

Managing Projects with Practical Software & Systems Measurement – PSM

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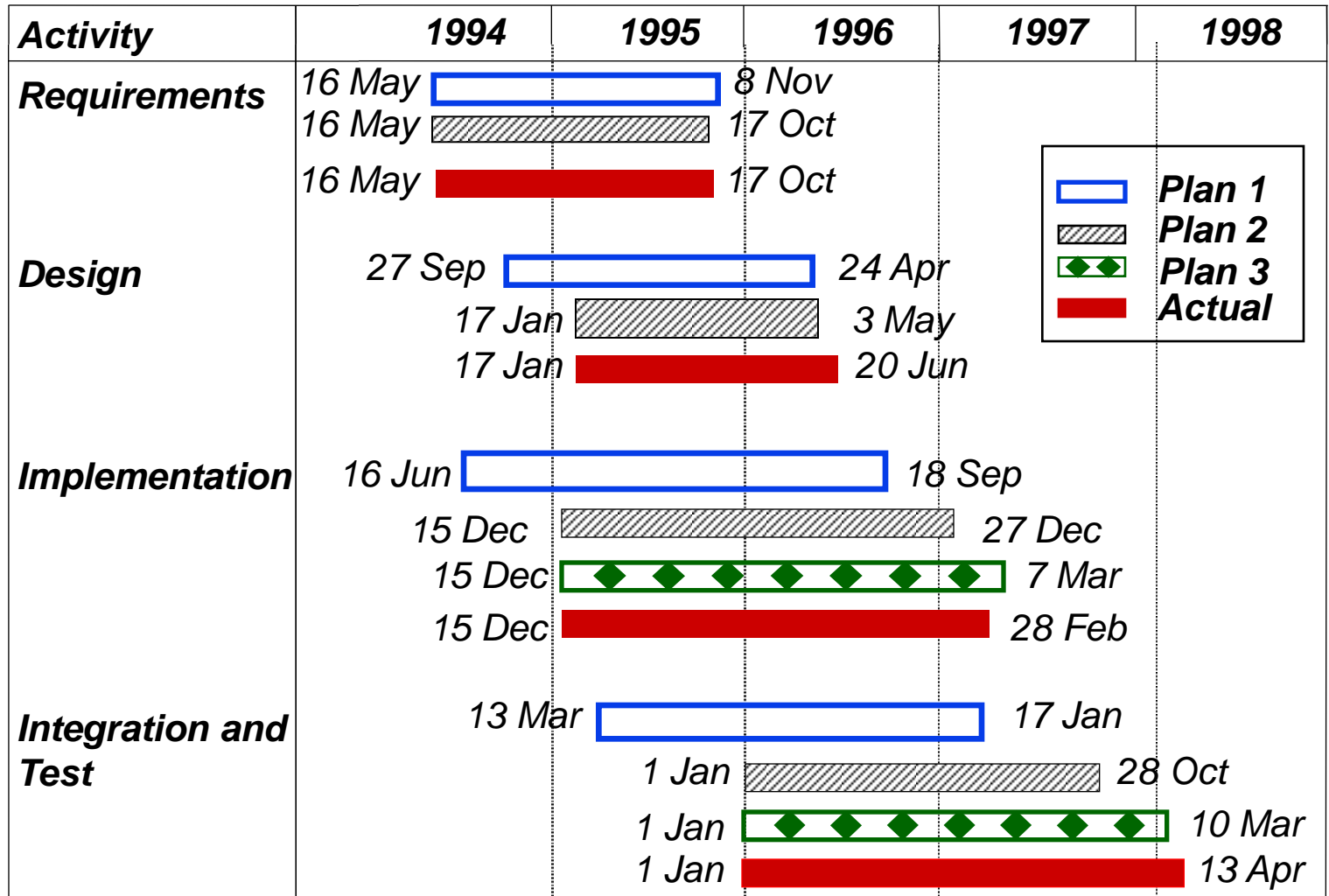
Agenda

