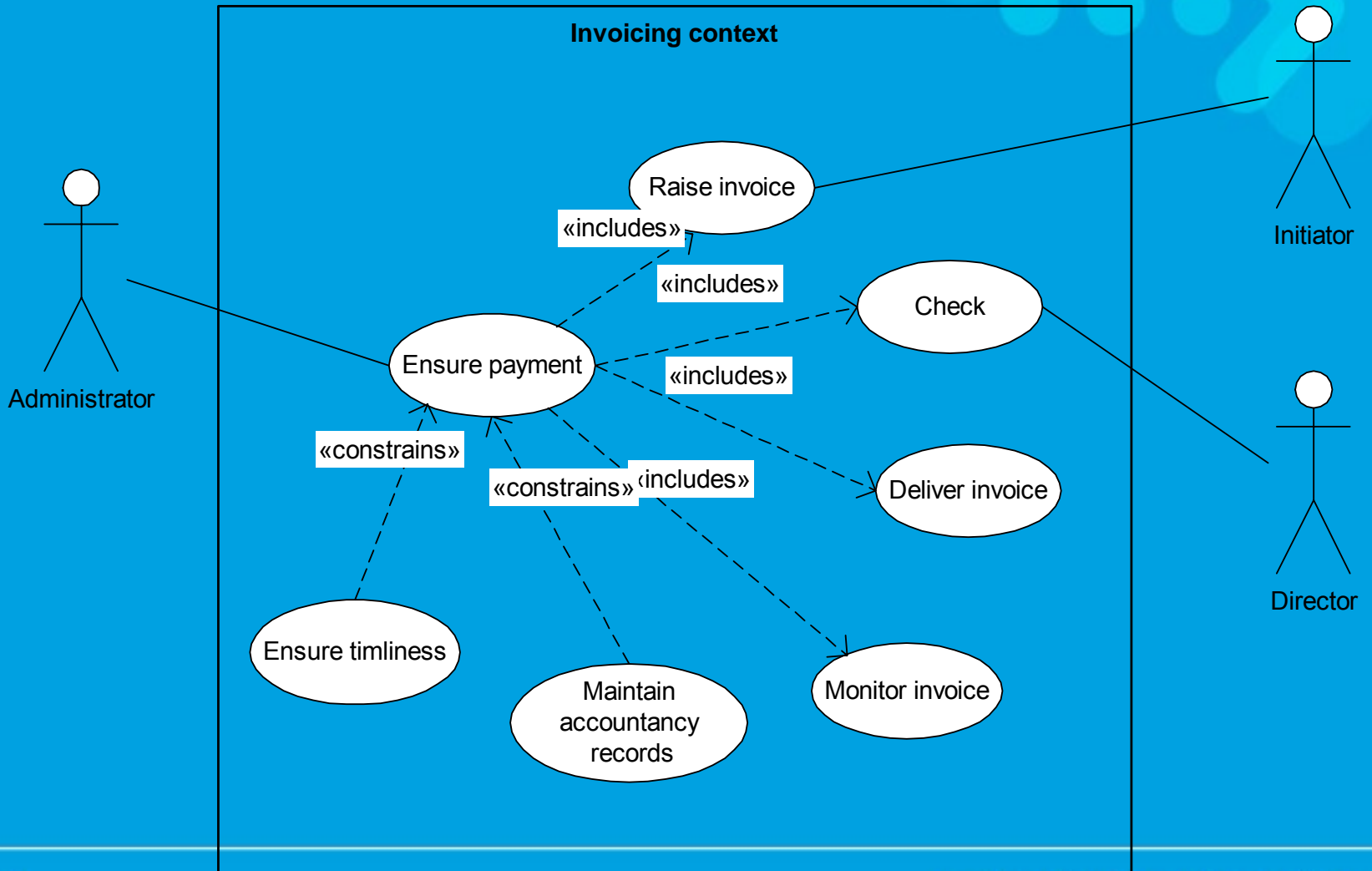
The Magnificent Seven

- ...> The process meta-model comprises seven inter-related views
 - ♠ *Any* language/notation may be used that *is able to* realise the seven views
 - ♠ each may be realised using a small subset of UML diagrams
- ...> Provides basis for analysis and discussion
- ...> Consistency may be defined :
 - ♠ UML + consistency = model
 - ♠ UML - consistency = pictures
 - ♠ Consistency = confidence

