

Business Process Management

Outline

- 1) Introduction
 - a) background
 - b) concepts
 - c) evolution
- 2) Workflow Management
 - a) overview
 - b) functional areas
 - c) reference architecture
 - d) workflow patterns
 - e) workflow solutions
 - f) summary
- 3) Business Process Management
 - a) overview
 - b) aspects
 - c) standards
 - d) technologies
 - e) BPM and WF
 - f) summary
- 4) e-Government Applications
 - a) e-service delivery
 - b) inter-government WFMS
- 5) Conclusions

Overview

BPM is concerned with supporting business processes:

- 1) It involves the design, enactment, control and analysis of business processes.
- 2) Enables rapid reaction to process changes as required by the environment.
- 3) Usually restricted to operational processes since strategic levels processes are difficult to describe

Why BPM?

There are important reasons for BPM:

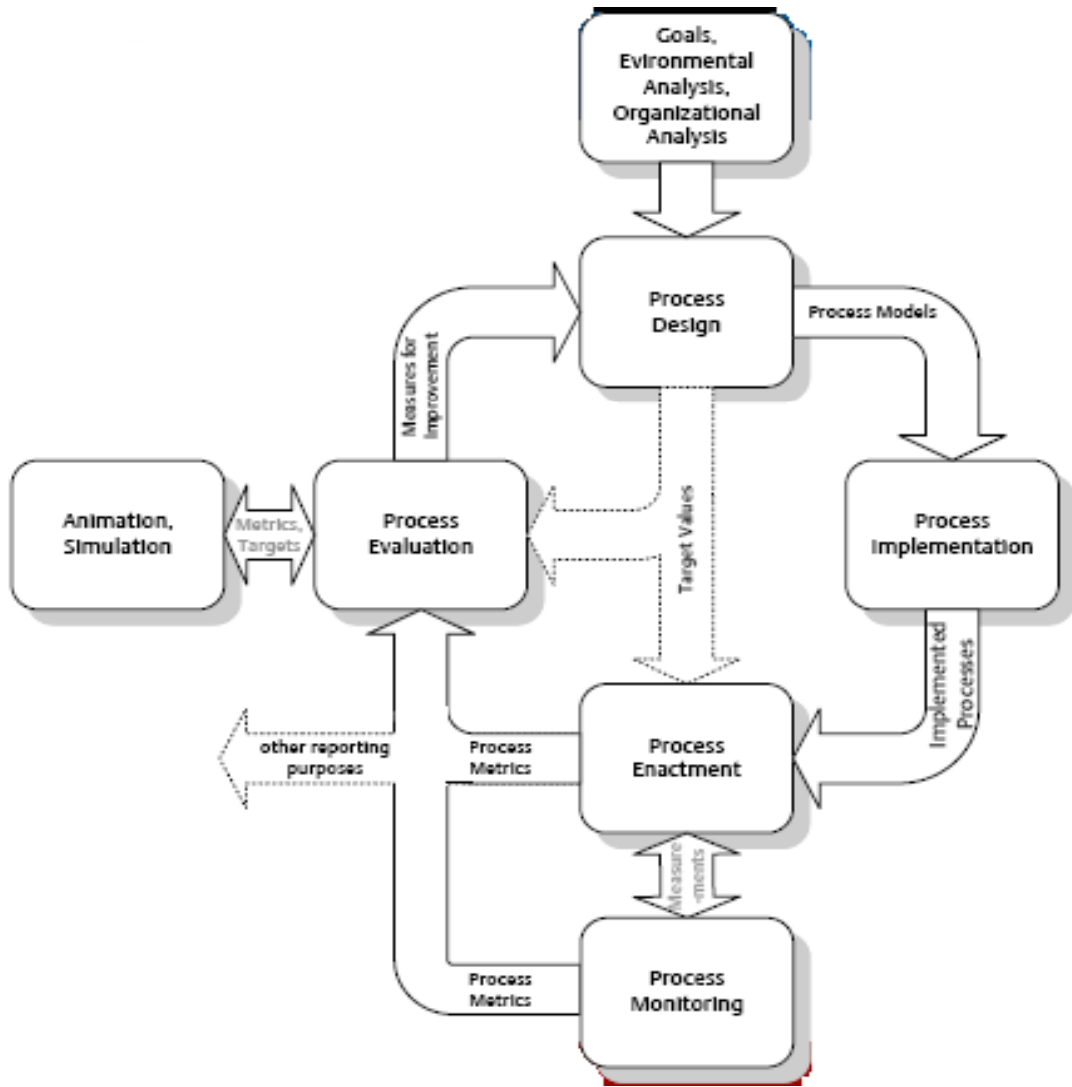
- 1) Enable timely response to changing environment
- 2) Measure business processes in forms of performance indicators which can be used as a basis of evaluation
- 3) Link operational processes to corporate strategies