Topics

- Project Management Problems
- Applying PSM
- Using PSM with FPA

Project Management Problems

Project Development Schedule



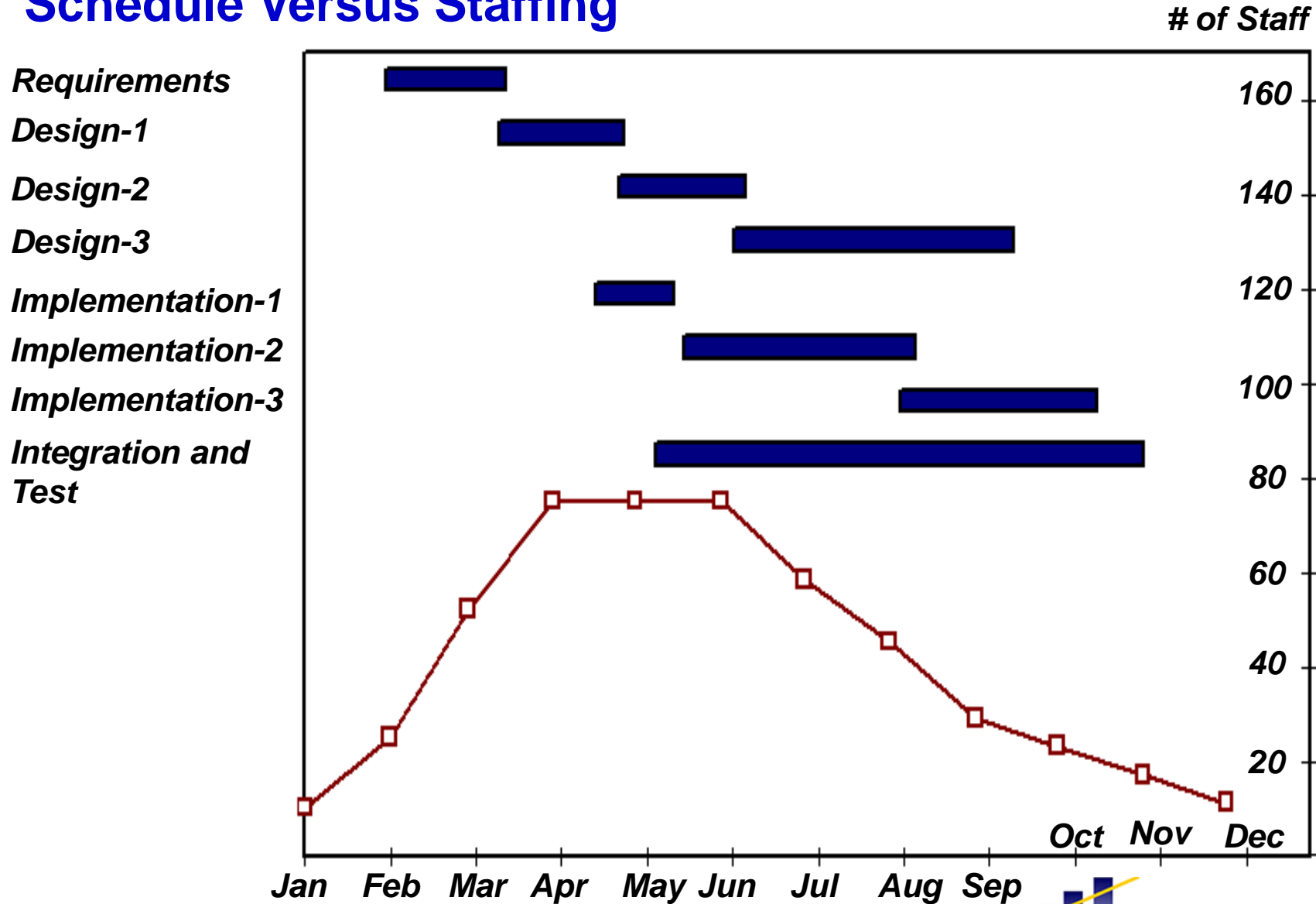
Project Management Problems

The Gantt Chart

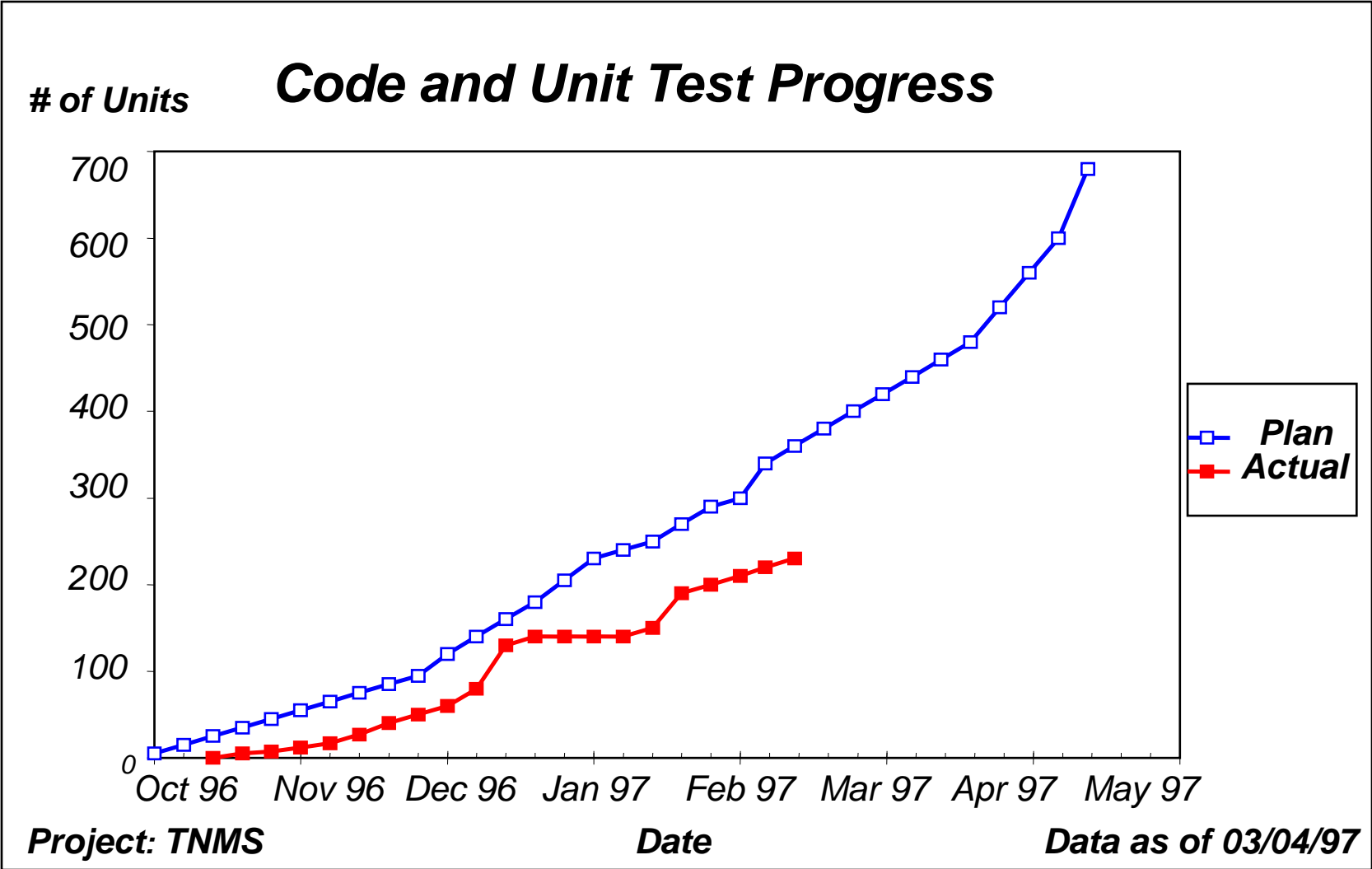
- The Gantt Chart is named after Henry Gantt (1861–1919), who designed his chart around the years **1910–1915**.
- Can we do better than that?