- …→ The views are presented here with examples from a process model
- …→ Aim of example is to
 - ♠ identify complexity
 - ♠ promote understanding of meta-model
 - ♠ promote understanding of modelling
 - ♠ promote discussion within group
 - ♠ promote discussion with customer

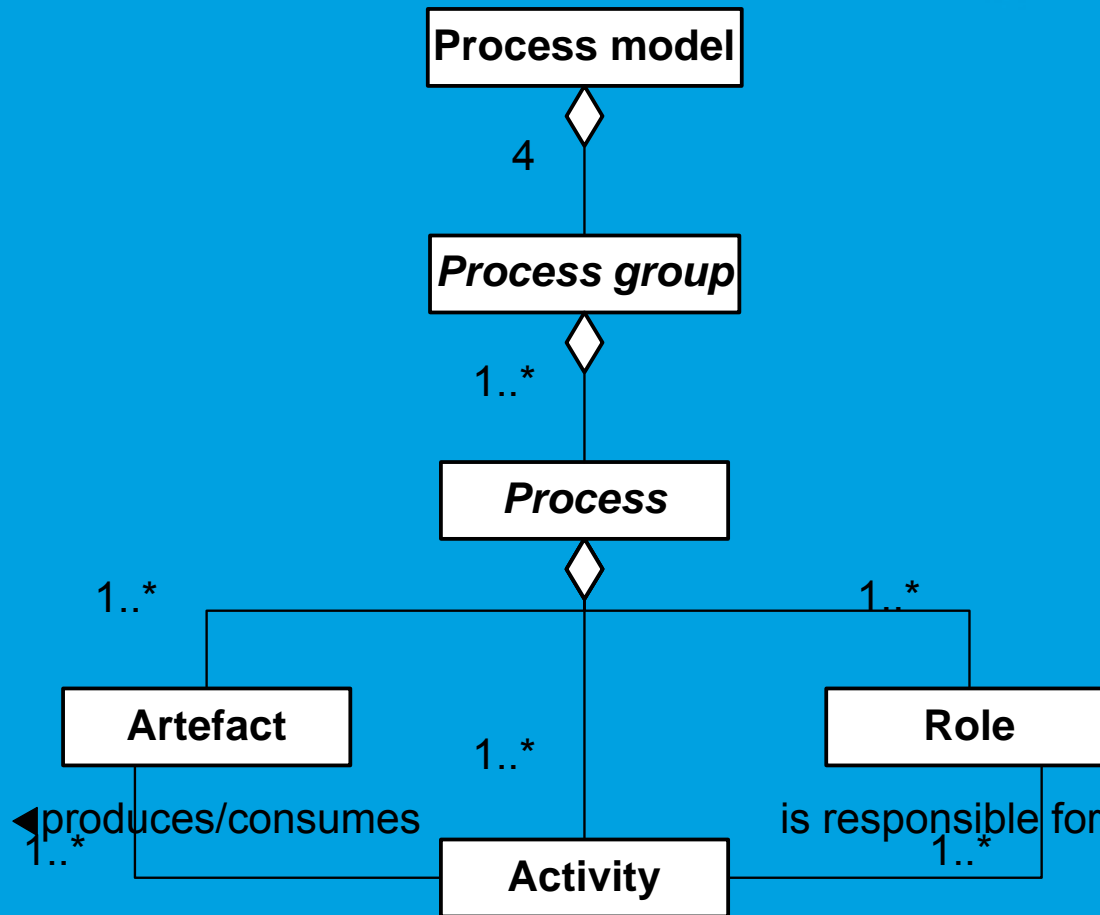
- …→ Specifies overall aims of process
 - ♠ possible to have more than one view
 - ♠ specified by stakeholder or groups
- …→ Essential for validation
 - ♠ changes in related process models
 - ♠ changes in business
- …→ Requirements need to be checked periodically