BPM Life Cycle

The following activities make up the BPM Lifecycle:

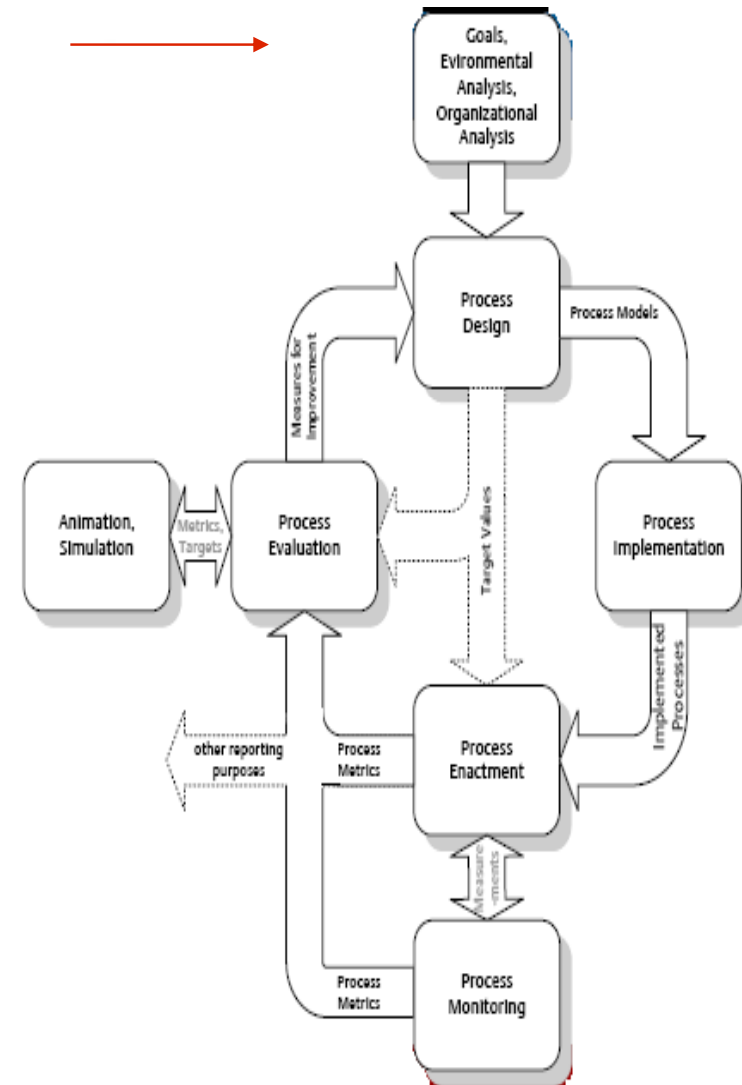
- 1) Goal Specification, Environmental and Organizational Analysis
- 2) Process Design
- 3) Process Implementation
- 4) Process Enactment
- 5) Process Monitoring
- 6) Process Evaluation

BPM Life Cycle Schematic



Goal and Analysis

- 1) Specifies goals that a business process is to achieve
- 2) Gather information about available resources and constraints within organization
- 3) Gather information about external environment which is outside the organization

