



Process Architecture

What is it? Why do I need one? Picking a Winner...

David Piper
Managing Consultant

Agenda

- Defining Process Architecture
- Importance of Process Architecture
- What's in Process Architecture?
- How do I use Process Architecture?
- What makes a winner?

Defining Process Architecture

Process Architecture

The ordering, interfaces, interdependencies, and other relationships among the *process elements* in a *standard process*. Process architecture also describes the interfaces, interdependencies, and other relationships between *process elements* and external processes (e.g. contract management).

CMMI-DEV V1.2

5 references in OPD + Glossary



Other “Useful” Terms

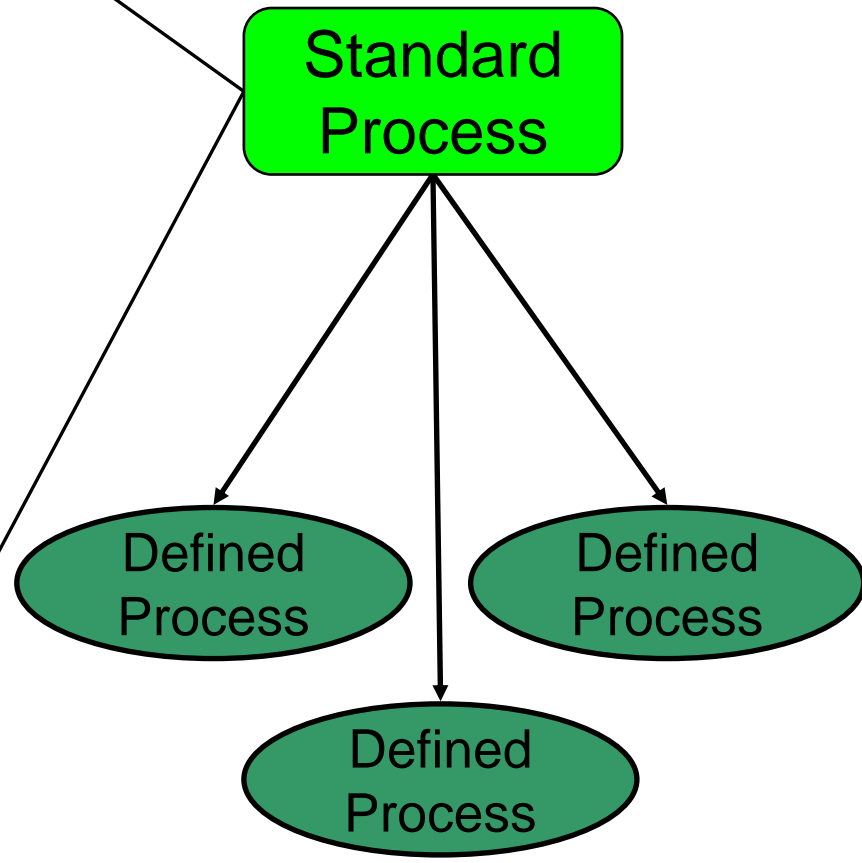
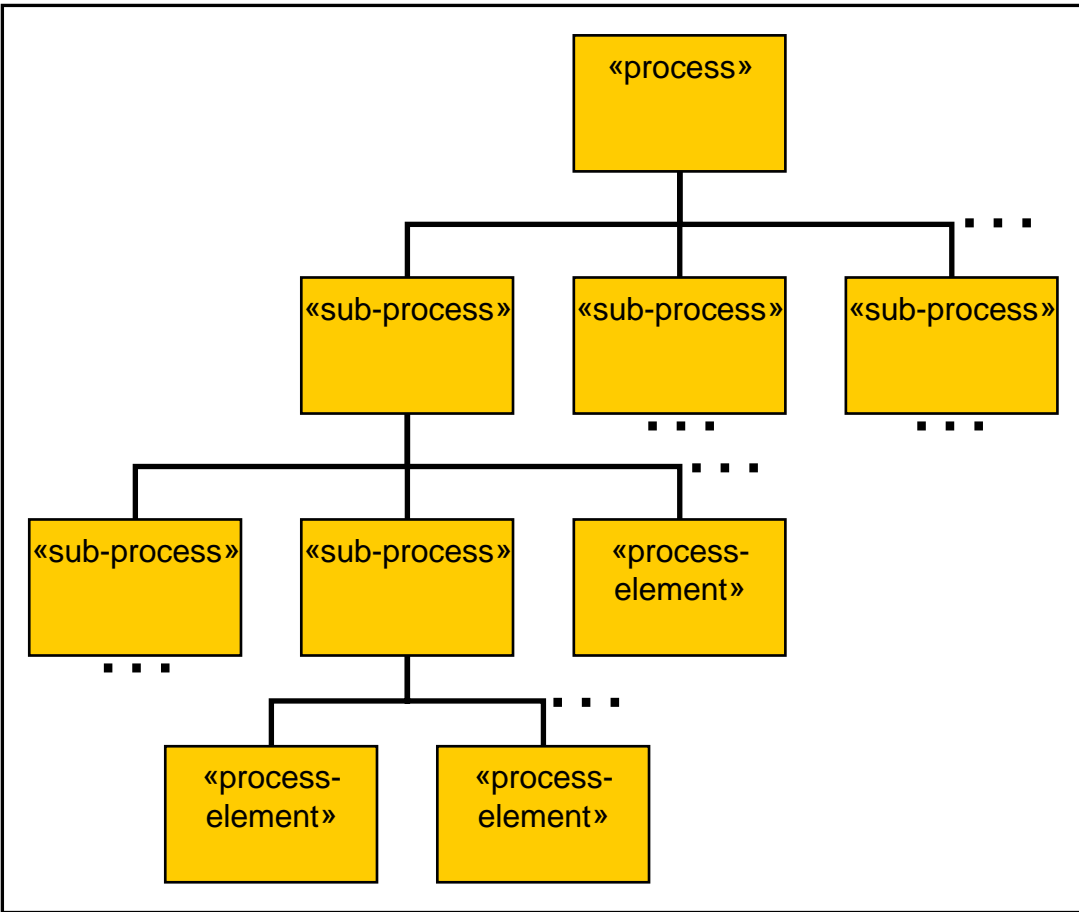
Process Element

