14. Developing Custom Processes for IT Projects

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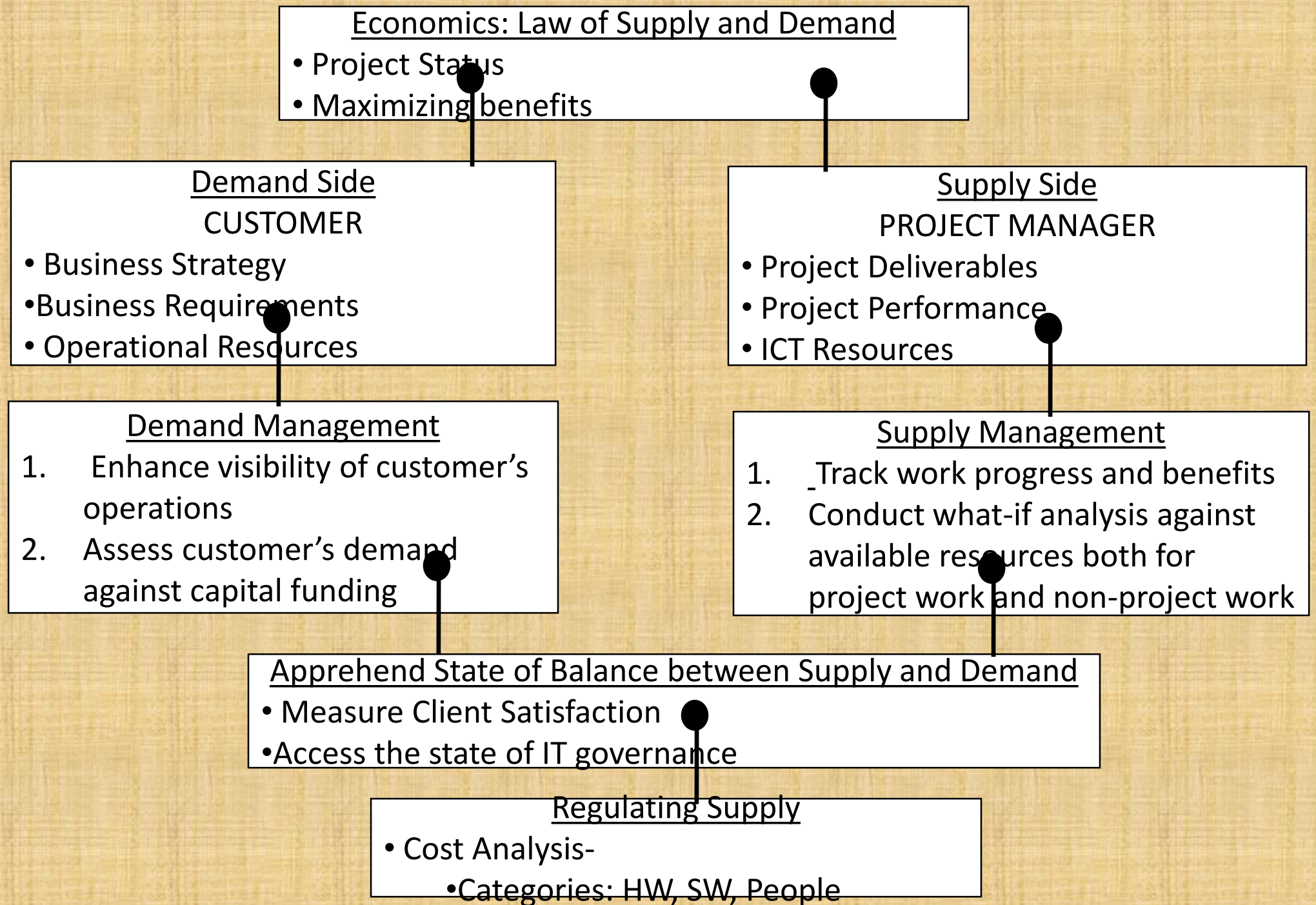
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Why Custom Processes for IT Projects?