Example requirements view

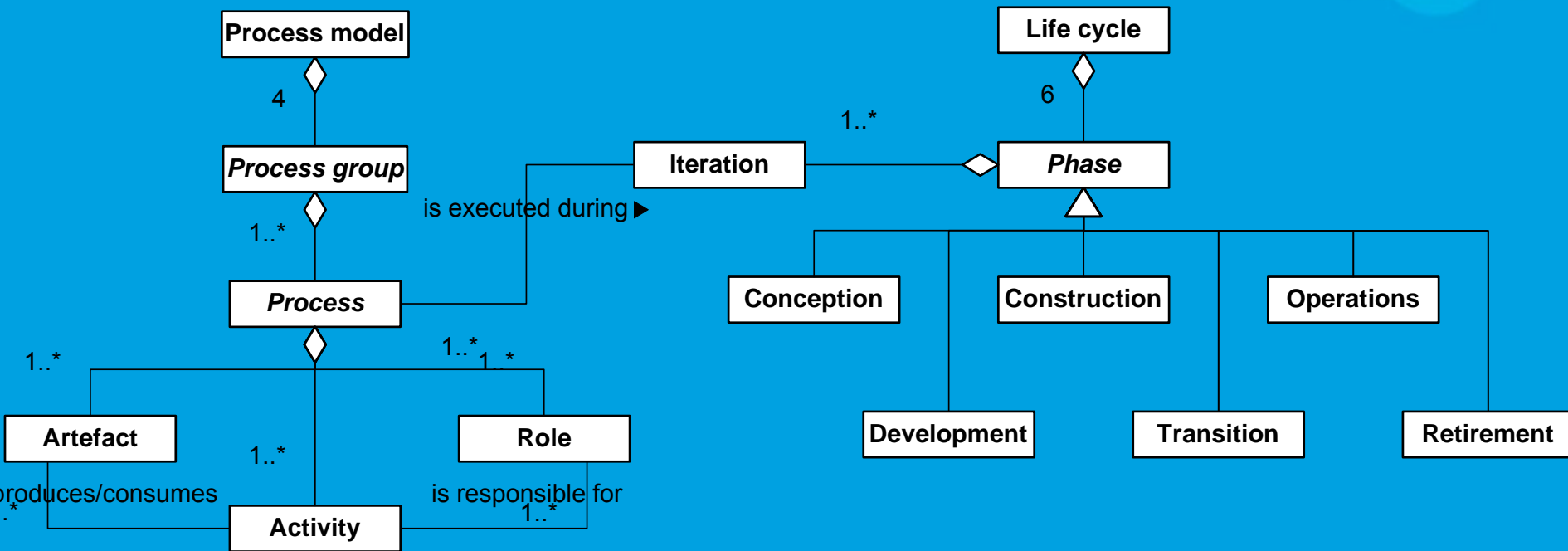


- ...> Specifies
 - ♠ structure of concepts
 - ♠ terminology used
- ...> Forms basis for process mapping
- ...> May relate to other issues
 - ♠ life cycle management
- ...> Identifies high-level conceptual problems