The fundamental unit of a *process*. A *process* can be defined in terms of *sub-processes* or process elements. A *sub-process* can be further decomposed into *sub-processes* or process elements; a process element cannot.

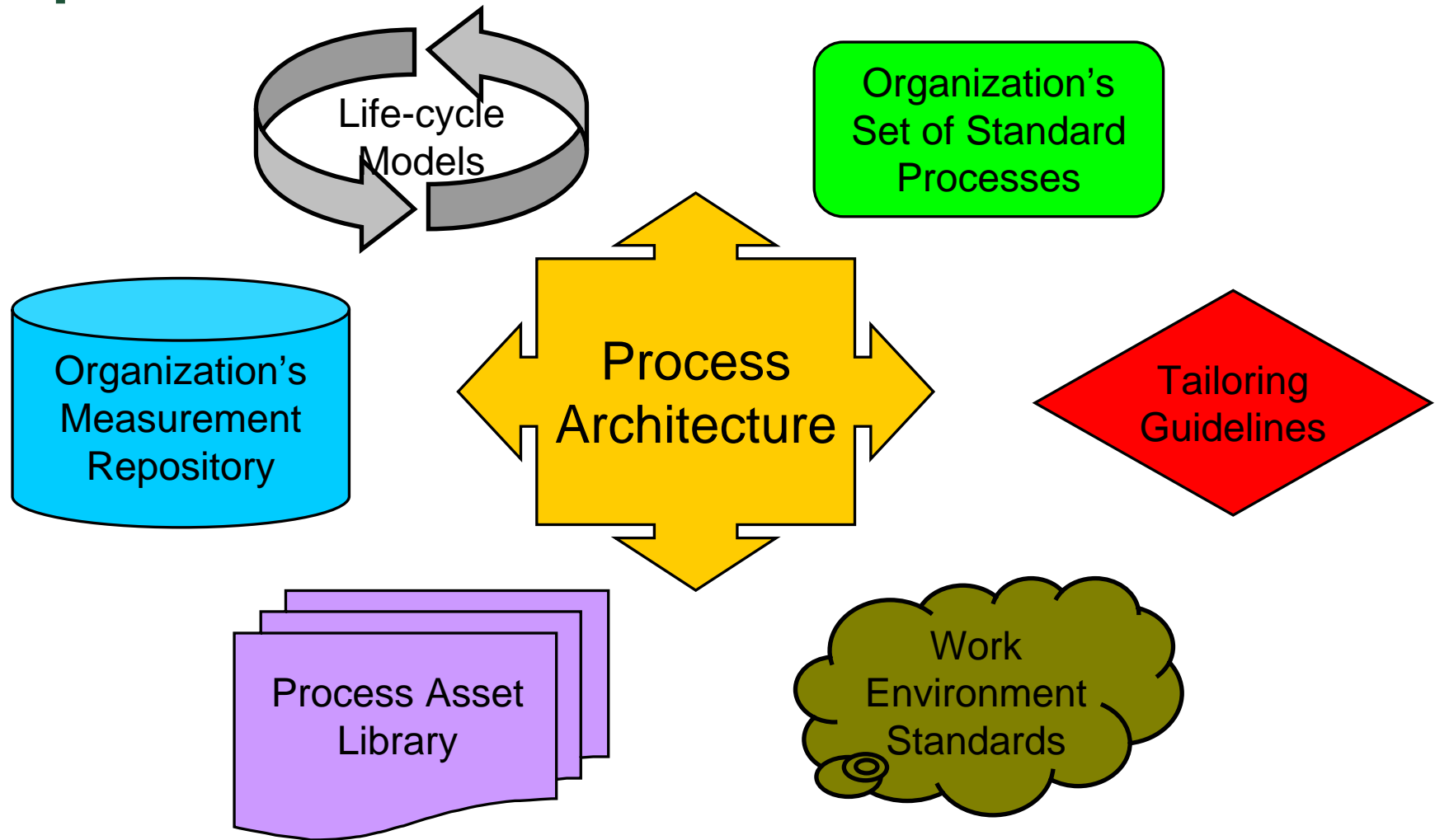
Standard Process