- Customer's role is dominant
- Environment is more dynamic
- Tasks are mental, unique, and complex
- Society is more democratic and educated
- Individuals have higher aspirations and expectations
- Government's role is less clear, and its performance more closely scrutinize
- Sources of knowledge are different (tacit knowledge, the practitioner)

Economics of Project Management

Economics: Law of Supply and Demand
• Project Status
• Maximizing benefits

Demand Side
CUSTOMER
• Business Strategy
• Business Requirements
• Operational Resources

Supply Side
PROJECT MANAGER
• Project Deliverables
• Project Performance
• ICT Resources

Demand Management
1. Enhance visibility of customer's operations
2. Assess customer's demand against capital funding

Supply Management
1. Track work progress and benefits
2. Conduct what-if analysis against available resources both for project work and non-project work

Apprehend State of Balance between Supply and Demand
• Measure Client Satisfaction
• Access the state of IT governance

Regulating Supply
• Cost Analysis-
• Categories: HW, SW, People

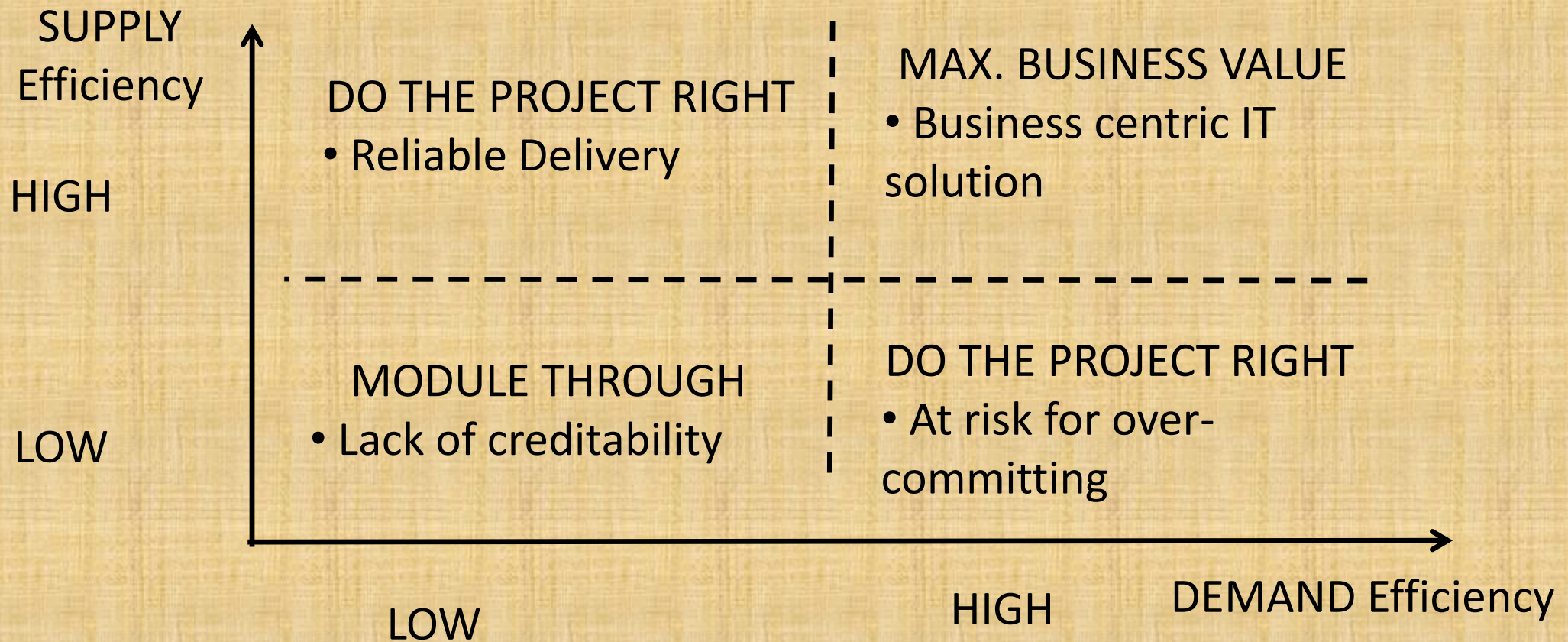# Managing Supply and Demand for a PM

Figure: Managing Supply and Demand for a PM

Developing an IT Project Management Methodology

Many organization develop their own project management methodologies, especially for IT projects.