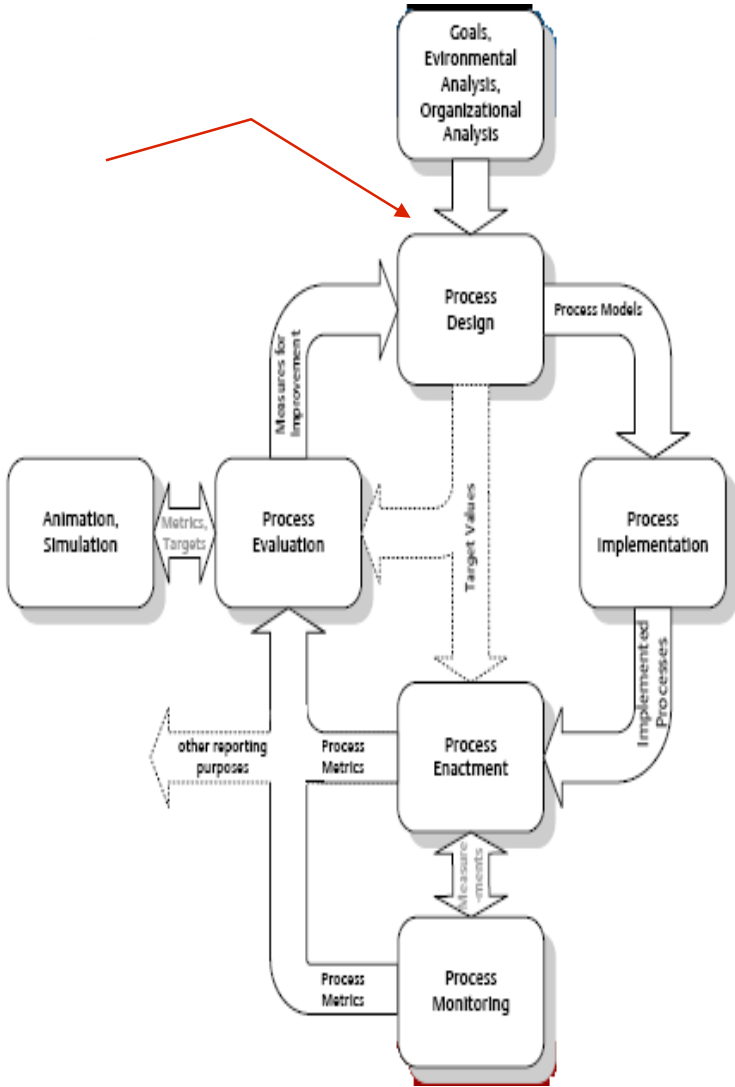


Process Design

- 1) Identifies the processes to be:
 - a) Analyzed
 - b) Design
 - c) Re-designed
 - d) Automate

1) Identifies the important factors and constraints related to the process (step 1)

