

Lecture 2

2. Project Management Body of Knowledge

Bibek Ropakheti

Outline

- PMBOK Basics
 - Five Processes
 - Nine Knowledge Areas
 - PMBOK Guides
- Understanding of Project Environment
 - Project Environment – Classification
 - Internal Environment
 - External Environment
 - Task Environment
- General Management Skill
 - Effective and Ineffective Project Managers
- Essential Interpersonal and Managerial Skills
 - Energized and Initiators
 - Communication
 - Influencing
 - Leadership
 - Motivator
 - Negotiation
 - Problem Solver
 - Perspective Nature
 - Result Oriented
 - Global Illiteracies
 - Problem Solving using Problem trees
- Roles of Project Manager
- Responsibilities of Project Manager

Project Management Body of Knowledge Basics

- PMBOK is a collection of Processes and Knowledge Areas generally accepted as best practice within the Project Management.
- Project Management fundamentals are always same irrespective of what the knowledge base is, i.e. construction, software, engineering, automobile, gadget development or social ones.
- PMBOK recognizes FIVE Process Groups and NINE Knowledge areas for every type of project.

FIVE Process Groups

- Initiating Process Group
- Planning Process Group
- Executing Process Group
- Controlling Process Group
- Closing Process Group

Processes are described in terms of :

- Inputs
 - Documents, Plans, Designs, Artifacts, etc.
- Tools & Techniques
 - Mechanisms Applied to Inputs
- Outputs
 - Documents, Products, Service, Knowledge, Artifacts.

NINE Knowledge Areas

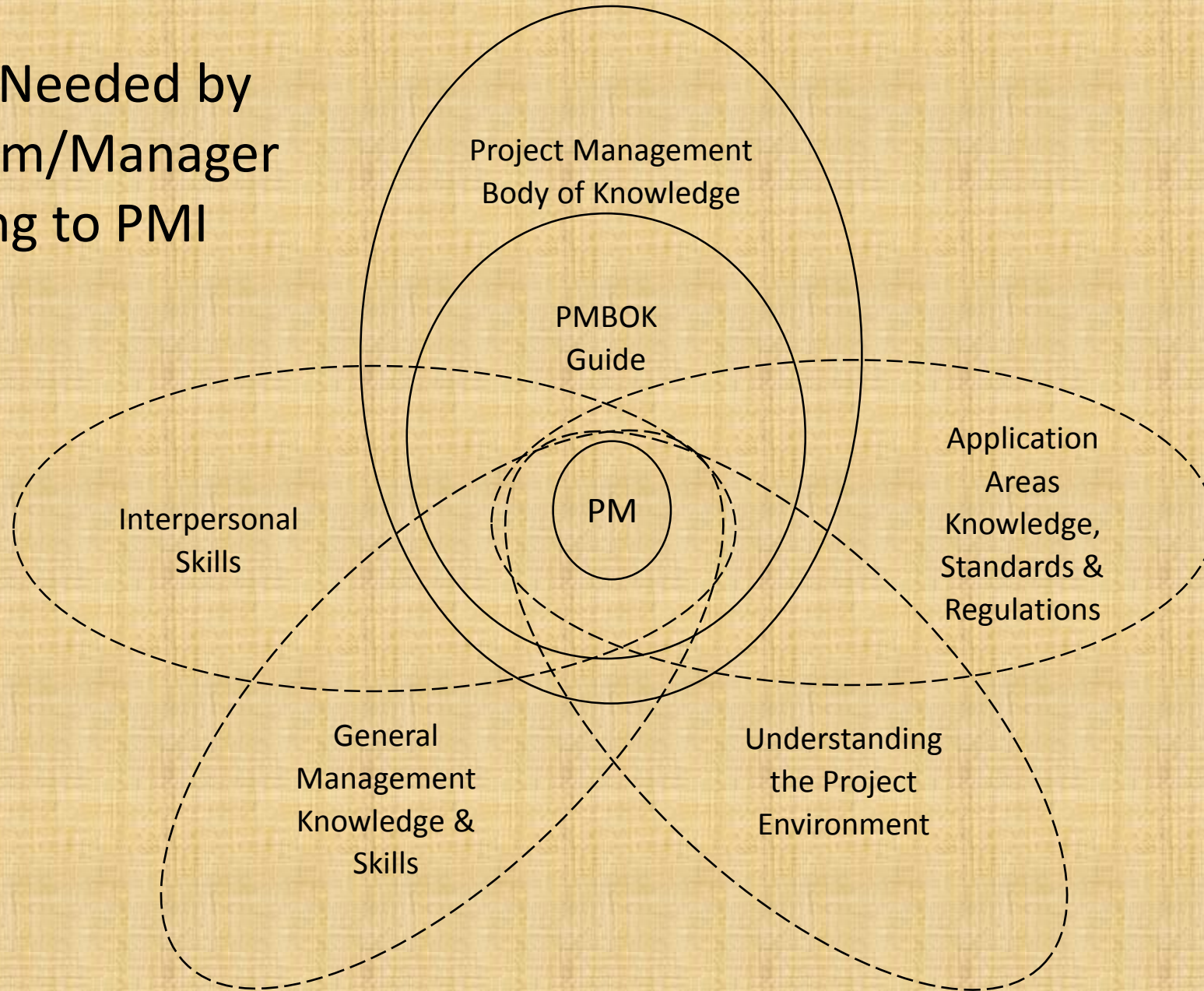
- Project Integration Management
- Project Scope Management
- Project Time Management
- Project Cost Management
- Project Quality Management
- Project Human Resource Management
- Project Communications Management
- Project Risk Management
- Project Procurement Management