a.   Project Initiation
- Recognizing and starting a new project or project phase
- Key outputs include:
  - Assigning the project manager
  - Identifying the key stakeholders
  - Completing a business case
  - Completing the project charter and getting signature on it.
- Project Initiation Documents
  - Business Case Study
  - Project Charter
  - Stakeholder Analysis

b.   Project Planning
- Main purpose of planning is to guide execution.
- Key outputs include:
  - A team contract
  - A scope statement
  - A work breakdown structure (WBS)
  - Project Schedule (Gantt, etc)
  - list of prioritize risks
- Project Planning Documents
  - Project Executing
  - Project controlling
  - Project closing
  - Post-project follow-up

A customized SDLC Model for IT Projects

- To design and develop a "customized +tailored +tuned" project management methodology – A "**multi-pass model**"

- Multi-pass model need not be a full fledged development methodology, rather it encompasses both the "iterative & incremental model" and the agile model in a "merge and fit" manner.

- Key logical phases of multi-pass model are:
    - Outline initial requirements, focus on mission – critical issues and develop proof of concept – **Agile** way.
    - Sort out major requirements, prioritize according to business need and develop an initial stable solution – **Iterative** & **Incremental** way.
    - Increase client's involvement, develop more functional and relatively more sensible solution – **Agile** way.
    - Finalize requirements, enhance design, develop complete solution, test rigorously – **iterative & incremental** way
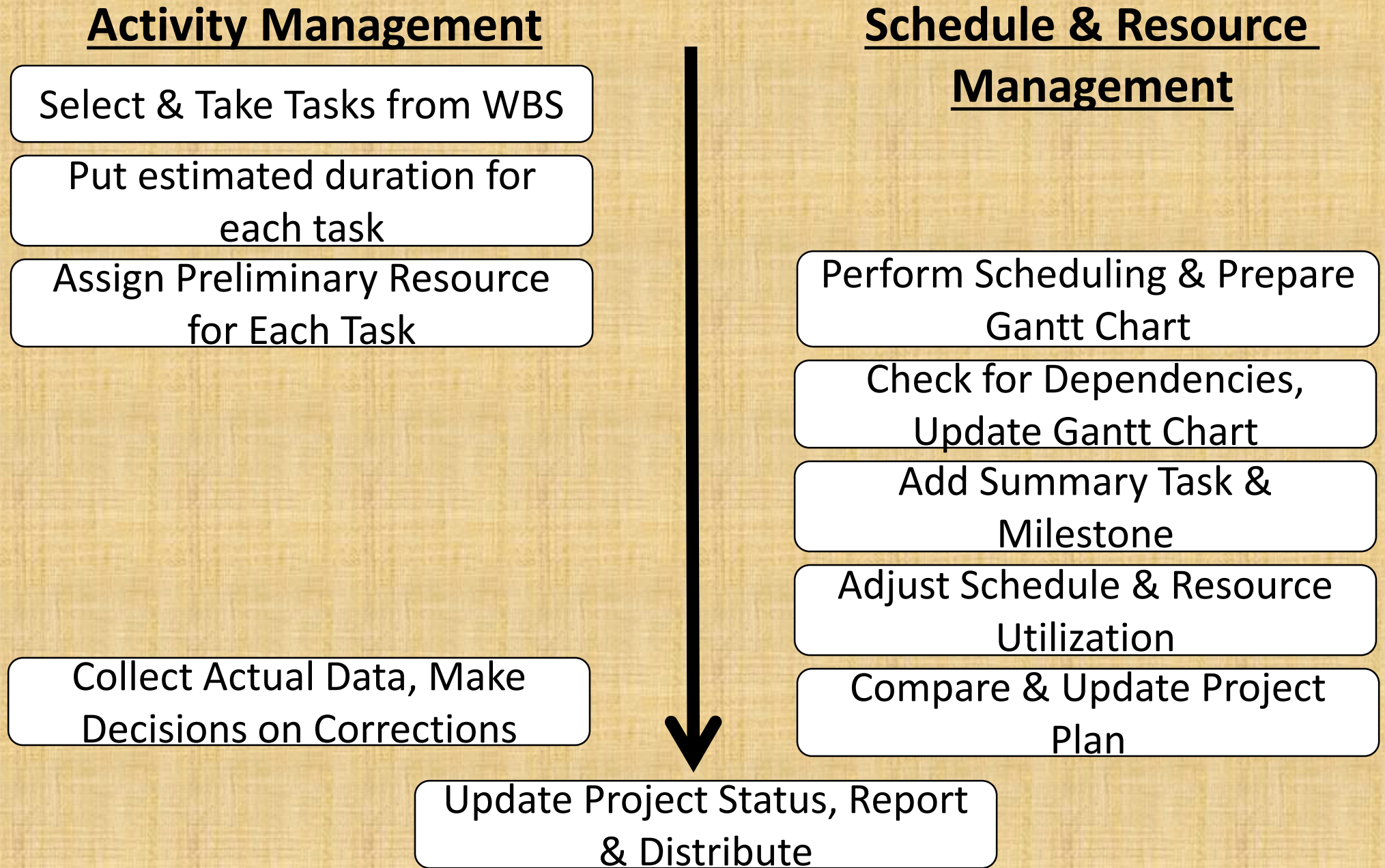
Customizing Project Management Workflow