An operational definition of the basic *process* that guides the establishment of a common *process* in an organization. A standard process describes the fundamental *process elements* that are expected to be incorporated into any *defined process*...

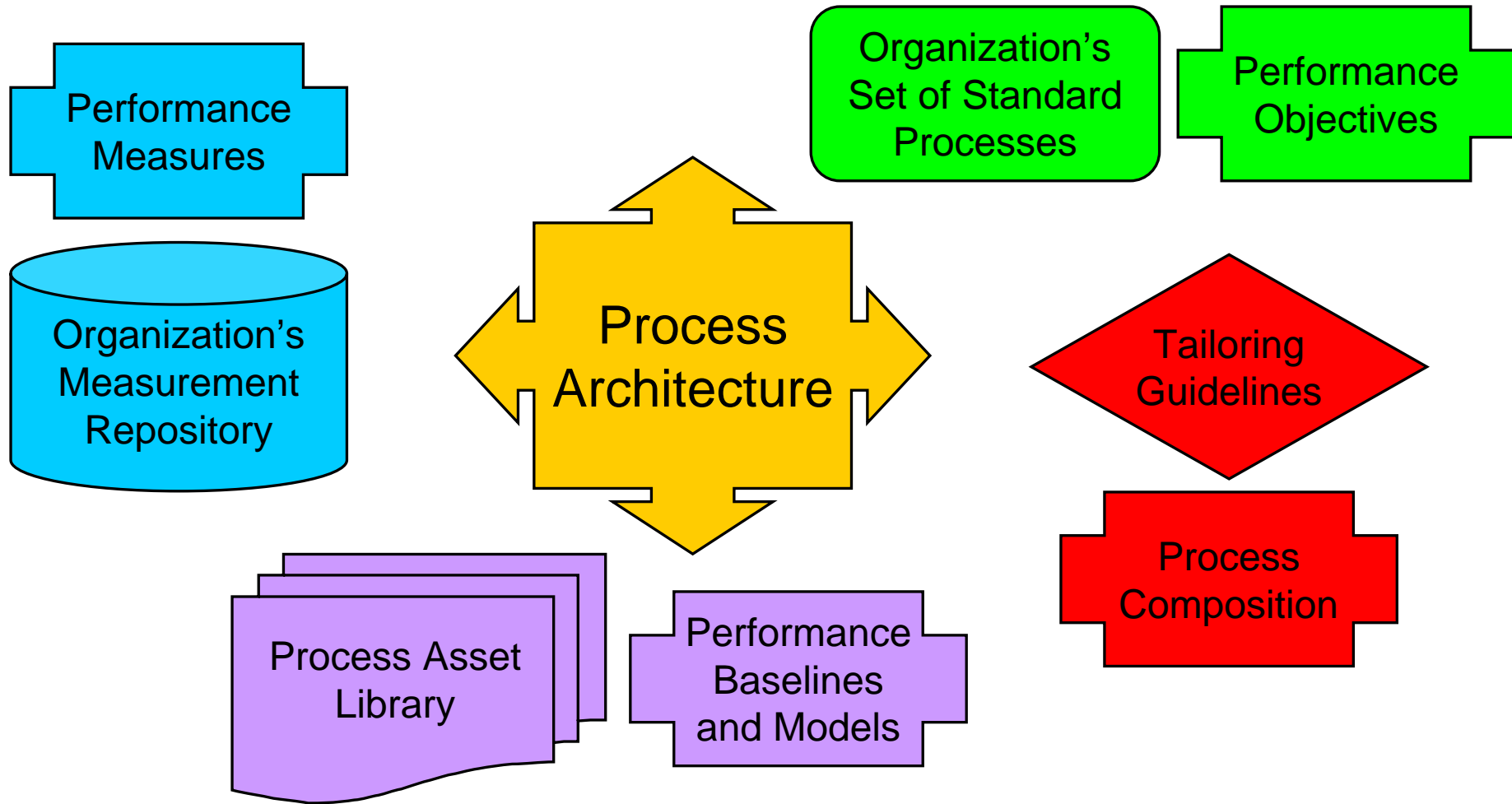
Ah Ha!