Each Knowledge Area contain some of or all of the Project Management Processes.

Project Management Body of Knowledge Basics

- Much of PMBOK is unique to Project Management, like CPM, PERT, WBS, EVA, etc.
- Some areas overlap with other management disciplines.
- General Management includes Planning, Organizing, Staffing, Coordinating, Leading and Controlling operations of an organization.
- Financial Forecasting, Organization Behavior and Planning techniques are also similar.

Expertise Needed by Project Team/Manager according to PMI



PMBOK Guides

Knowledge need for Project Management

- Application Area Knowledge, Standards and Regulations
- Understanding the Project Environment
- General Management knowledge and Skills
- Interpersonal Skills

Skills Requirement of a Project Manager

- Technical Skills
- Managerial Skills
- Interpersonal Skills
- Conceptual Skills
- Team Building Skills

Understanding of Project Environment

- Projects are Environment Specific.
- Environment consists forces that influence the project's ability to achieve its objectives.
- Environments' dynamicity needs to be addressed with flexibility.
- Environmental influences on projects occur through:
 - Complexity
 - Uncertainty
 - Competition for Resources
 - Flexibility
 - Rapid Technological Changes
- Projects must continually adapt to Environmental Changes.

Project Environment - Classification

- Internal Environment
- Task Environment
- External Environment

Internal Environment

- Located within Project
- Controllable by the Project
- Strengthen or Weakens Project

They are:

- Project Objectives
- Constraints
- Structure
- Resources

Task Environment

- Immediately surrounds Project
- Made up of Stakeholders
- Interest and Impacts are Interrelated
- Affect Project Activities
- Project can Influence Task Environment

They are:

- Client
- Contractors
- Consultants
- Competitors
- Suppliers
- Government
- Labor Unions
- Financers
 - Owner
 - Shareholders
 - Organization
 - Donor

External Environment

- Broad Forces in Surroundings
- Affects Climate in which Project Operates
- Located Outside the Project
- Influences the Project
- Can't be Controlled by the Project
- Pre Assessment of External Environment is done through PESTLE Analysis

External Environments are:

- Political
- Economic
- Socio-Cultural
- Technological
- Legal
- Environmental (Natural)