Example process structure view



Process structure view - extended for life cycles



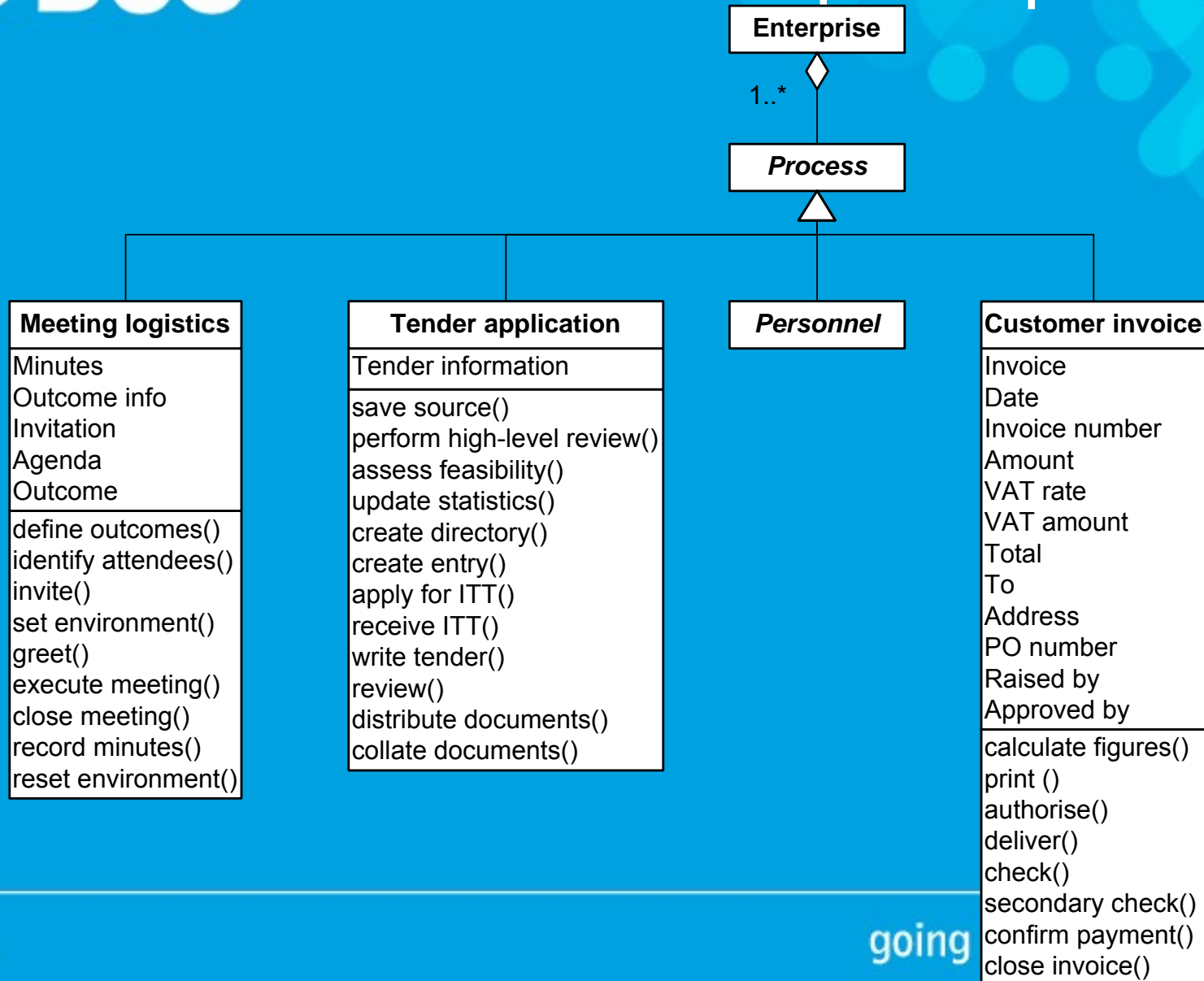
- …→ Identifies actual processes in each group
 - ♠ shows activities