Importance – ML/CL 3 Features

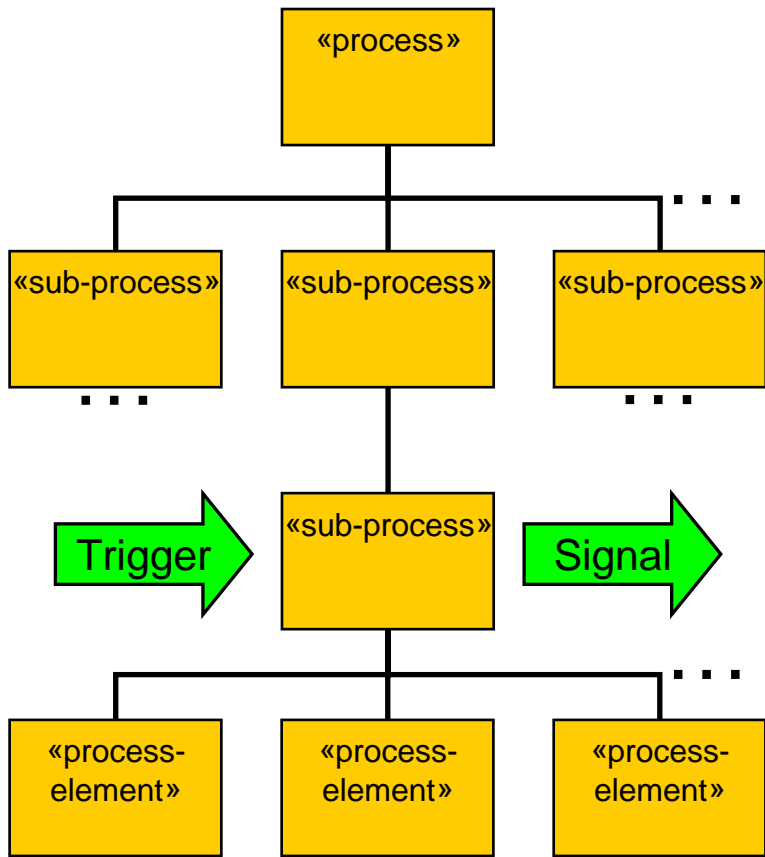


Importance – ML/CL 4/5 Features