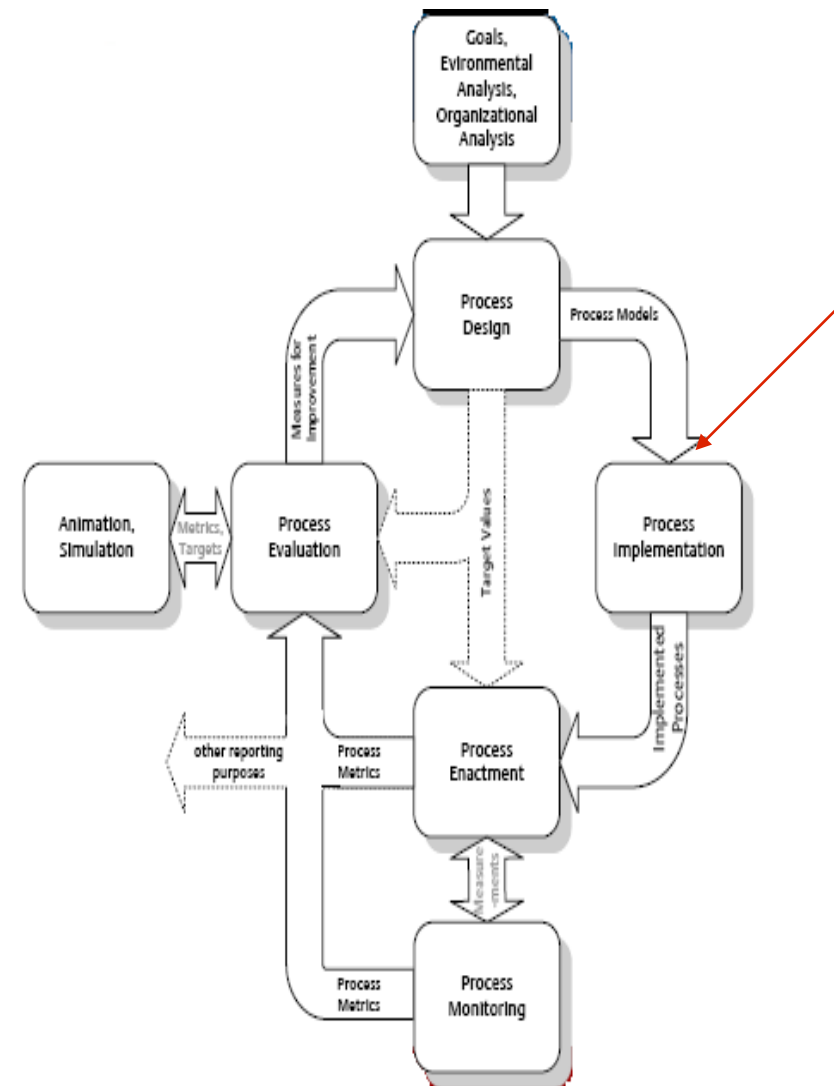
2) Specification of Processes



Process Implementation

Process is transferred into the operational environment:

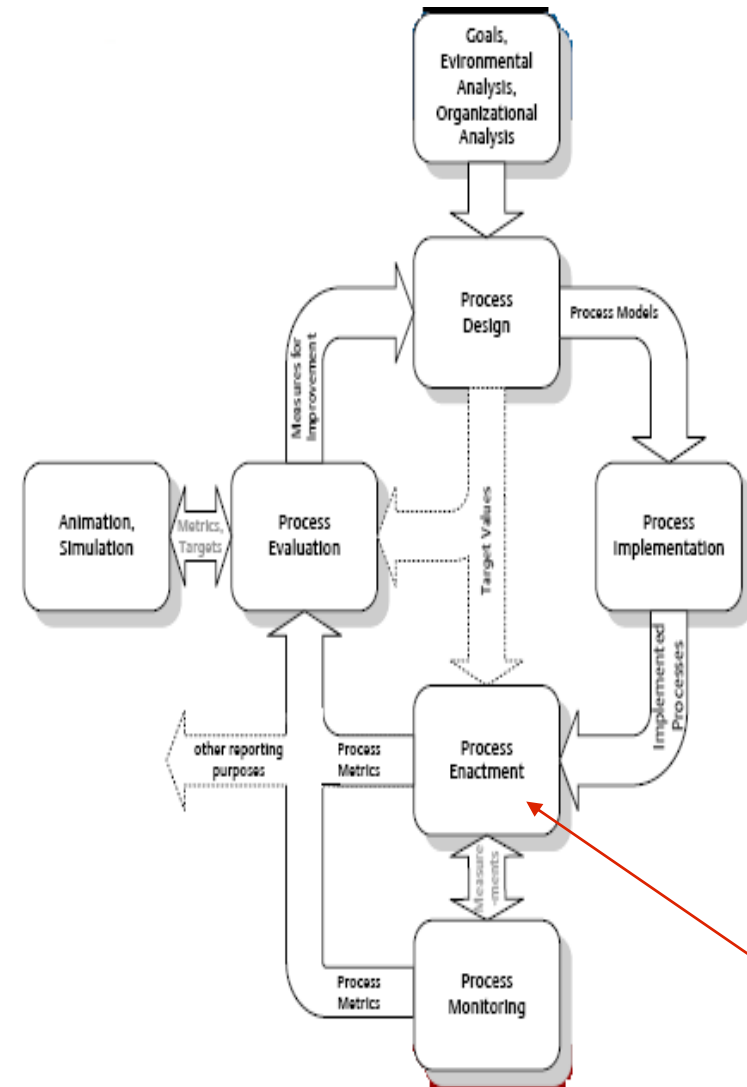
- a) Manual – procedure handbook
- b) Automated – Workflow



