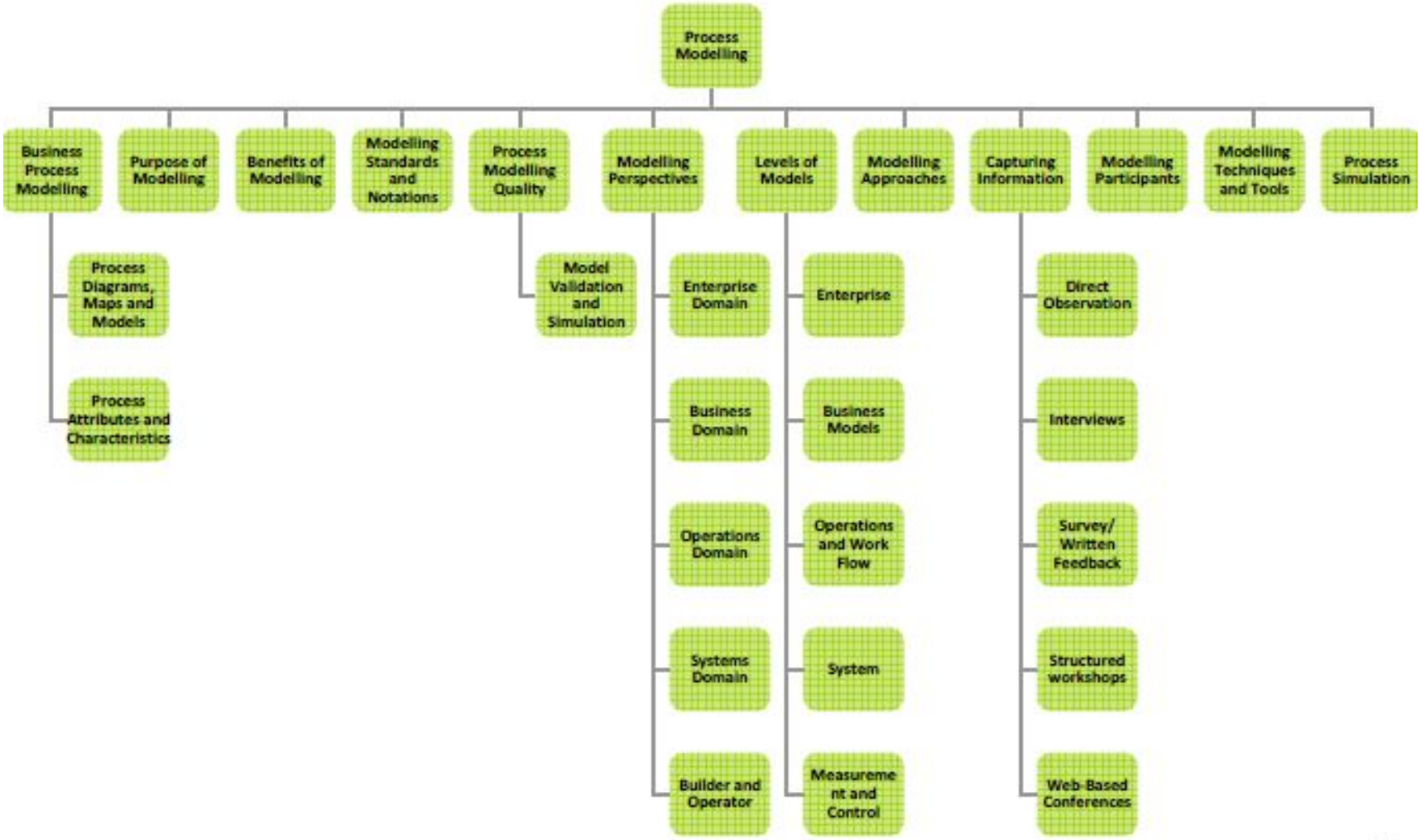
Business Process Engineering (BPE)

Process Modelling

Process Modelling

- Set of activities involved in creating representations of business process
  - existing (as-is) or
  - proposed (to-be)
- Provides an end-to-end perspective of an organisations primary, supporting and management processes
- Modelling is a means to an end and not an end in itself
  - You model to get results and reach conclusions

Process Modelling



Process Diagrams

- Process diagram often depicts simple notation of the basic workflow of a process
- Depicts the major elements of a process flow, but omits the minor details which are not necessary for understanding the overall flow of work

Process Maps

- More precision than a diagram
- More detail about process and important relationships to other elements such as performers (actors), events, results
- Provide a comprehensive view of all of the major components of the process

Process Models

- Represents the performance of what is being modelled
- Needs greater precision, data about the process and about the factors that affect its performance
- Often done using tools that provide simulation and reporting capability to analyse and understand the process

Process Attributes and Characteristics

- describe the properties, behaviour, purpose and other elements of the process
- are captured in a tool in order to organise, analyse and manage an organisation's portfolio of processes

Process Attributes and Characteristics

- Examples:
  - Inputs/Outputs,
  - Events/Results,
  - Value Add,
  - Roles/Organisations,
  - Data/Information,
  - Probabilities,
  - Queuing,
  - Transmission Time,
  - Wait Time,
  - Arrival Patterns/Distributions,
  - Costs (indirect and direct),
  - Entry Rules,
  - Exit Rules,
  - Branching Rules,
  - Join Rules,
  - Work/Handling Time,
  - Batching,
  - Servers (number of people available to perform tasks)

Purpose of Process Modelling (1)

- A model is rarely a complete and full representation of the actual process
- Objective is to create a representation of the process that describes it accurately and sufficiently for the task at hand
- Models are simplified representations that facilitate understanding of that which is being studied and making decisions about it

Purpose of Process Modelling (2)

- Focus on representing those attributes of the process that support continued analysis from one or more perspectives
- Understanding the business process through the creation of the model
- Creating a visible representation and establishing a commonly shared rerspective
- Process models are the primary means for
  - Measuring performance against standards
  - Determining opportunities for change
  - Expressing the desired end state preceding a change effort

Benefits of Modelling

- Models are relatively fast, easy and inexpensive to complete
- Models are easy to understand (when compared to other forms of documentation)
- Models provide a baseline for measurement
- Models facilitate process simulation and impact analysis

End of Lecture