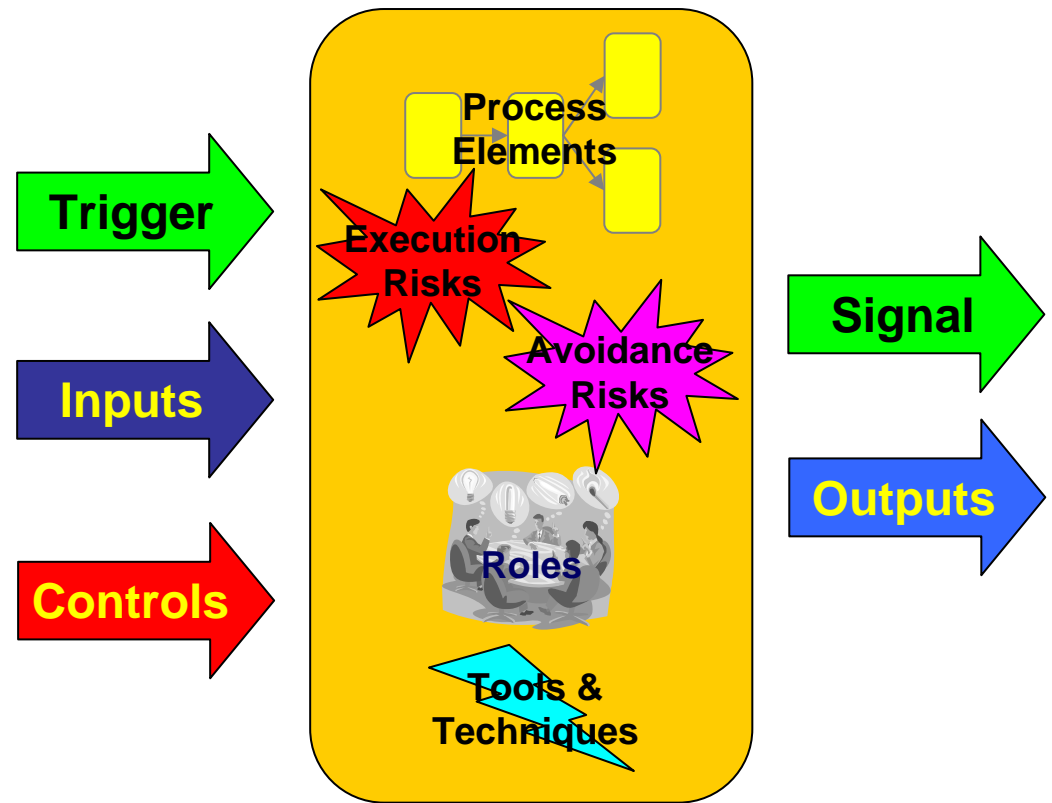


Process Definition

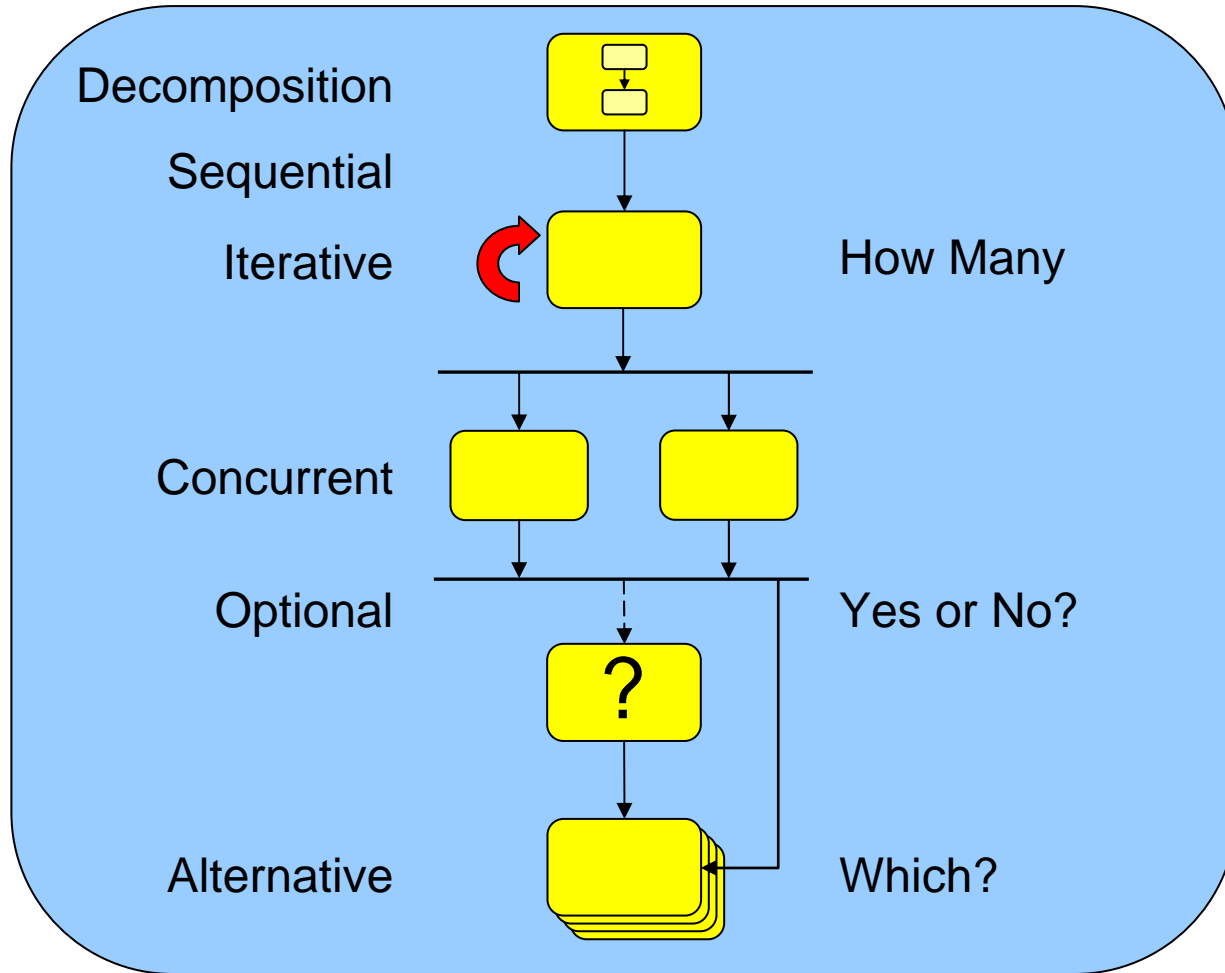
Hierarchy



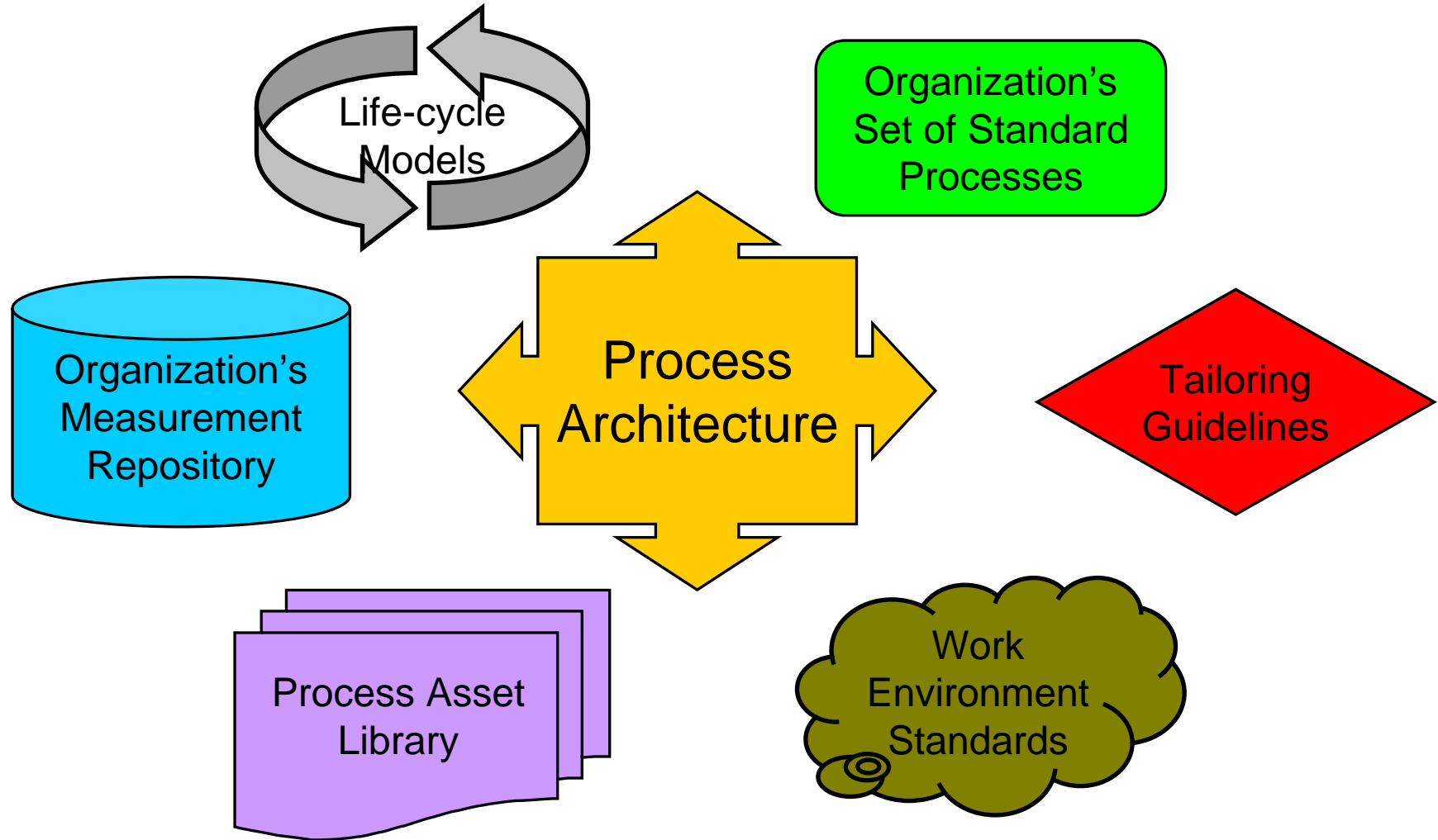