Project Management Problems

Schedule Versus Staffing

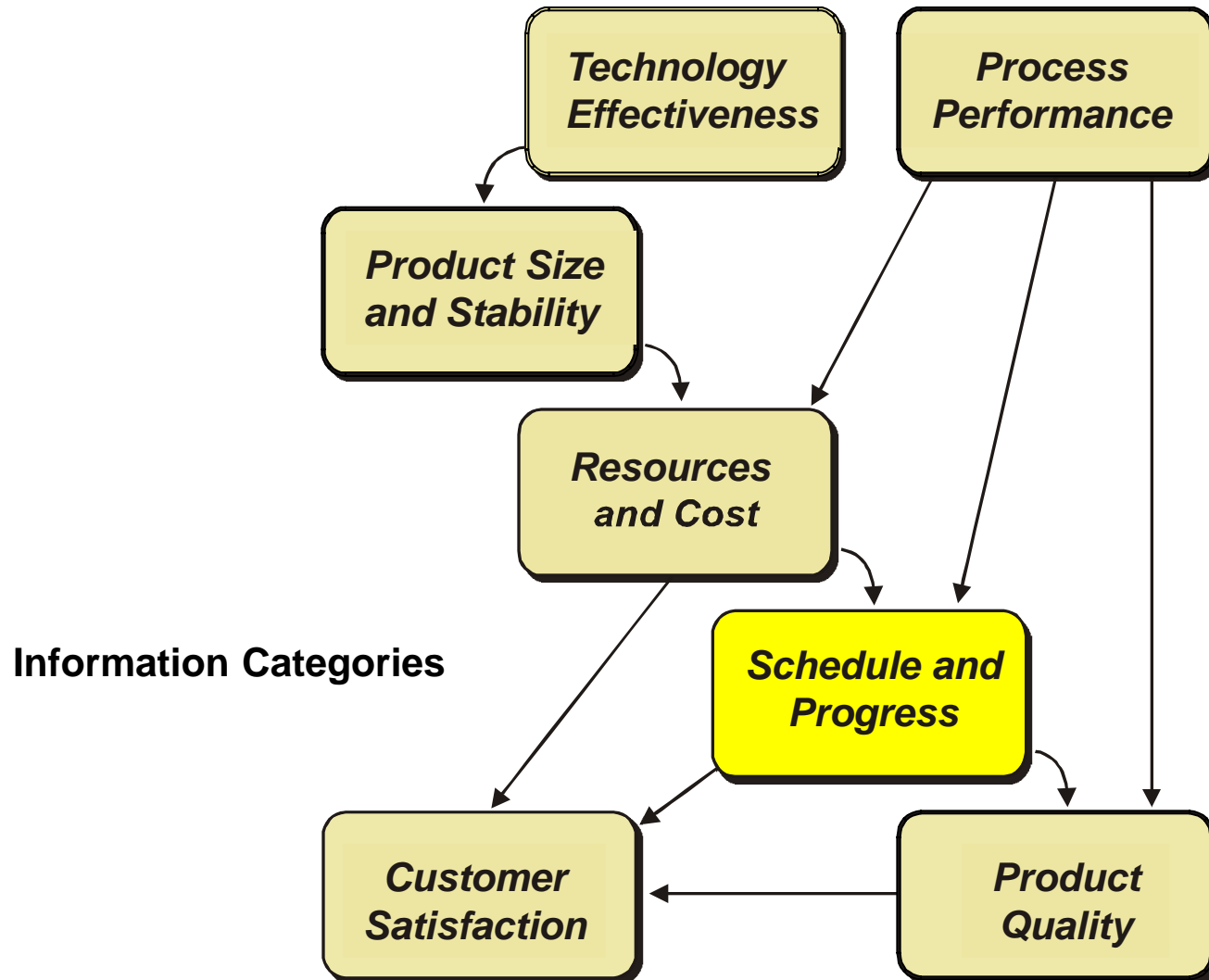


Project Management Problems

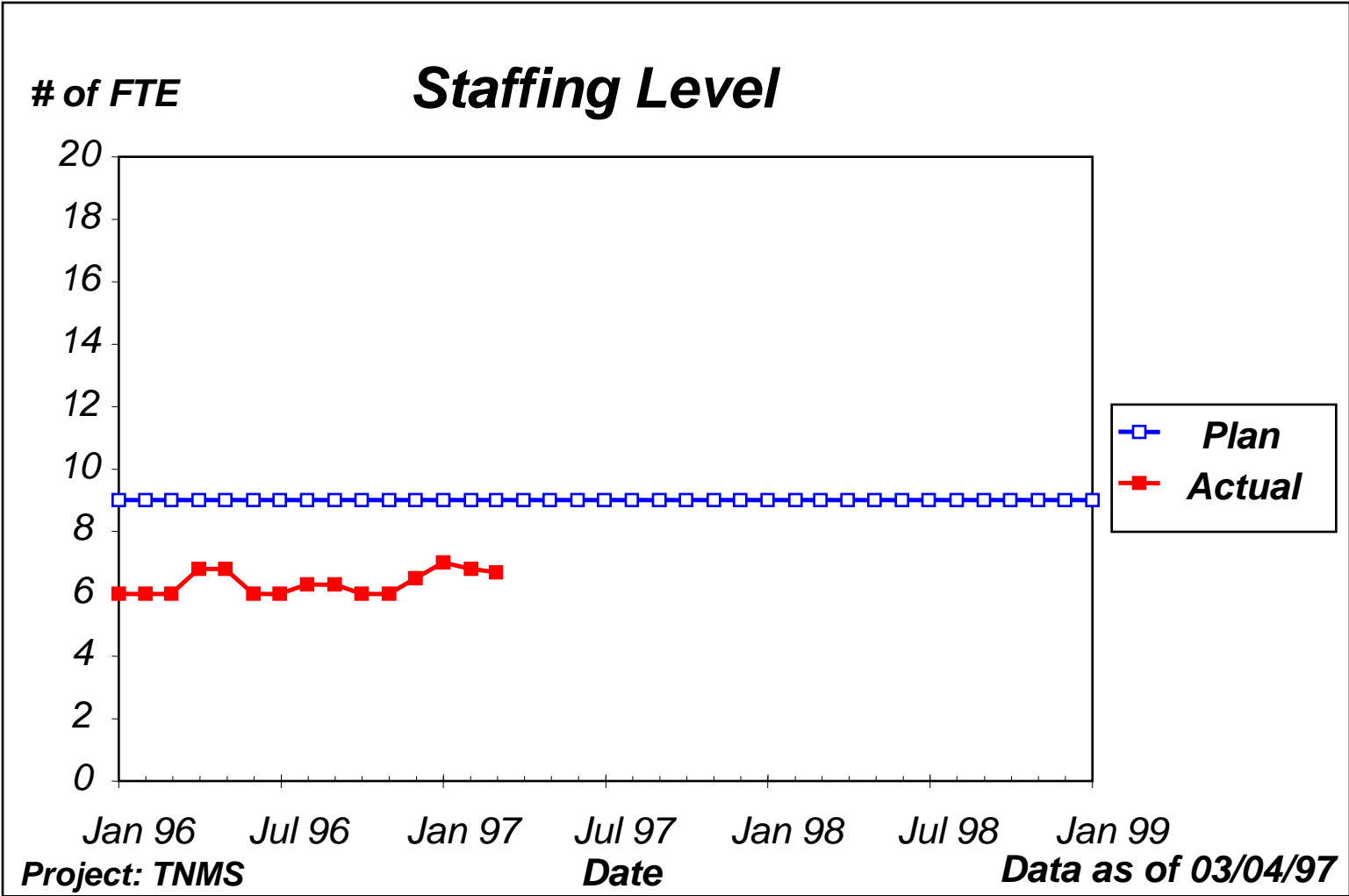


Project Management Problems

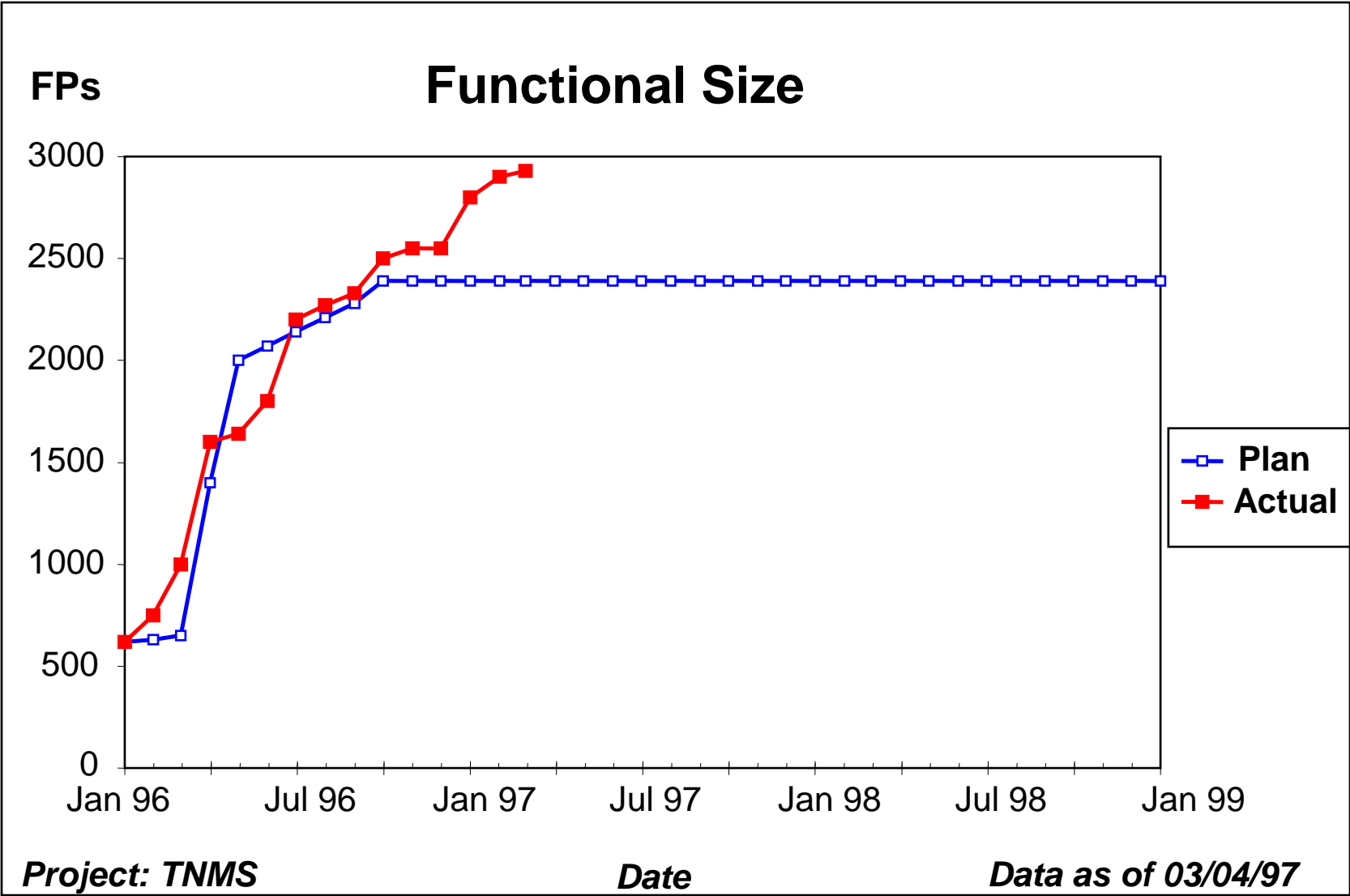
The PSM Analysis Model



Project Management Problems

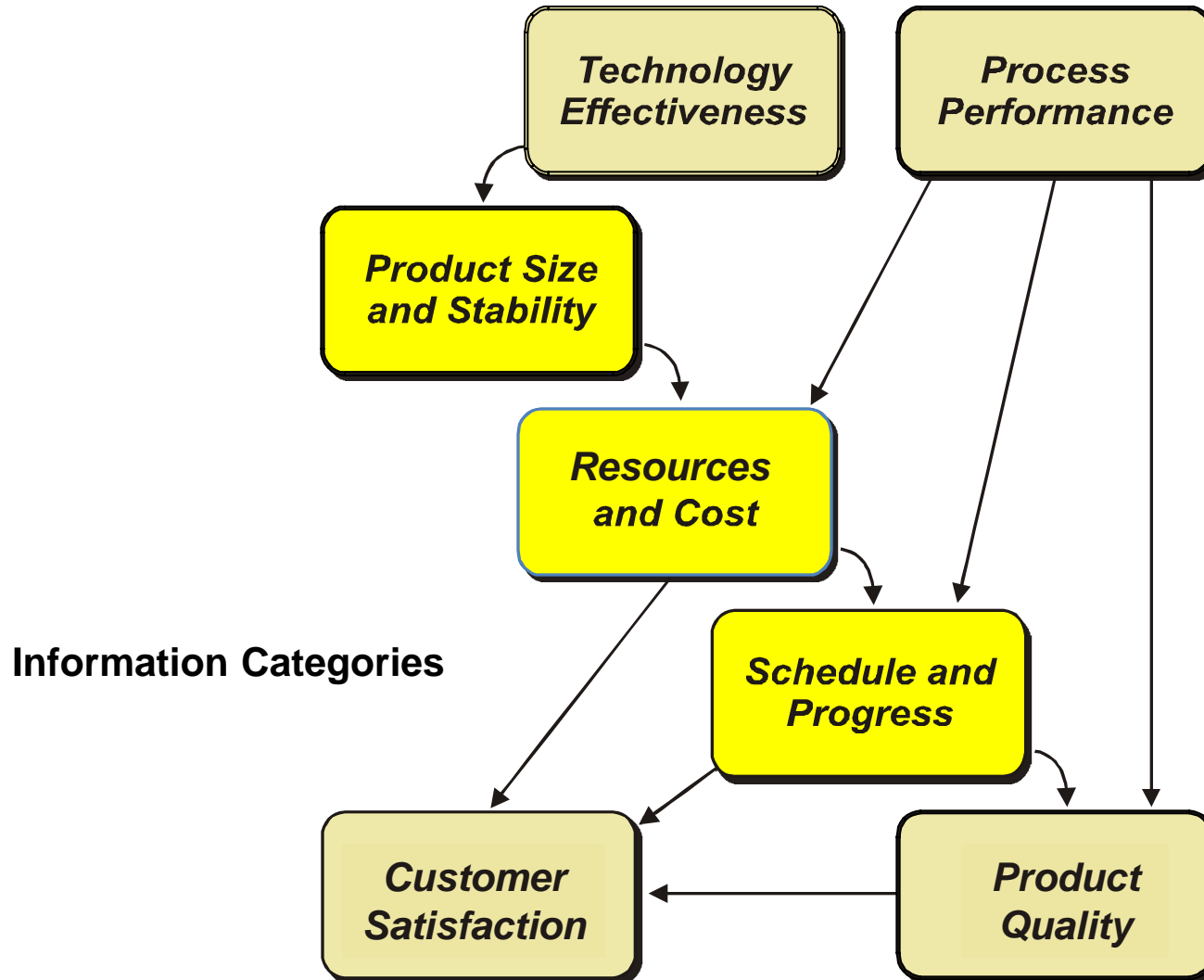


Project Management Problems



Project Management Problems

The PSM Analysis Model



Applying PSM

- **PSM - *Practical Software & Systems Measurement*** - is a methodology for the design and implementation of a measurement program
- **PSM** is fully compatible with the **ISO/IEC 15939** standard and with the *Measurement and Analysis* Process Area of the **CMMI**
- **PSM** is sponsored by the DoD and the US Army

Applying PSM

Select Measures

- Measures should be derived from Information Needs
- Information Needs are based on
 - Objectives
 - Obstacles
 - Risks
 - Problems
 - Lack of Information