 - ♠ shows artefacts
- …→ May show general associations
- …→ May show dependencies

Meeting logistics

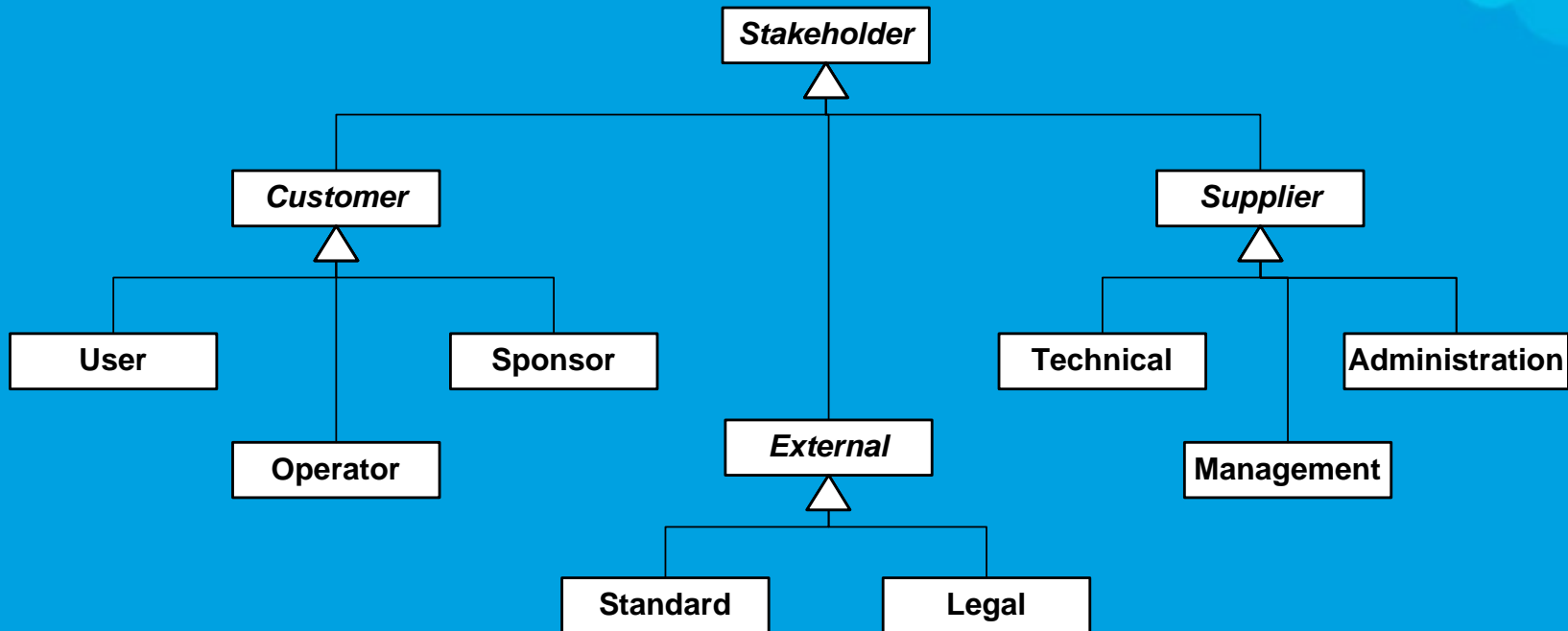
Minutes Outcome info Invitation Agenda Outcome
--