Definition



Structure and Tailoring

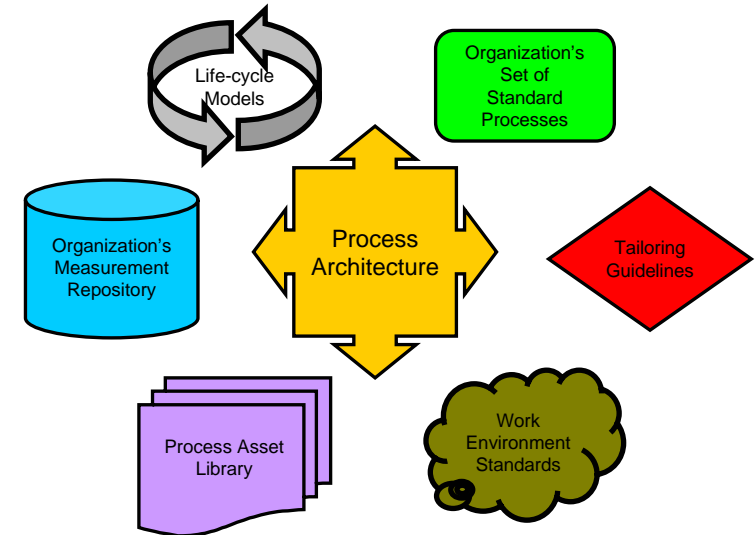


Plus All The Rest...