Activity Management

Select & Take Tasks from WBS

Put estimated duration for each task

Assign Preliminary Resource for Each Task

Collect Actual Data, Make Decisions on Corrections

Schedule & Resource Management

Perform Scheduling & Prepare Gantt Chart

Check for Dependencies, Update Gantt Chart

Add Summary Task & Milestone

Adjust Schedule & Resource Utilization

Compare & Update Project Plan

Update Project Status, Report & Distribute

Figure: A Guideline for Project Management workflow

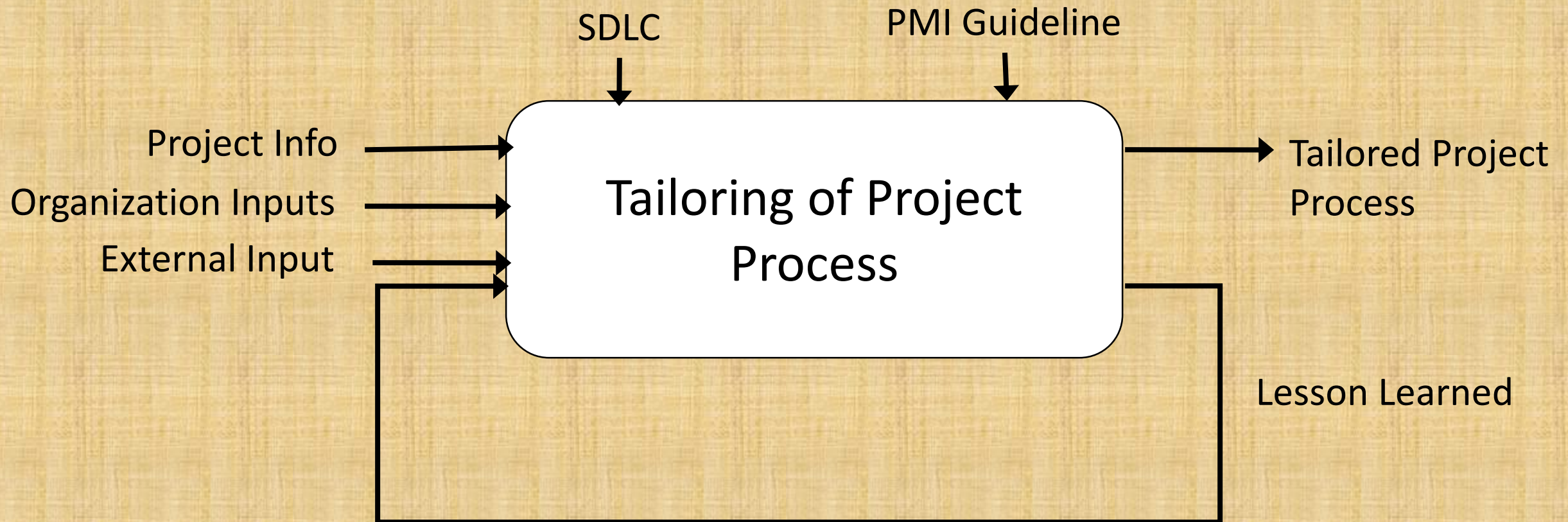# IT Project Process Tailoring

Figure: Tailoring of Project Process

Barriers to Implementation of Tailored Project Management

- External Environment
  - Unpredictability, hostility and heterogeneity
  - Degree of dependence on environment
  - Customer, consumer (public, private, culture, experience)
- Objectives and Constraints
  - Ambiguity, conflicts, stability
  - Strategic importance
  - Level of required performance, speed
  - Special constraints and risks (e.g. funding)
  - Type of contract

- Task
  - Degree of innovation (previous experience)
  - Scope (size and duration)
  - Interdependence and heterogeneity of task's components
  - Type (Technical, business, organizational)
- Organizational and Human Resources
  - Structure, systems, culture (of parent organization & project)
  - Top management support
  - Project leader (competence, experience)
  - Team members, other contributors (experience, skills, culture)

Project Management Maturity

The foundation for achieving excellence in project management can best be described as the project management maturity model (PMMM), which is comprised of five levels. Each of the five levels represents a different degree of maturity in project management.

- *Level 1—Common Language:* good understanding of the basic knowledge on project management.

- *Level 2—Common Processes: common* processes need to be defined and developed such that successes on one project can be repeated on other projects.

- *Level 3—Singular Methodology: the synergistic* effect of combining all corporate methodologies into a singular methodology, the center of which is project management.

- *Level 4—Benchmarking: process improvement* is necessary to maintain a competitive advantage. Benchmarking must be performed on a continuous basis.