Process Enactment

Process is executed:

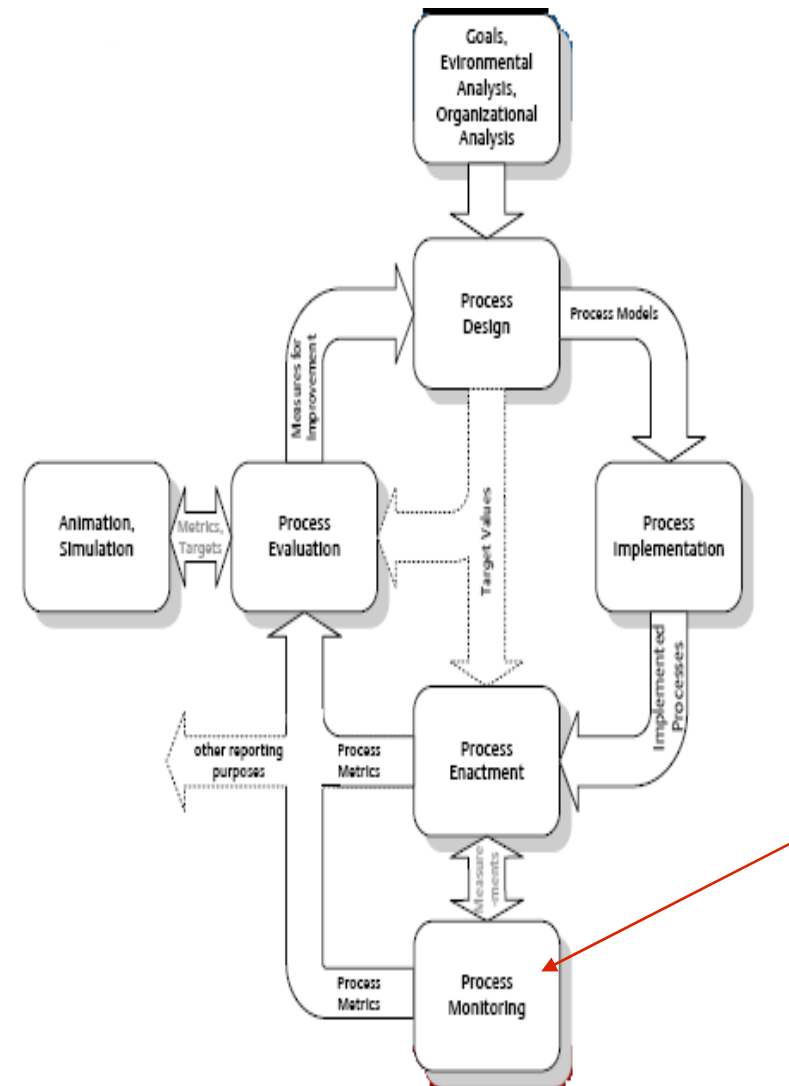
- 1) Process activities are executed based on the control flow
- 2) Information is logged during the process execution:
 - a) Activity Start time
 - b) Activity End time
 - c) Exceptions
 - d) etc.