Process Architecture Features

- Information Rich
 - All aspects of process definition
 - Many different types of asset
- Relationally Rich
 - Inter-process relationship types
 - Conditional relationships (tailoring guidelines)
 - Relationships to all types of assets
- Analytically Rich
 - Support measures, baselines and models
 - Performance-based Process Composition
 - Quantitative Management, Innovation and Deployment
 - Project Use of Process
- Presentation Rich
 - Complex information
 - Easy to use



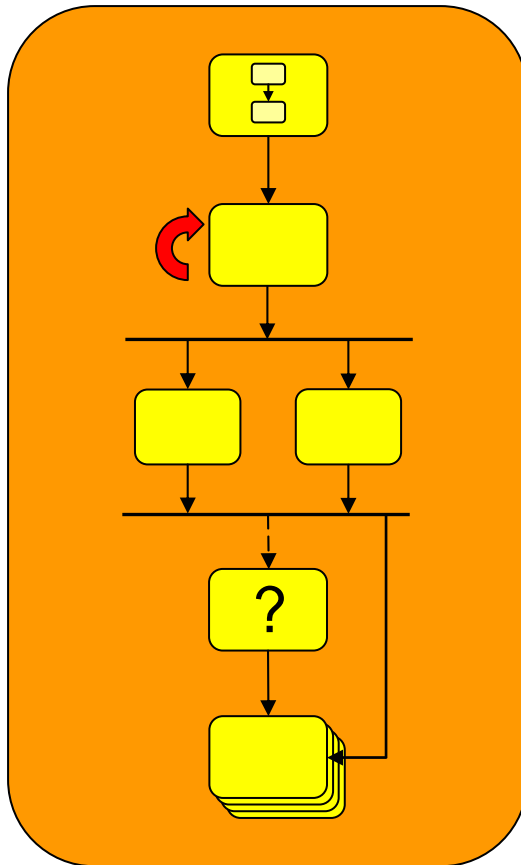
Obstruction...



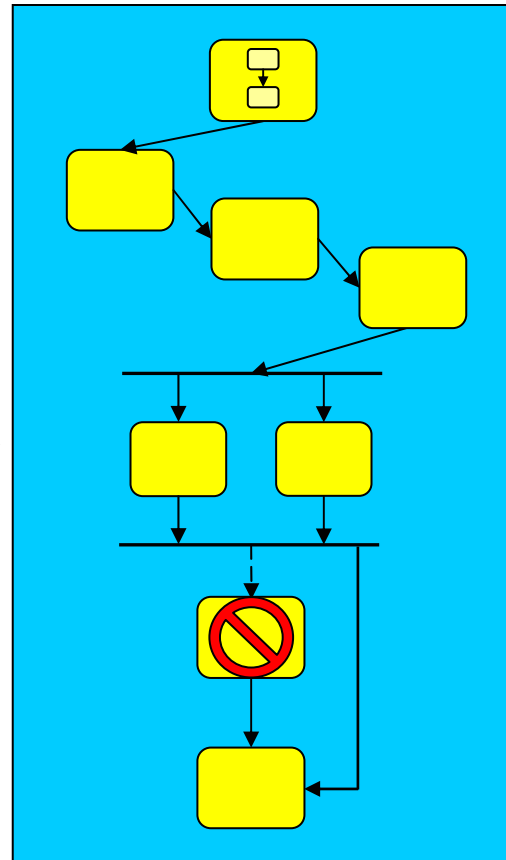
Automate the Legacy!