External Environment

- Political
 - System
 - Institutions
 - Philosophies
- Economic
 - System
 - Policies
 - Conditions
 - Regional Groups
- Socio-Cultural
 - Demographic
 - Social Institutions
 - Pressure Groups
 - Social Changes
 - Culture
- Environmental
 - Global Warming
 - Climate Change
 - Ecology & Geography
- Legal
 - Laws
 - Courts
 - Law Administrators
- Technological
 - Level of Technology
 - Technology Change
 - Technology Transfer
 - R&D

General Management Skill

Planning
Organizing
Leading
Staffing
Coordinating
Controlling
Executing

- Strategic Planning
- Tactical Planning
- Operational Planning
- Financial Management
- Accounting
- Budgeting
- Contracting & Commercial Law
- Purchasing
- Procurement
- HR Recruitment
- Promotion & Transfer
- Rewarding
- Motivating
- Counselling
- Monitoring/Evaluation
- Decision Making
- Leadership

Effective and Ineffective Project Managers

Effective Project Managers

- Lead By Example
- Visionaries
- Technically Competent
- Decisive
- Good Communicators
- Good Motivators
- Stand up to Top Level Management
- Support Team Members
- Encourages New Ideas

Ineffective Project Managers

- Set Bad Examples
- Confused
- Lack Technical Expertise
- Indecisive
- Poor Communicators
- Poor Motivators/ Demotivates
- Complaining about Top Level Management
- Lacks Team Spirit
- Conservative

Essential Interpersonal and Managerial Skills

- Project Manager must be a people manager.
- Soft skills are must.
 - Negotiations
 - Communication
 - Interpersonal

Essential Interpersonal and Managerial Skills are:

- Energized and Initiators
- Communication
- Influencing
- Leadership
- Motivator
- Negotiation
- Problem Solver
- Perspective Nature
- Result Oriented
- Global Illiteracies
- Problem Solving using Problem trees

Essential Interpersonal and Managerial Skills

Energized & Initiators

- Fitness
- Full of Energy
- Work under Pressure and Odd Conditions

Influencing

- Ability to get people do what they wont otherwise.

Communication

- Expressing Ideas
- In Written and Oral Form
- Ensure:
 - Simplicity & Clarity
 - No Complexity & Ambiguity
 - Completeness & Comprehensiveness
 - Adequate Feedback (If Necessary)

Essential Interpersonal and Managerial Skills

Leadership

- Impart Vision
- Gain Consensus for Goals
- Establish Direction
- Inspire
- Motivate
- Self Assured

Motivator

- Energize people to achieve high level of Performance to Overcome Barriers to change

Result Oriented

- Not just complete work for work's sake but to achieve the Project Objectives.

Essential Interpersonal and Managerial Skills

Negotiation

- Ability to resolve conflicts.
- Achieve Consensus
- Understand the best solution to the Problem.

Perspective Nature

- Ability to look beyond the team.
- See how Project & Team fit into Organization.

Problem Solver

- Able to deal with Problems.
- Have Problem Solving Attitude.
- Have Problem Analysis know-how.

Global Literacies

- Ability to work in Cross Cultural Environment.
- Understand Cross Cultural Issues.

Essential Interpersonal and Managerial Skills

Problem Solving using Problem Tree

- Examine the Problem
- Analyze the Problem
- Develop Problem Tree

Its alternative could be FTA.