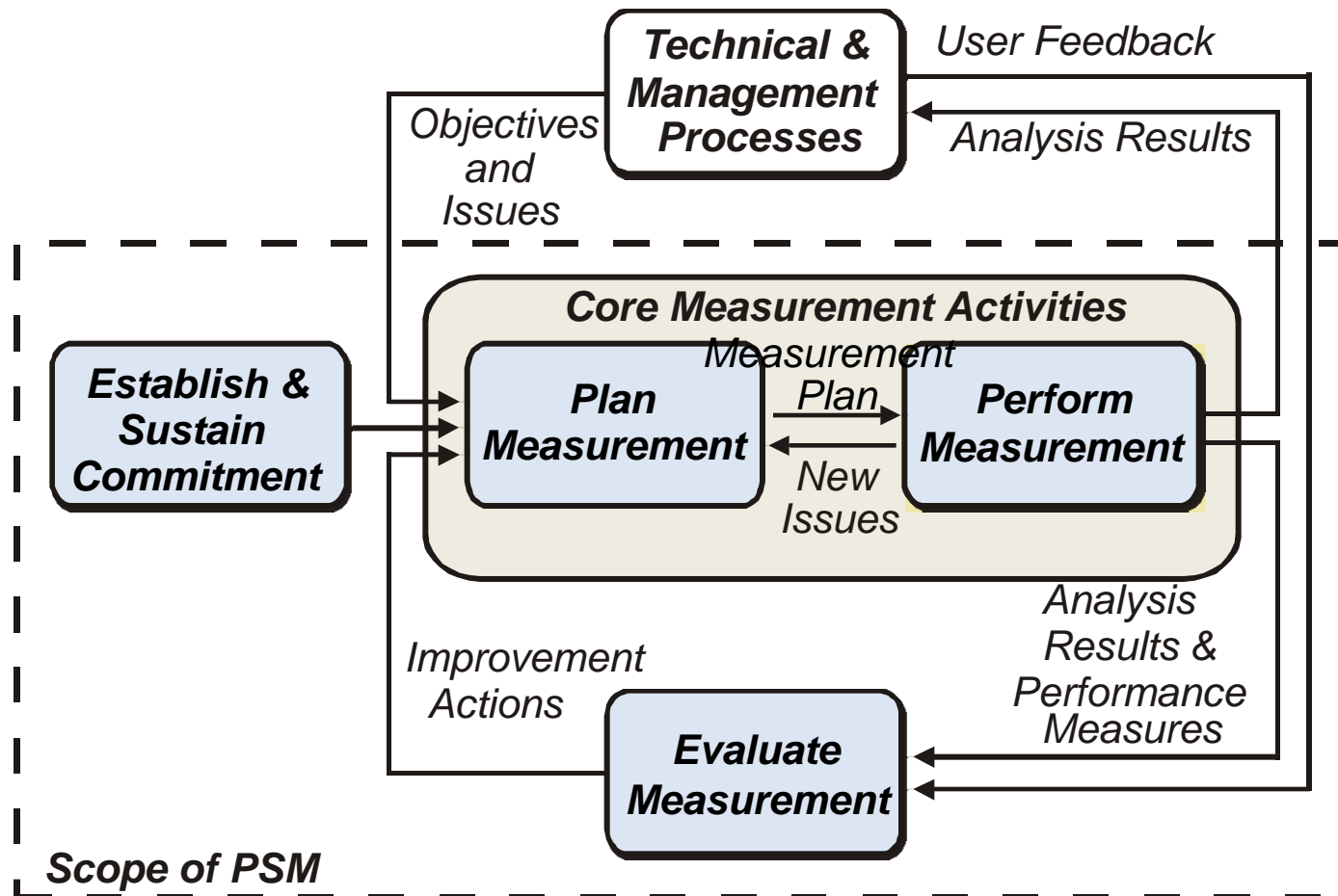
Applying PSM

Information Categories

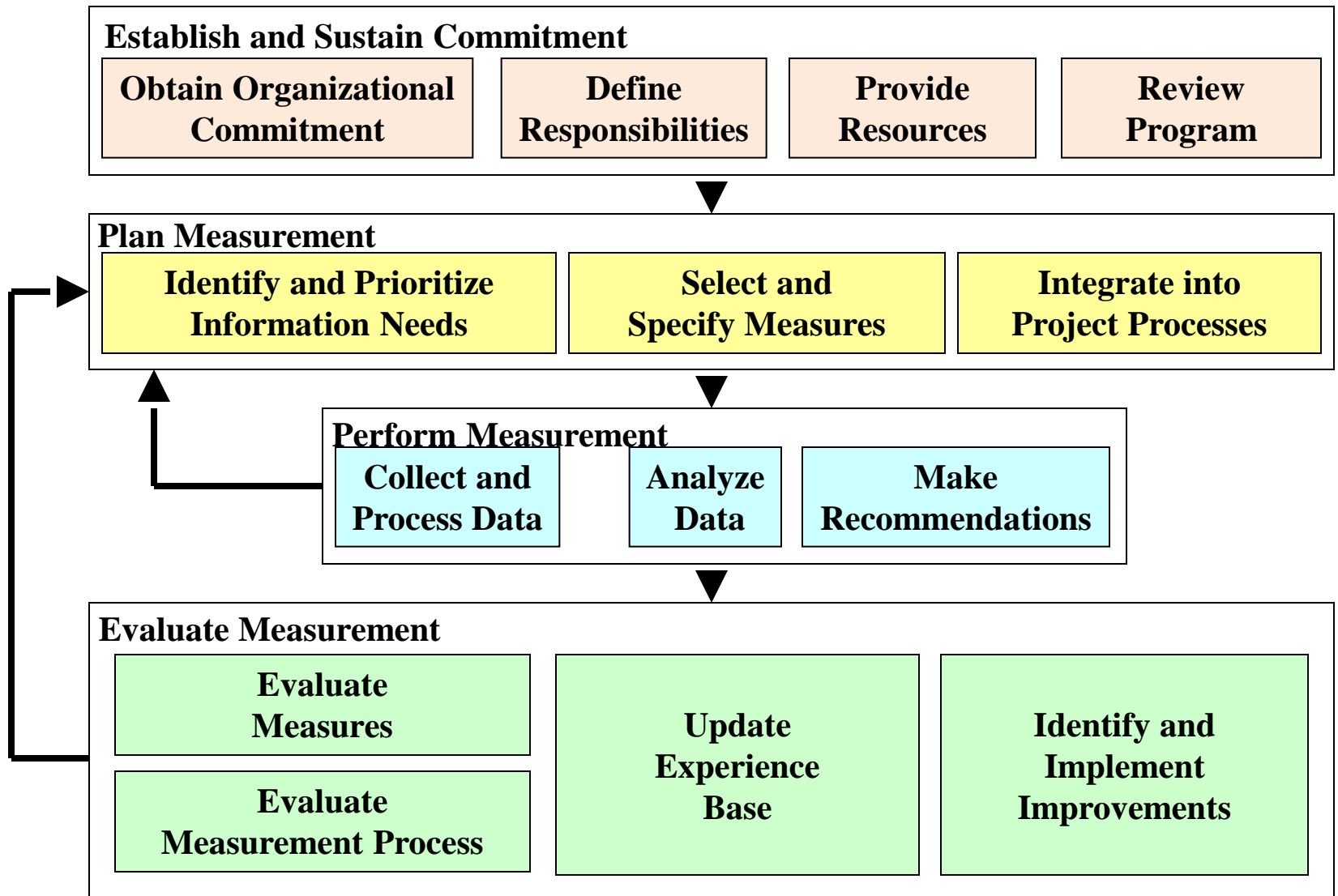
- PSM includes a set of measures successfully used in the industry
- Measures are grouped into Information Categories
 - Schedule and Progress
 - Resources and Cost
 - Product Size and Stability
 - Product Quality
 - Process Performance
 - Technology Effectiveness
 - Customer Satisfaction