Process Monitoring

Process is monitored in real time:

- 1) A number of process metrics are defined, for instance:
 - a) number of applications verified per day,
 - b) average response time for external enquiries
 - c) rejected applications
- 2) Could be determined by performance pledges

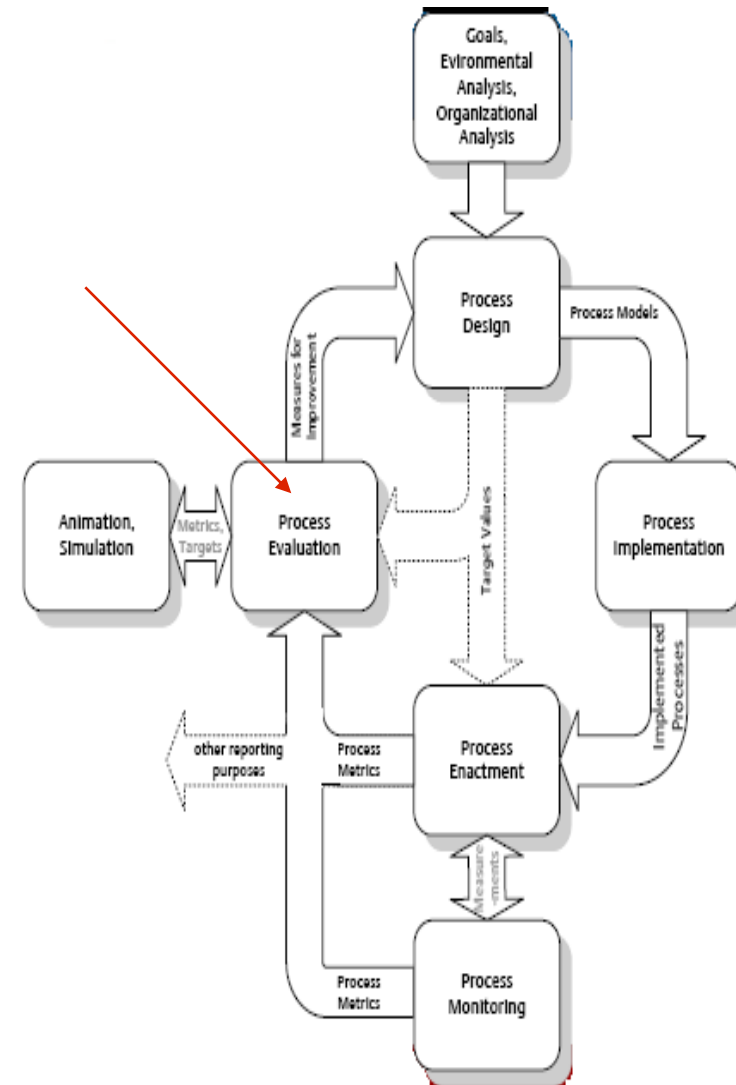


Process Evaluation

Process is evaluated to check if it meets its goal.

Evaluation is made based on:

- target values specified in process design
- process metrics from enactment
- process metrics from monitoring



Business Process Standards

Reasons for standards:

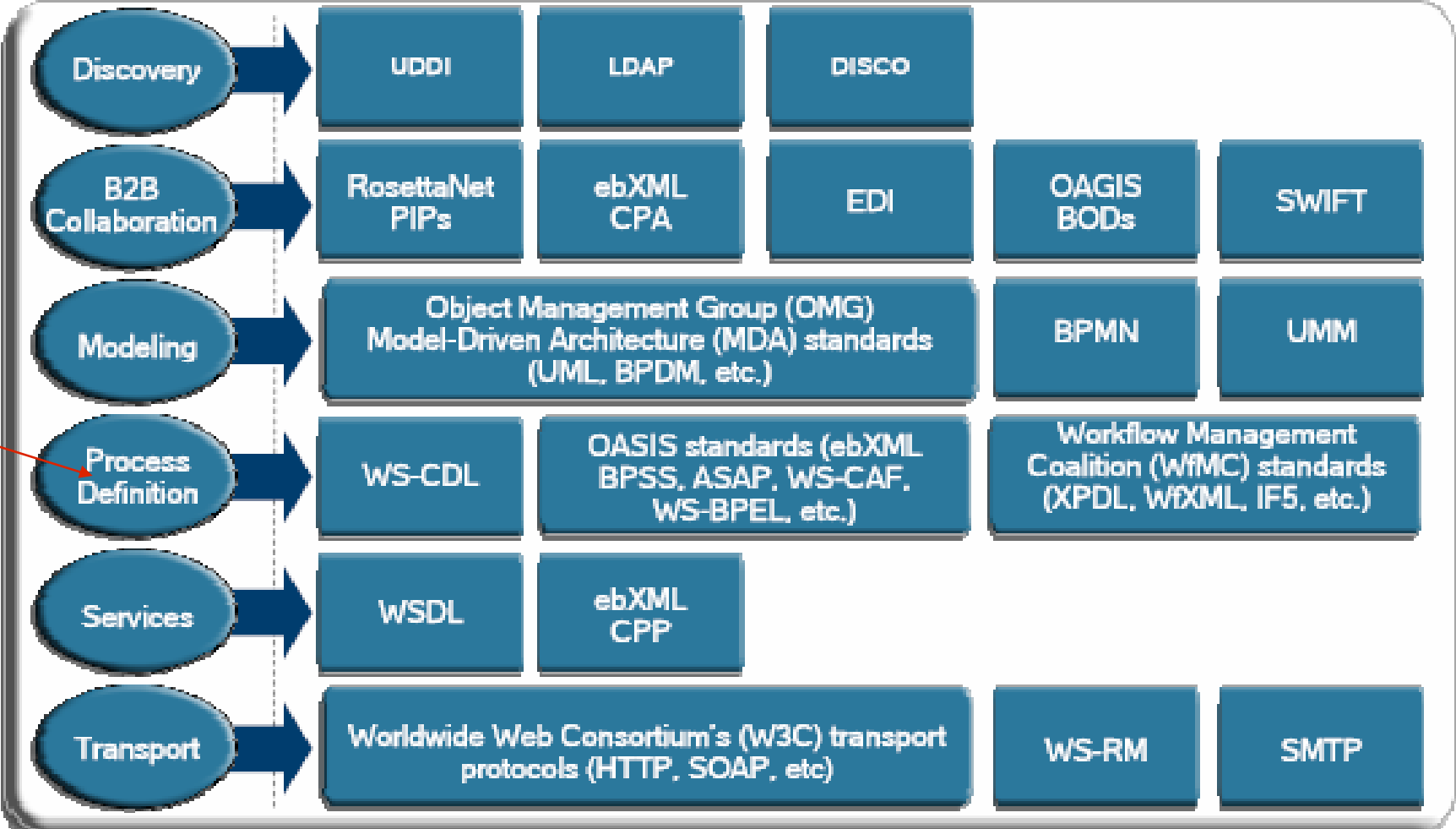
- 1) Avoiding vendor lock-in strategies
- 2) Allowing for collaboration of different organization by defining shared process models
- 3) Reusing proven processes and patterns across products

Standardisation Areas

Efforts are ongoing to standardize the following areas:

- 1) Process Definition
- 2) Process Modelling
- 3) B2B or G2G Collaboration
- 4) Discovery of Services
- 5) Services
- 6) Transport

Process-Related Standards



BPM Tools

Some categories of BPM tools:

- 1) Business Process Modelling, e.g. UML and Business Process Management Notation tools
- 2) Business Process Analysis, e.g. ARIS Process Performance Manager used for diagnostic purposes
- 3) Business Process Intelligence, e.g. Oracle Discoverer, Business Object, other BI tools for mining/prediction based on log data