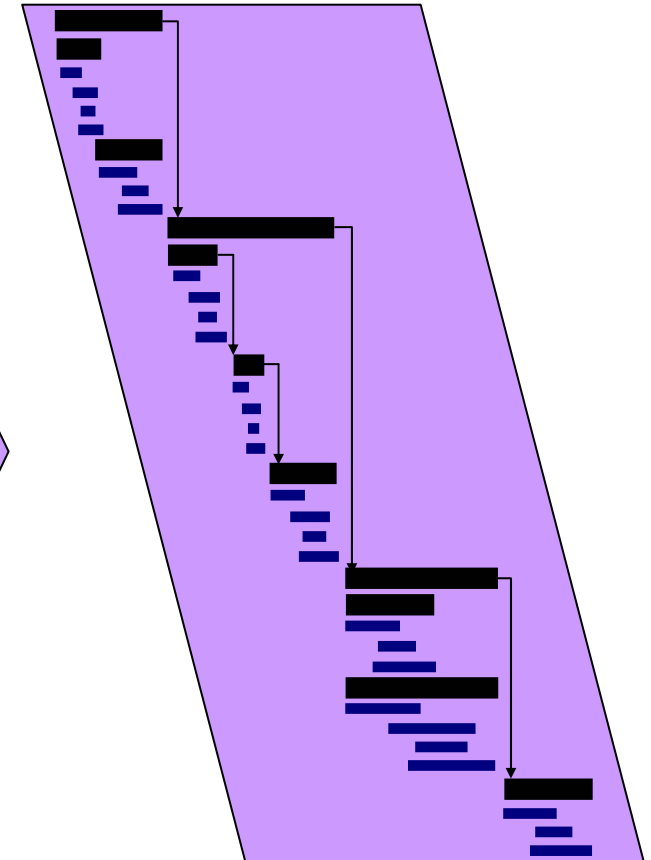
Make it Work For You



Standard
Process

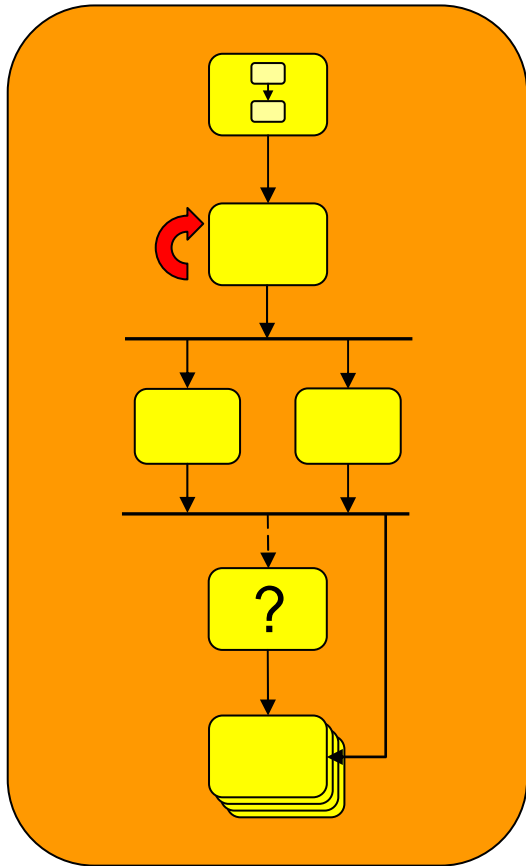


Defined
Process



Project Plan

Supply and Harvest

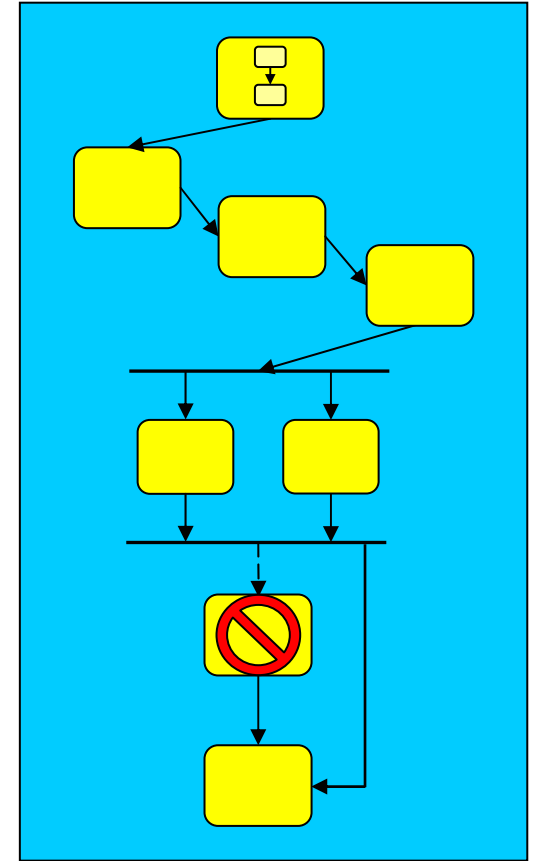


Standard Process








Assets Supplied with Standard Process

Work Products submitted as candidate Assets



Defined Process

Keys to Success

-  Start Process Architecture Early
-  Collect and Catalogue Assets Early
-  Standardize on Process Definitions
-  Assist Early Process Adopters
-  Have a Strategy to Manage the Legacy
-  Make the Process Architecture Work for YOU!

Summary

- **Process Architecture is Critical to Process Success**
 - Central to CMMI CL/ML 3 → 5
 - Not Clearly Defined in the Model
 - Implicit not Explicit Presence in the Model (6 mentions!)
- **Critical Obstacle is the Legacy**
 - Different Origins, Different Formats
 - Making Legacy Conform
- **Make Process Architecture work For YOU!**
 - Active, Intelligent Supply of Processes
 - Supply and Harvest of Assets
 - Benefits Obvious to Practitioners not just Process Gurus