Applying PSM

The PSM Process Model



Applying PSM - The PSM Process Model - Details



Applying PSM

Three Major Project Concerns

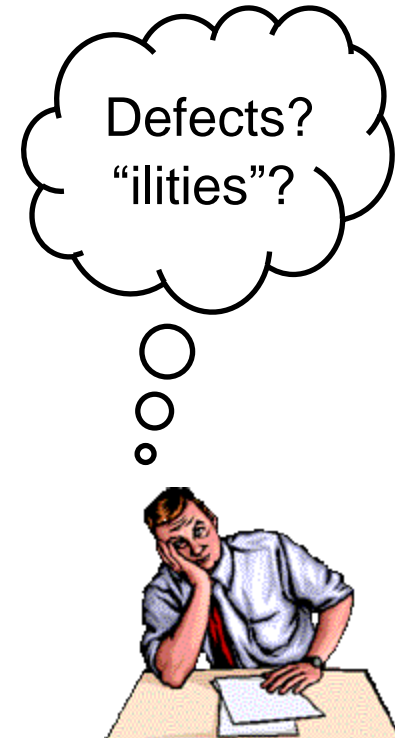
- Schedule



- Cost

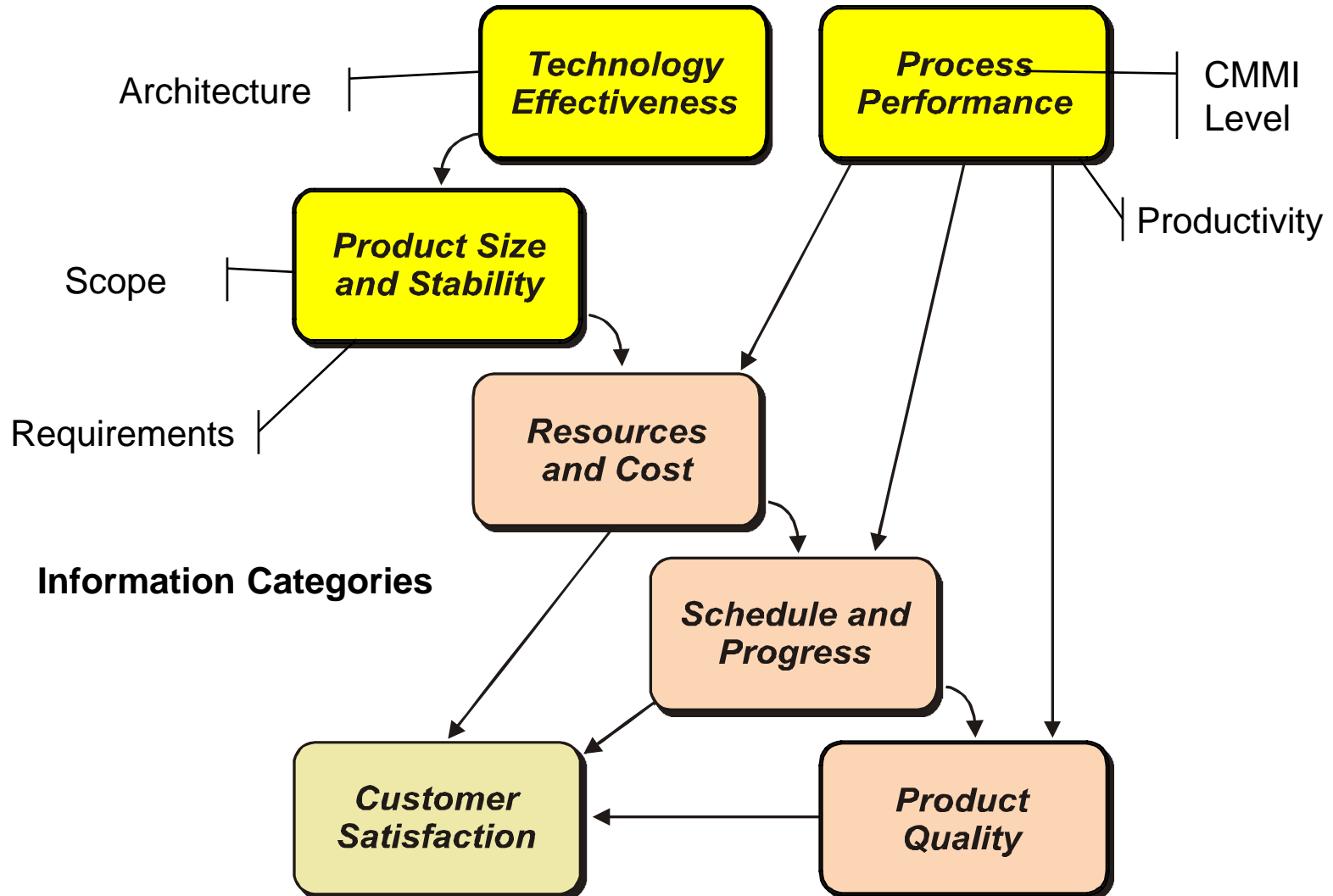


- Quality



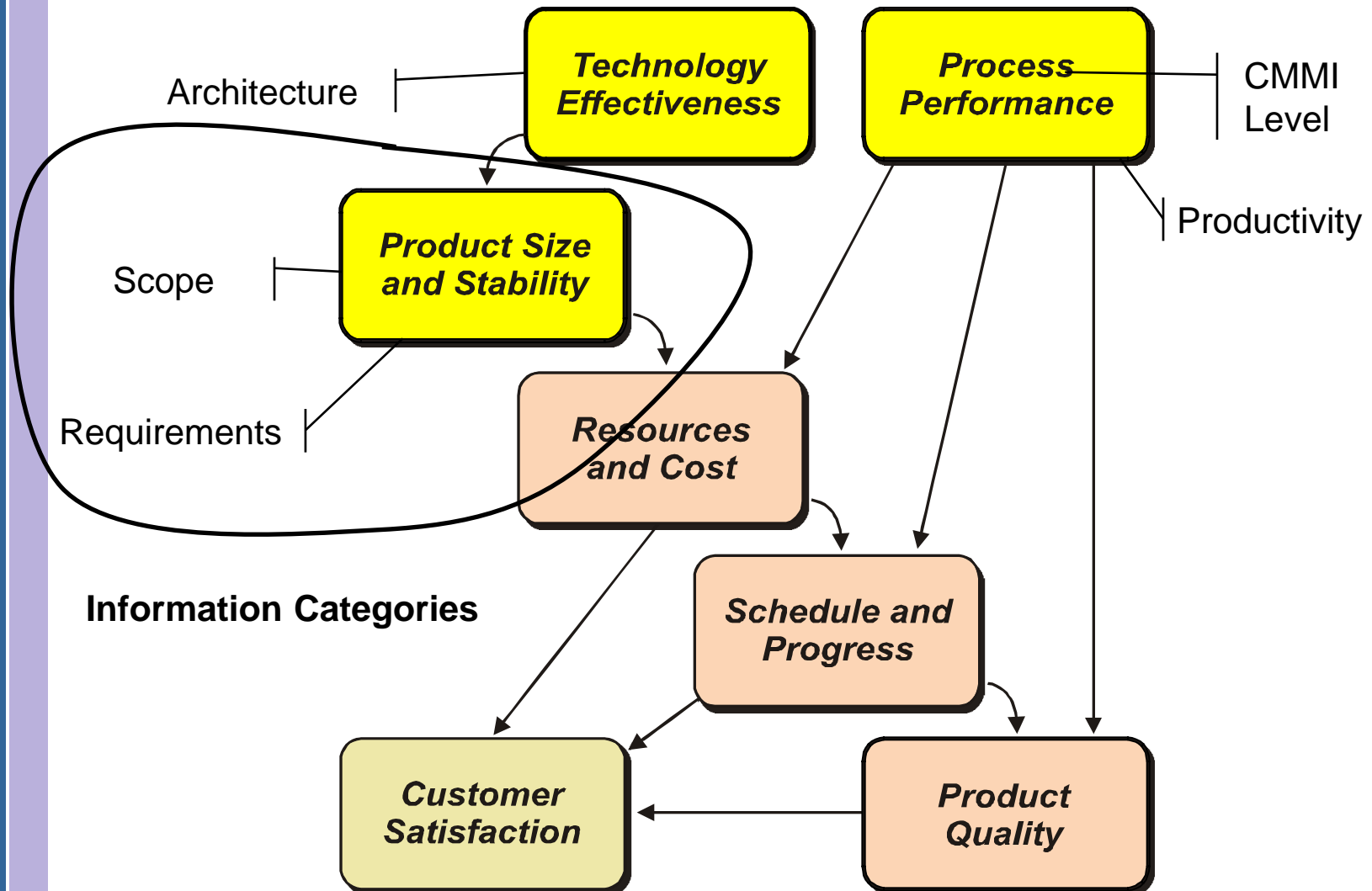
Applying PSM