define outcomes() identify attendees() invite() set environment() greet() execute meeting() close meeting() record minutes() reset environment()
--

The 'Enterprise' process

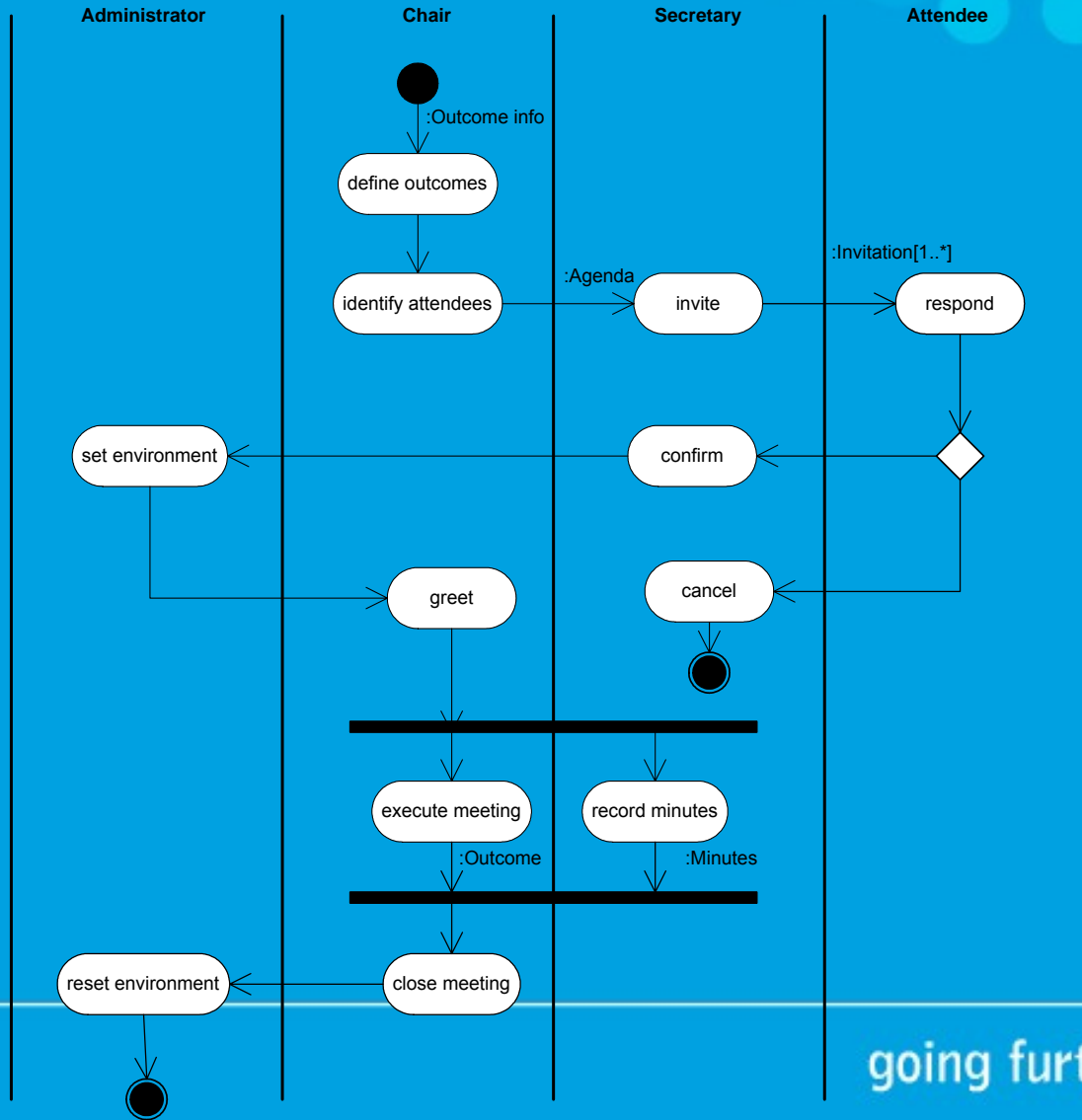


- Identifies stakeholder roles within
 - ♠ organisation
 - ♠ project
 - ♠ system
- Presents stakeholders in a classification hierarchy
 - ♠ additional relationships may be added



- Shows how an individual process behaves
 - ♠ order of activities
 - ♠ information flow
 - ♠ responsibilities
- Applies to any process with activity
- Often defined at procedure level

Process behaviour view - 'Meeting logistics'