- *Level 5—Continuous Improvement: evaluates the* information obtained through benchmarking and must then decide whether or not this information will enhance the singular methodology.
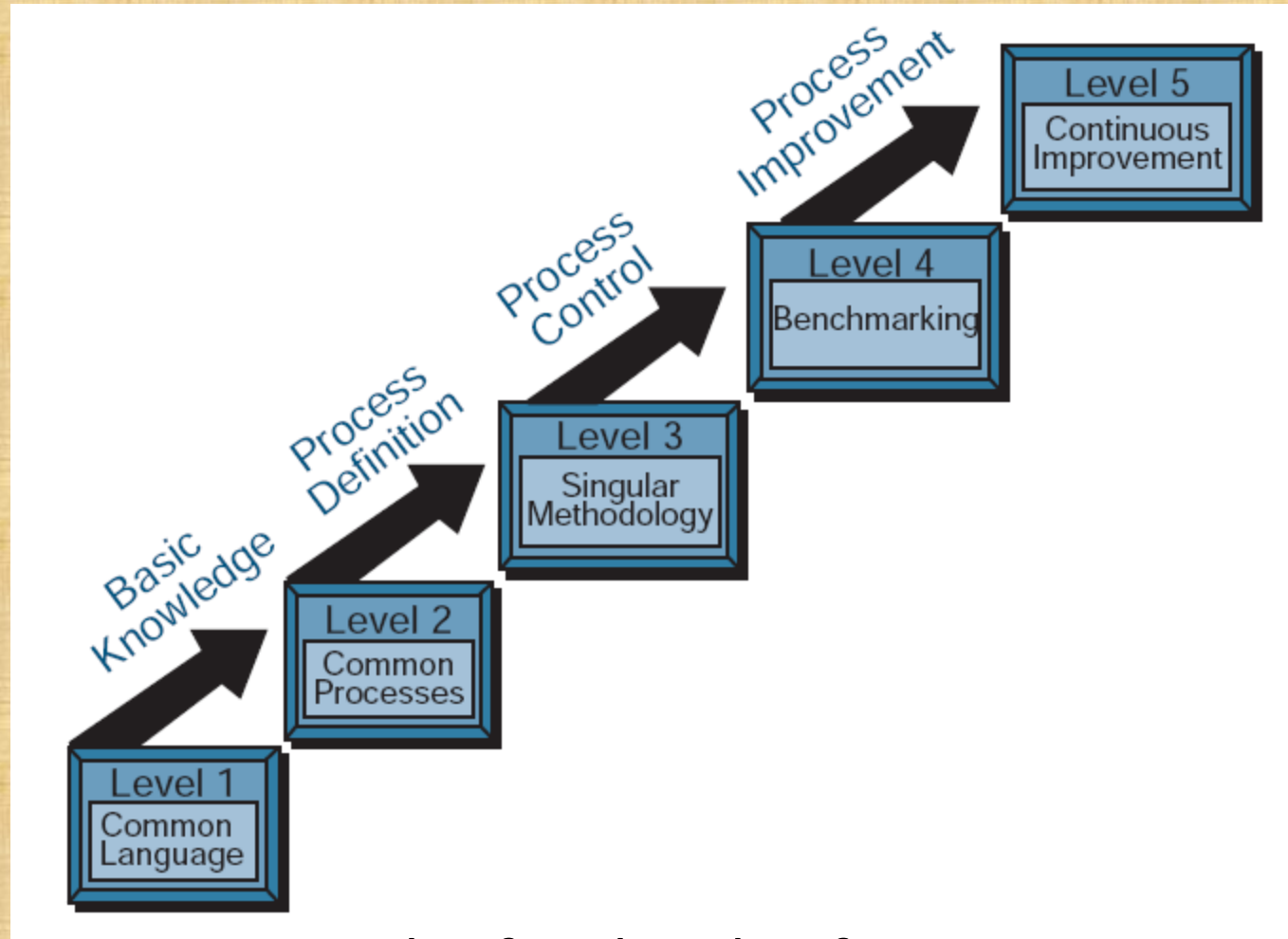
Project Management Maturity .. Contd.

Fig: the five levels of maturity

- Promoting Project Excellency through Awards and Assessment
- Certification Process Flow

Code of Ethics

Project Management Institute (PMI) sets ethical standards by which professionals must abide when completing tasks.

- Responsibility (towards community)
- Respect (relationship between employers and clients)
- Fairness (work performance)
- Honesty (personal performance)

How to Create a Code of Ethics

1) Decide why are you writing your code of ethics. Is it to inspire your employees? Is it to spell out the expected behavior?

2) Begin with introduction that explains the purpose of the code of ethics and what you hope to achieve by instituting such a code.

3) Add the items to your code of ethics. Cover the issues like interpersonal relationships, behavior expected around customers and clients and other items specific to your company/industry.

4) Decide how you will implement code of ethics.

Future Trends

Five Themes kept surfacing for future Project Management. (ED HOFFMAN, APPEL Director) src: ASK MAGAZINE

- Team diversity
- Virtual Work
- Sustainability
- Innovation
- Portfolio Management

Think about future Tools for Project Management.

Thank you.