Using the PSM Analysis Model



Applying PSM

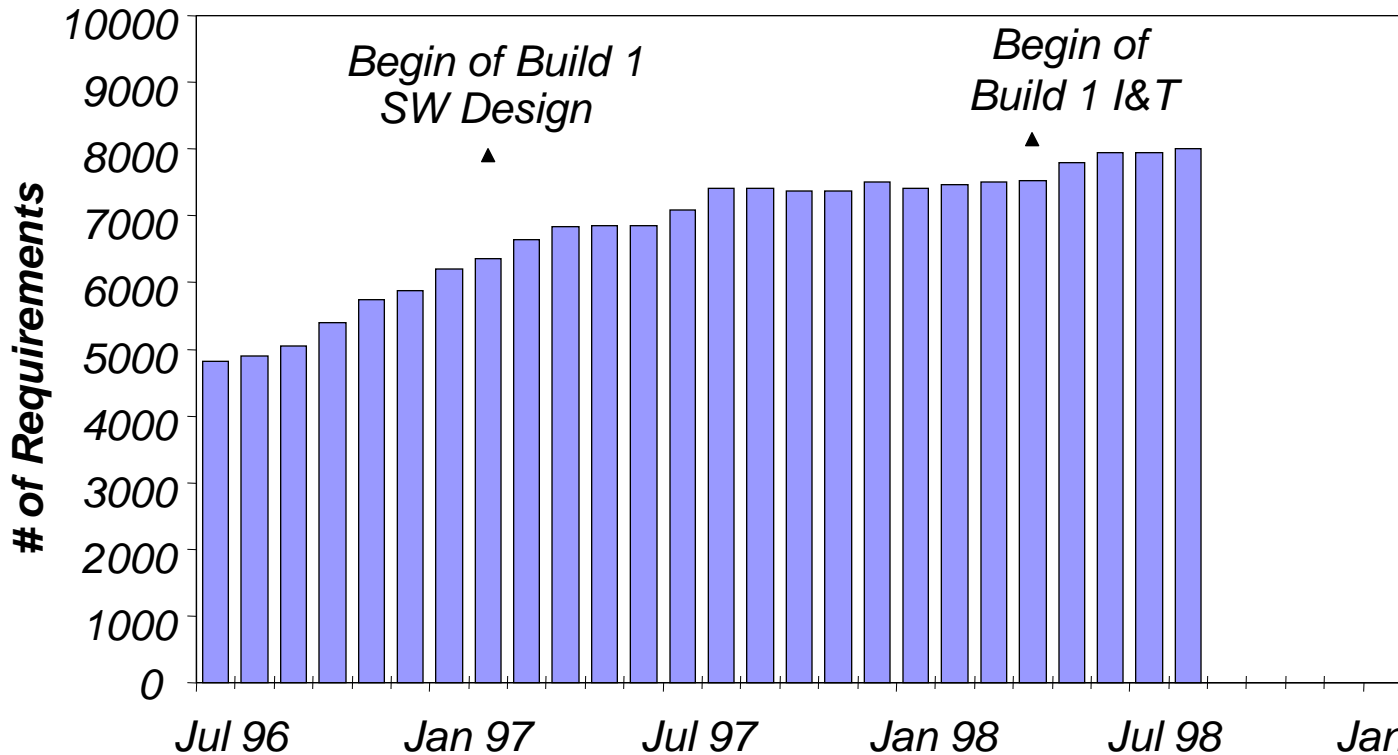
A Plan for Immediate Action



Applying PSM

Control Requirements

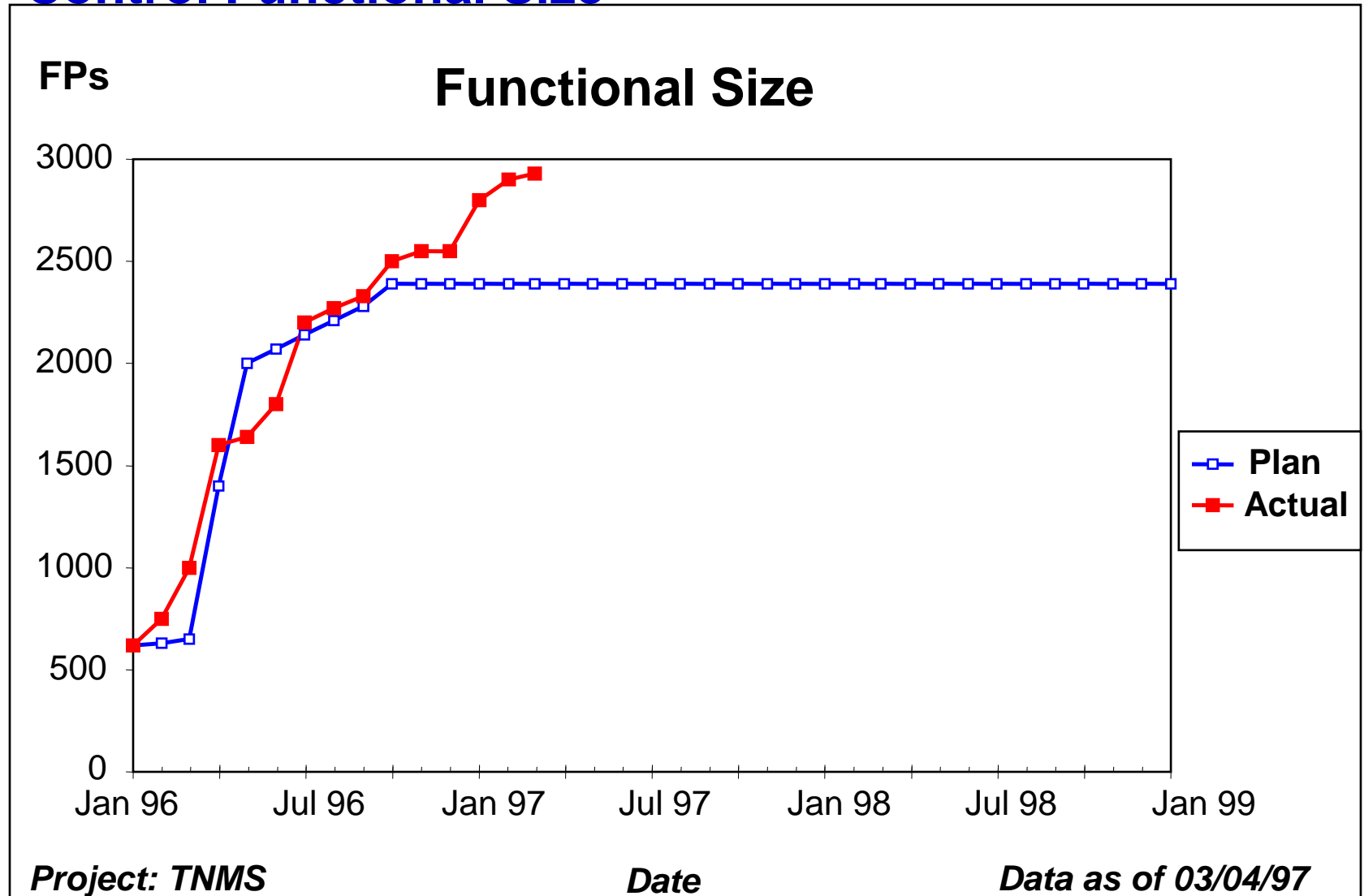
of Requirements
Build 1



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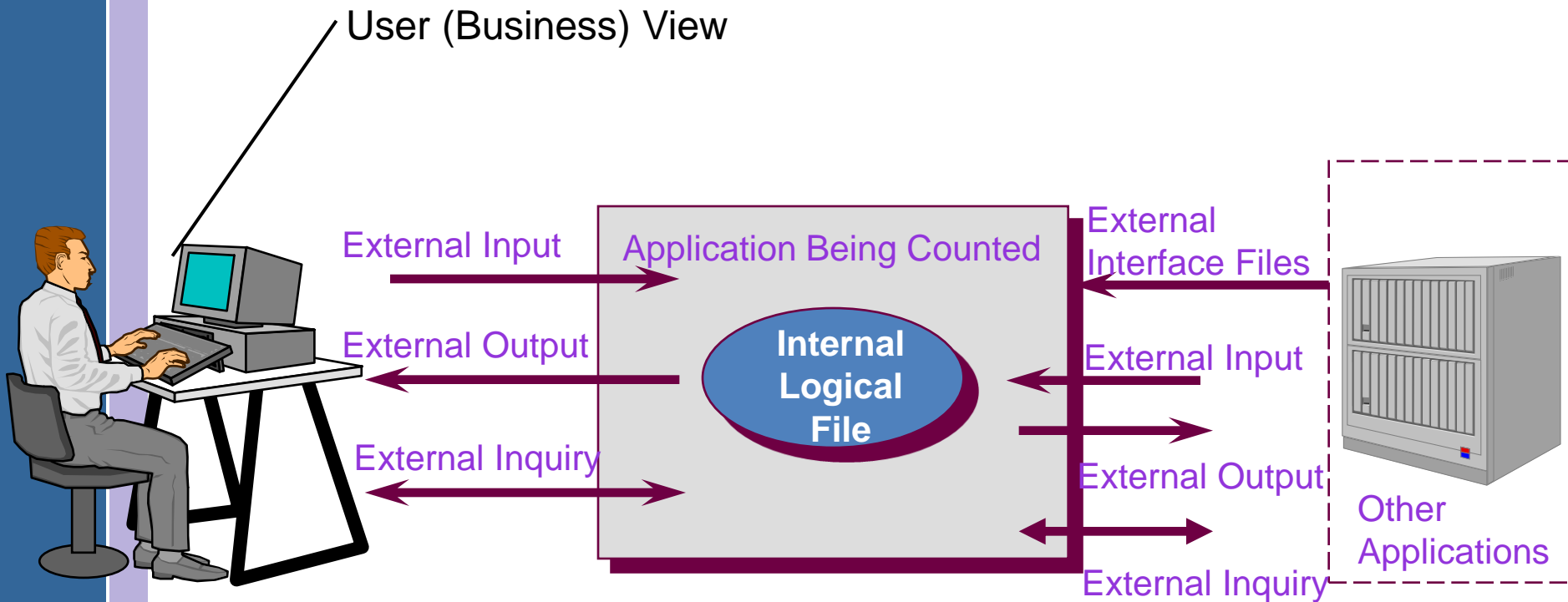
Applying PSM