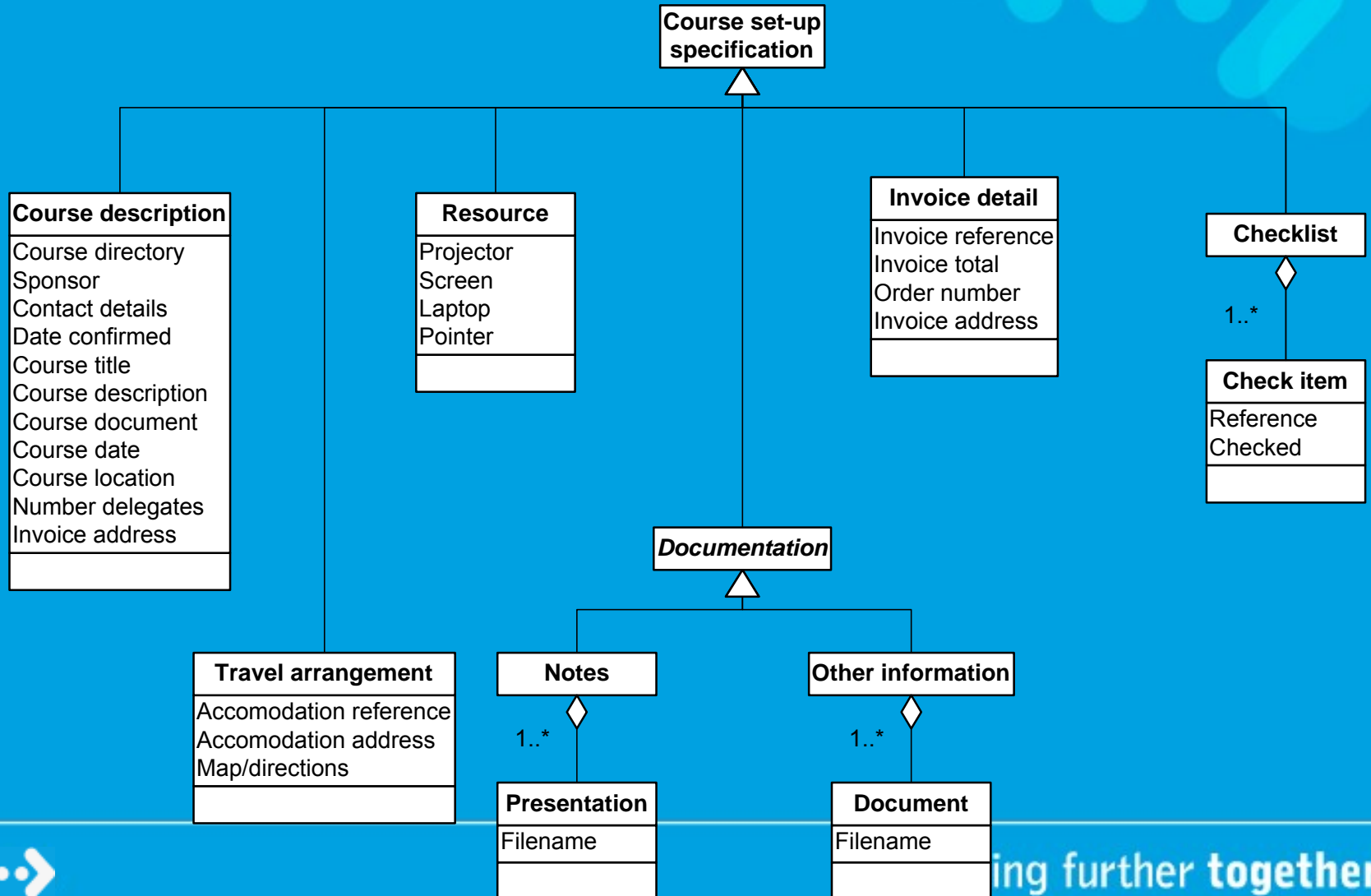
→ Identifies

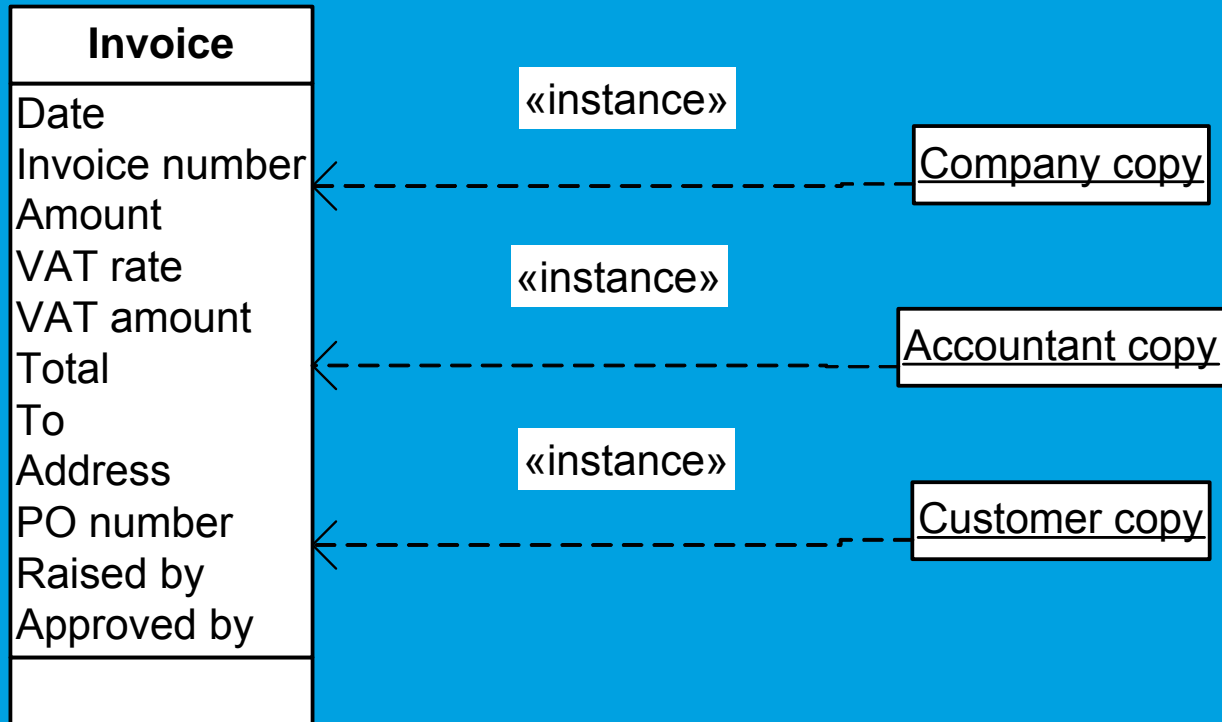
- ♠ all artefacts
- ♠ relationships between them