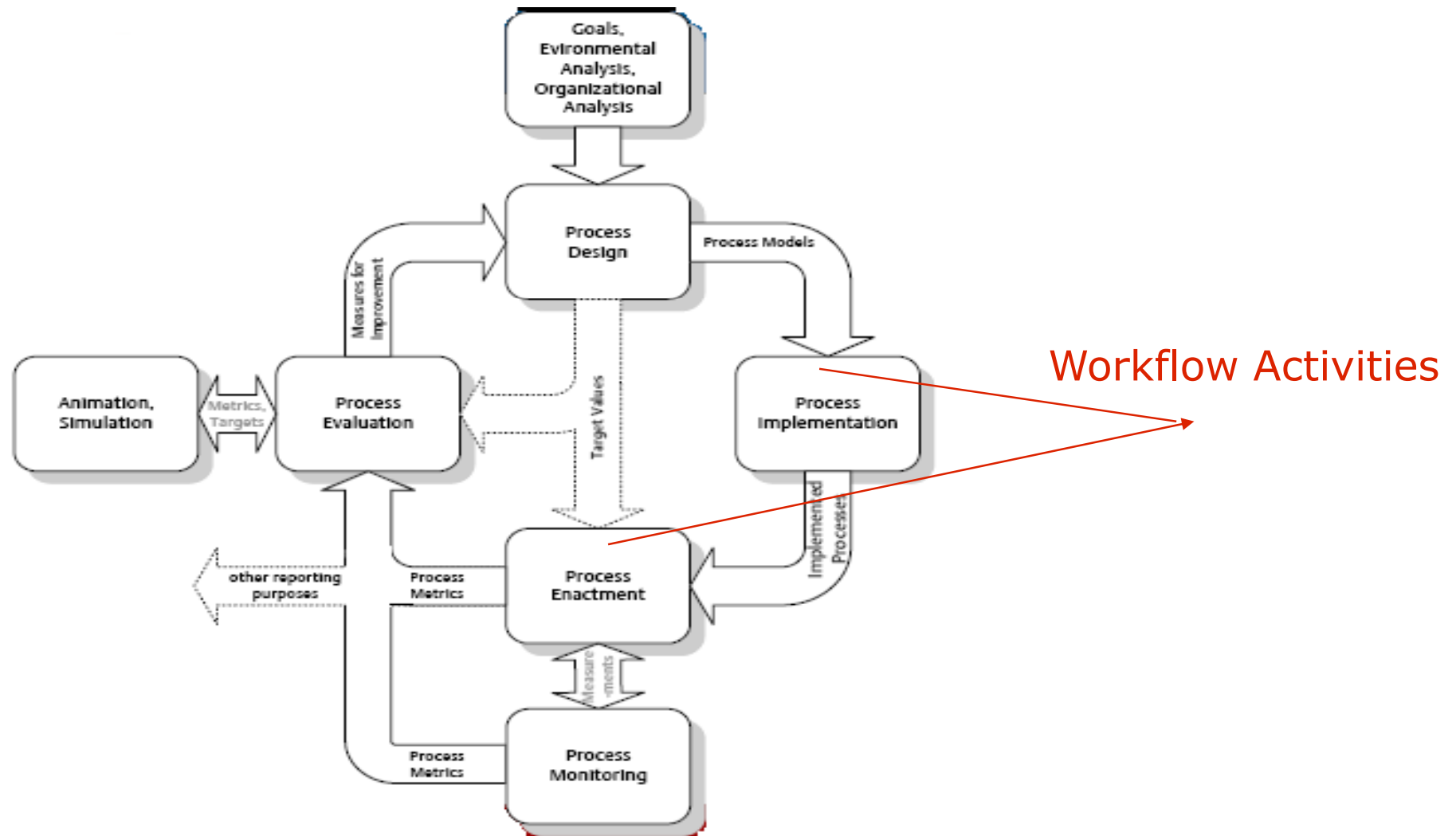
Workflow Management Systems are also BPM tools.

Relating BPM and WF

Business Process Management and Workflow Management are related concepts:

- 1) Business Process Management subsumes Workflow Management
- 2) Workflow Management is largely concerned with definition of processes and enactment services
- 3) BPM activities allow:
 - a) process design before implementation by workflow system
 - b) monitoring, evaluation and re-design after implementation and during execution by workflow system

Workflow Activities in BPM



Summary

- 1) BPM aims to align operational processes with organizational strategies
- 2) BPM activities cover the design, definition, enactment, monitoring and evaluation of business processes
- 3) Workflow Management is an aspect of BPM concerned with the enactment and state management of processes
- 4) BPM activities like monitoring and evaluation rely on data provided by Workflow Engines during process execution
- 5) Several BPM tools exist, specifically in the area of process modeling, design, analysis and intelligence.