Control Functional Size



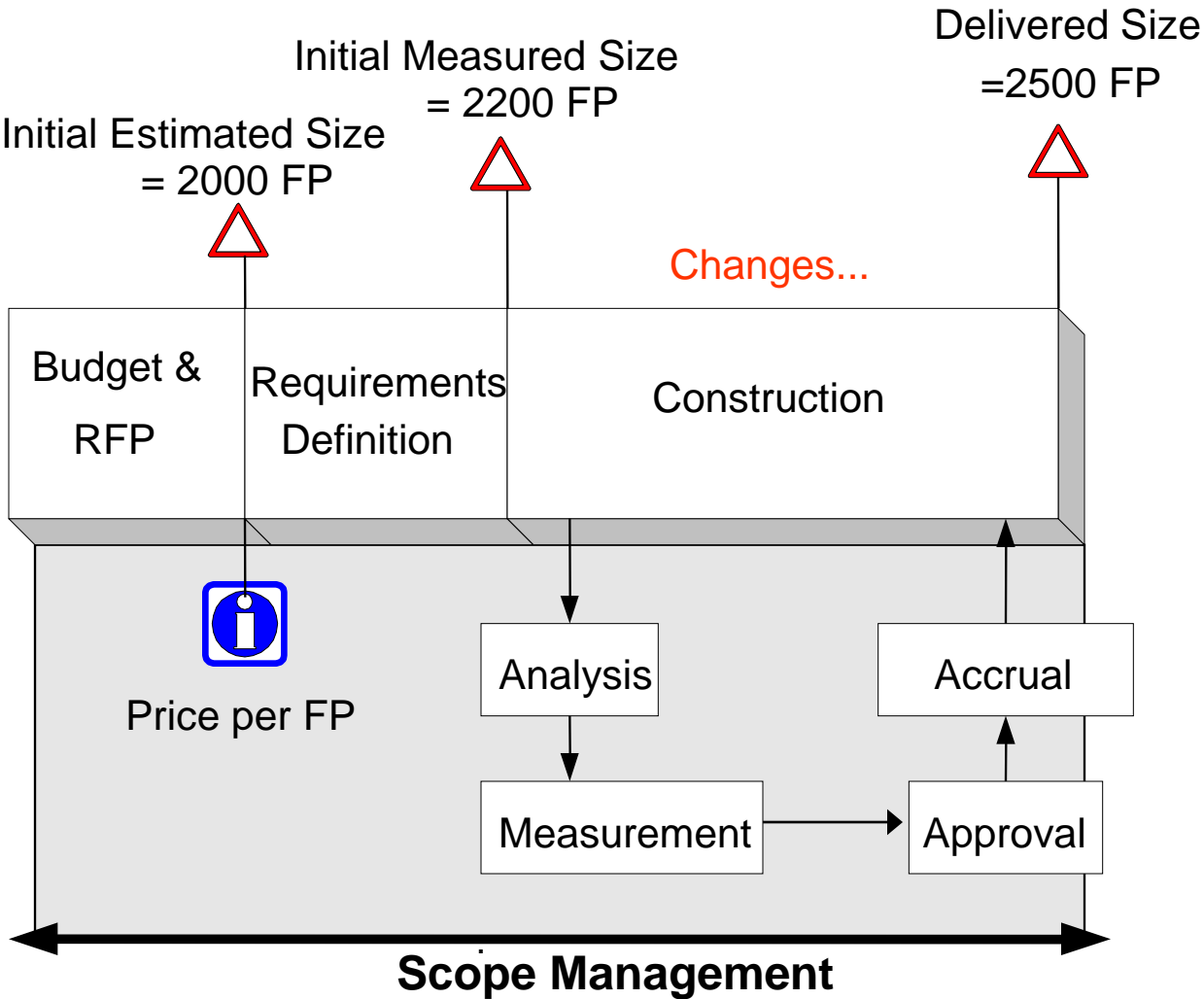
Using PSM with FPA

Function Point Analysis (FPA)



Using PSM with FPA

Using FPA to Control Scope



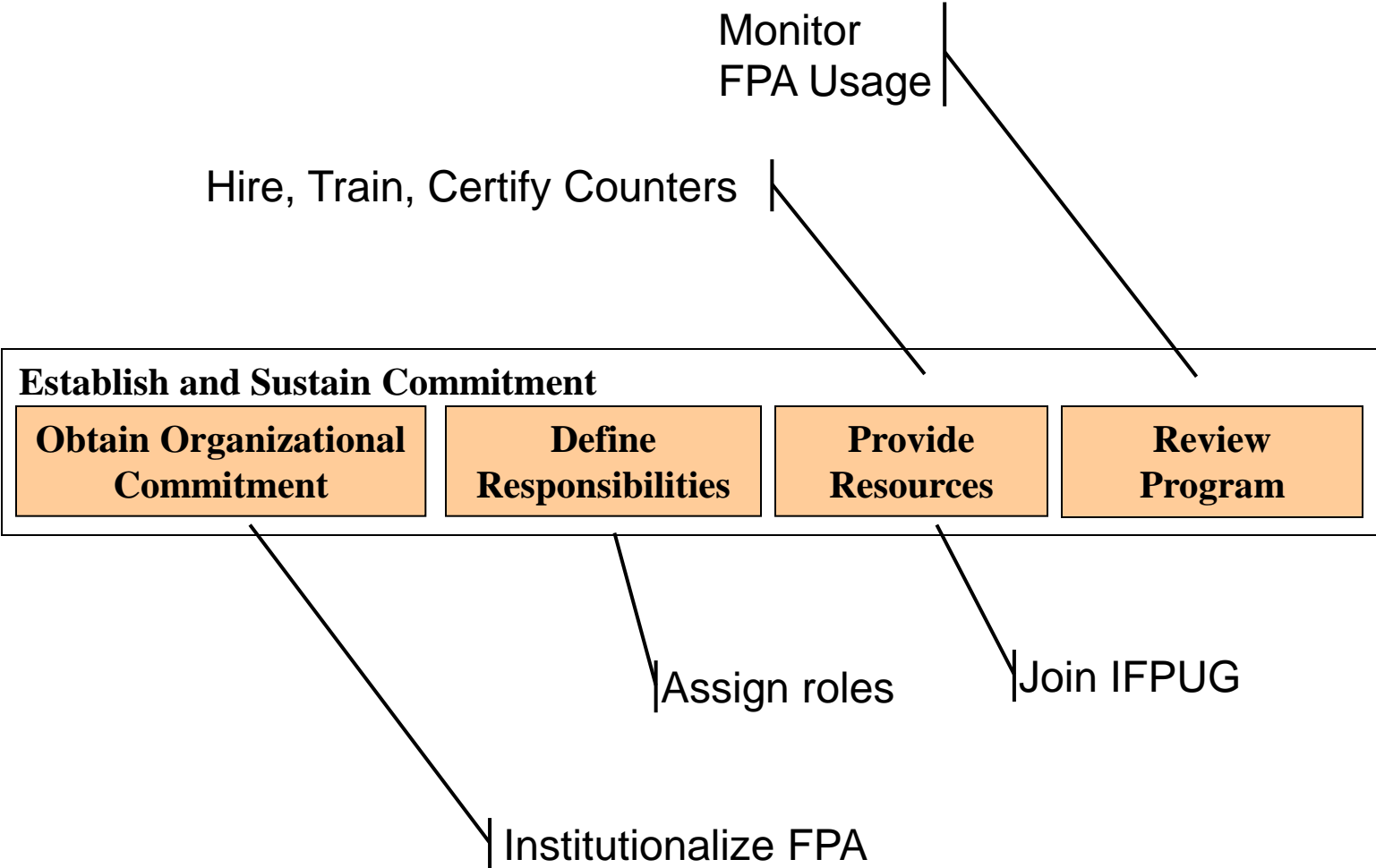
Using PSM with FPA

FPA Infrastructure

- Allocate budget, resources, and responsibilities
- Implement standards and procedures for:
 - Collection
 - Validation
 - Storage
 - Analysis
 - Reporting
 - Using Results
- Document local FP rules and interpretations
- Measure, monitor, and continuously improve the process