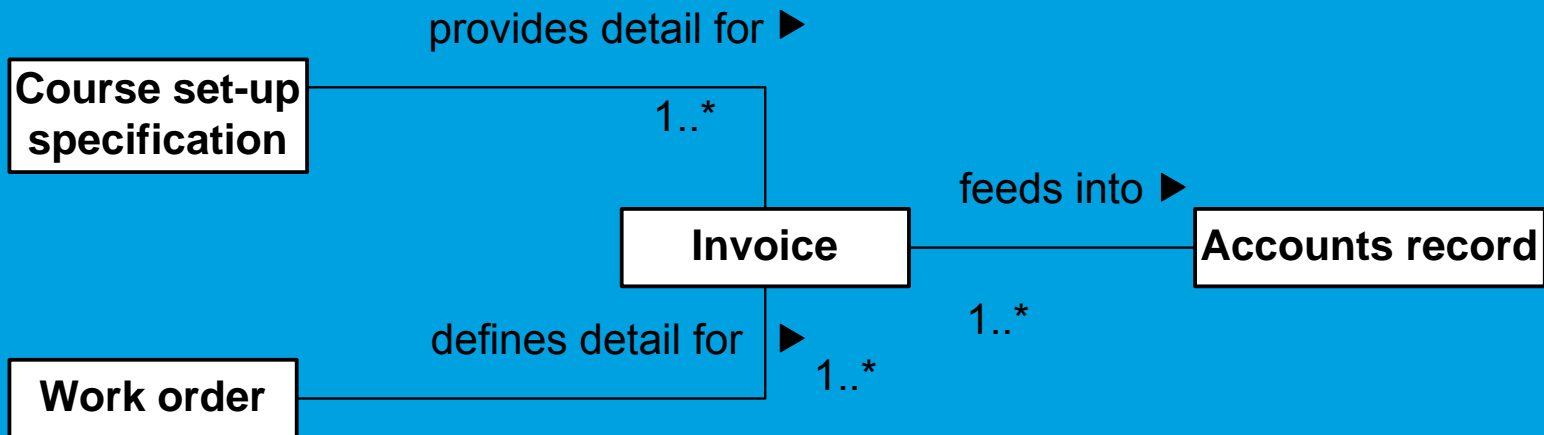
→ May be at high or low level

- ♠ detailed structure and content of individual artefacts
- ♠ traceability trails

Information view - low level

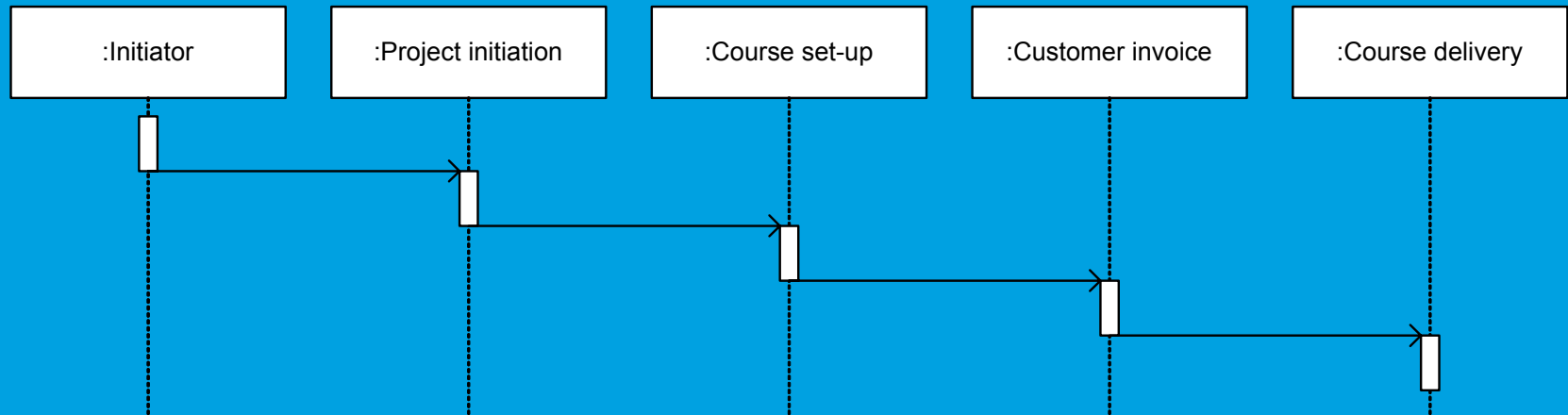






- ...> Shows instances of processes and stakeholders
- ...> Forms basis for validation
- ...> Relates process execution back to requirements

Example process instance view



- ...> Process capture (tacit, documented, etc)
- ...> Process analysis (optimisation, improvement, verification, validation, etc)
- ...> Process definition (documentation, automation, etc)
- ...> Process mapping (compliance, assessments, audits, etc)

Most other process-related buzz words

'And now, the end is near'

Frank Sinatra

- ...> Processes are prevalent
- ...> Processes exhibit the three evils
- ...> Processes may be modelled
- ...> Confidence in process is essential