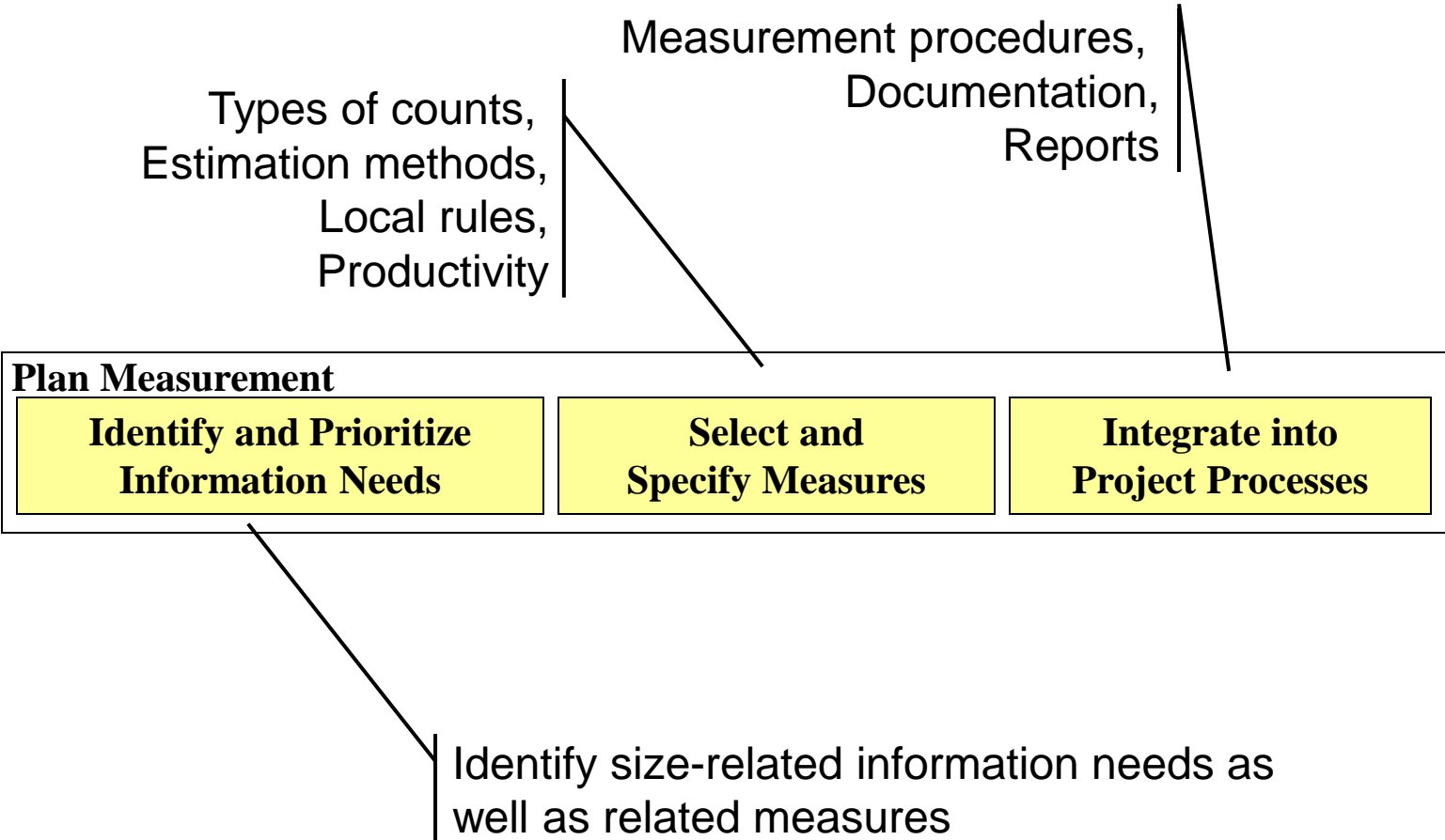
Using PSM with FPA

Using PSM to Implement FPA



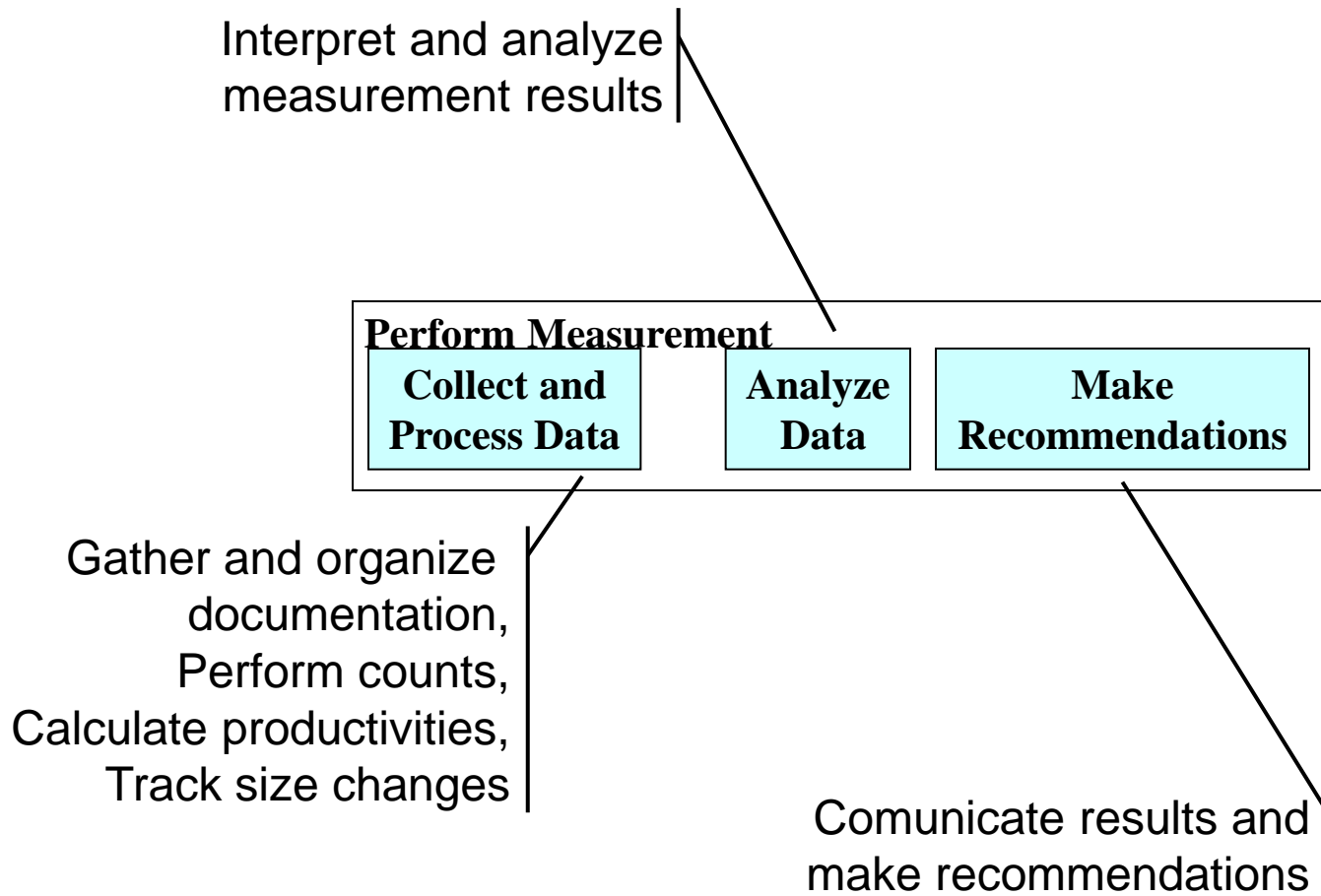
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Using PSM to Implement FPA



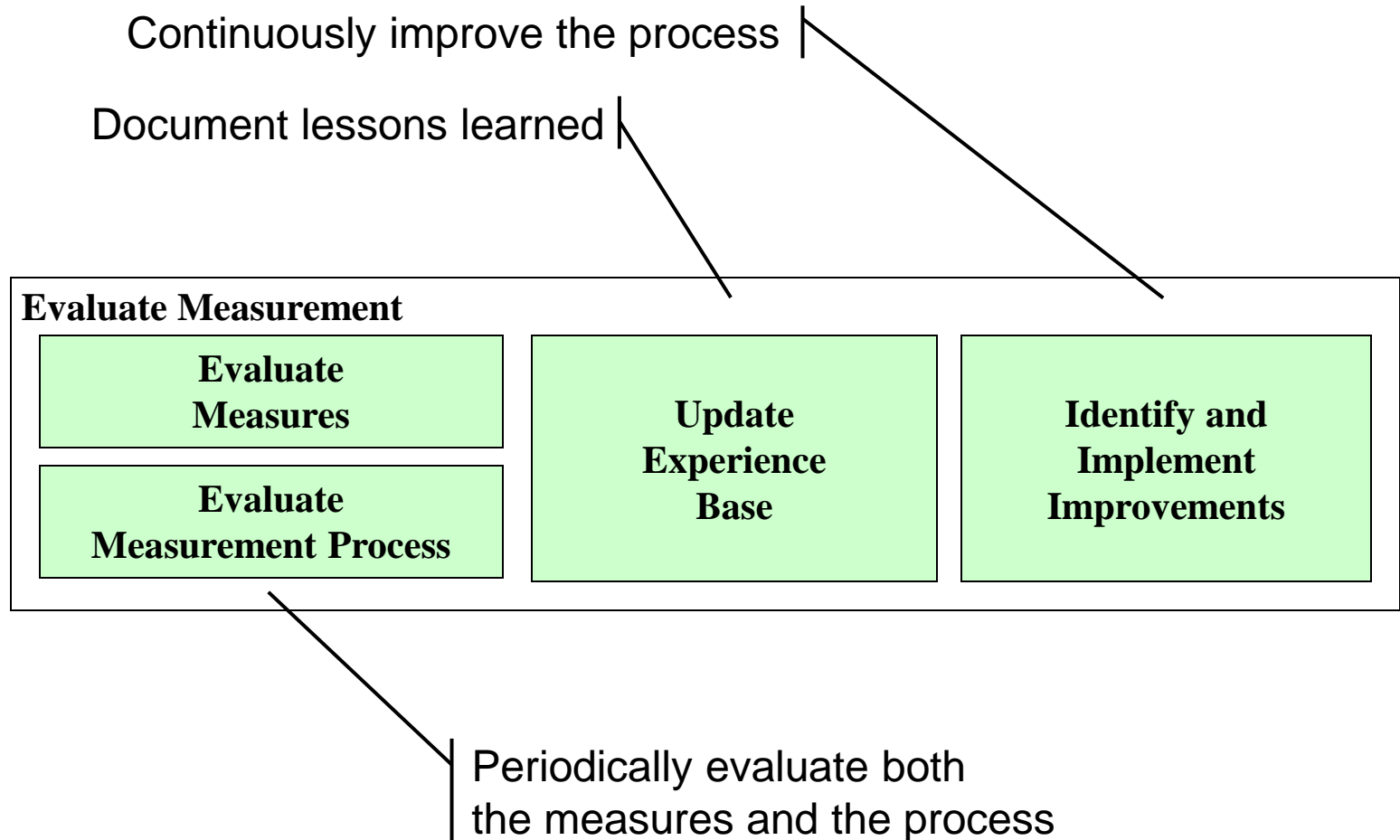
Using PSM with FPA

Using PSM to Implement FPA



Using PSM with FPA

Using PSM to Implement FPA



Thank You!



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