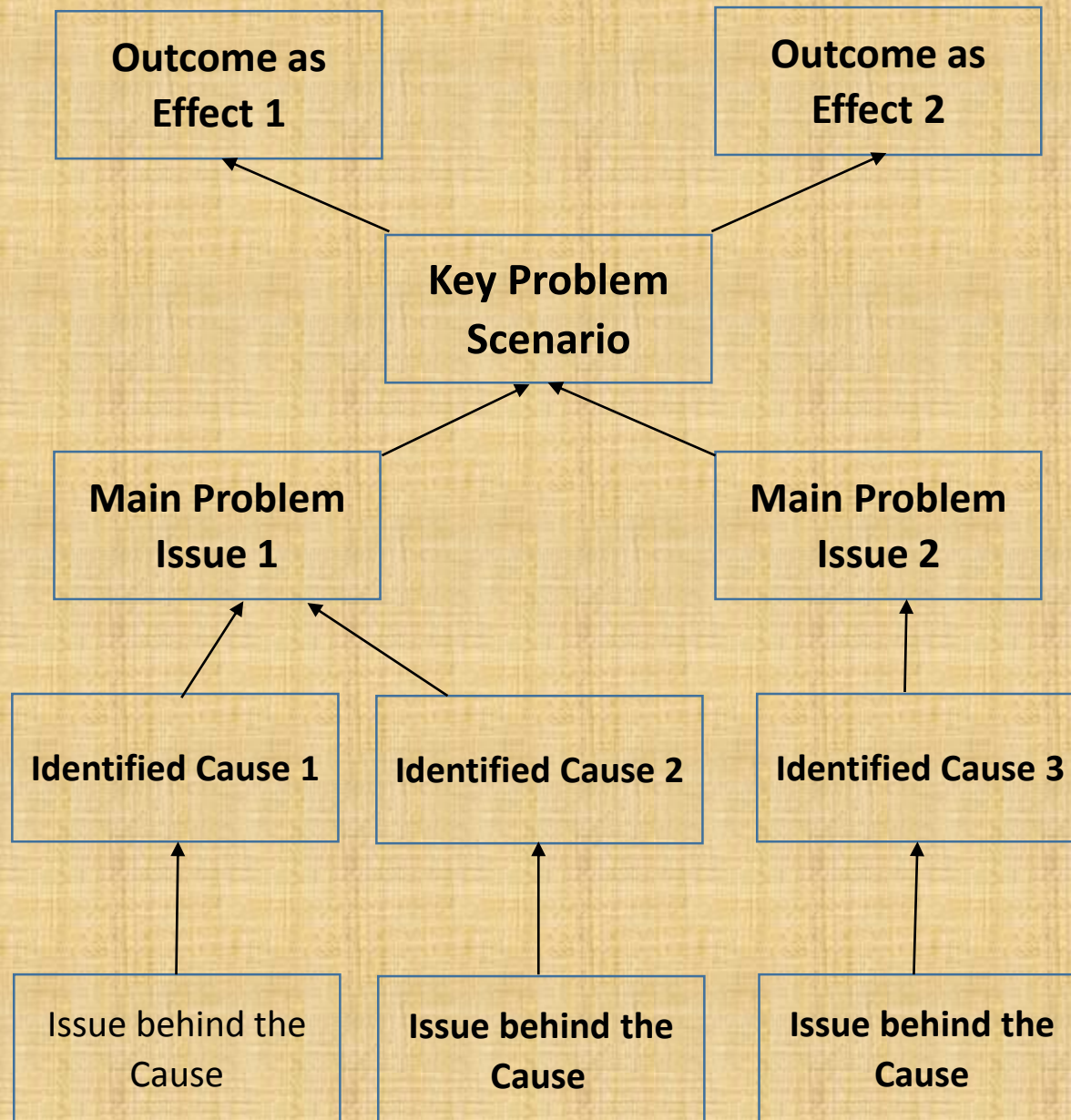
Essential Interpersonal and Managerial Skills

Developing a Problem Tree - Steps

1. Identify major problems existing within the stated problem areas.
2. Analyze their interrelationship and common issues. Determine the core problem among the major problem.
3. Write the causes of the major problems.
4. Write effects caused by the core problem.
5. Form a diagram of problem tree showing causes, effects and problems.
6. Review the diagram as a whole. Verify its validity and completeness.

Repeat from step 2 if required.

Iteration helps!



Effects (4)

Core Problem (2)

Major Problems (1)

Causes (3)

**Contributing
Factor (5)**

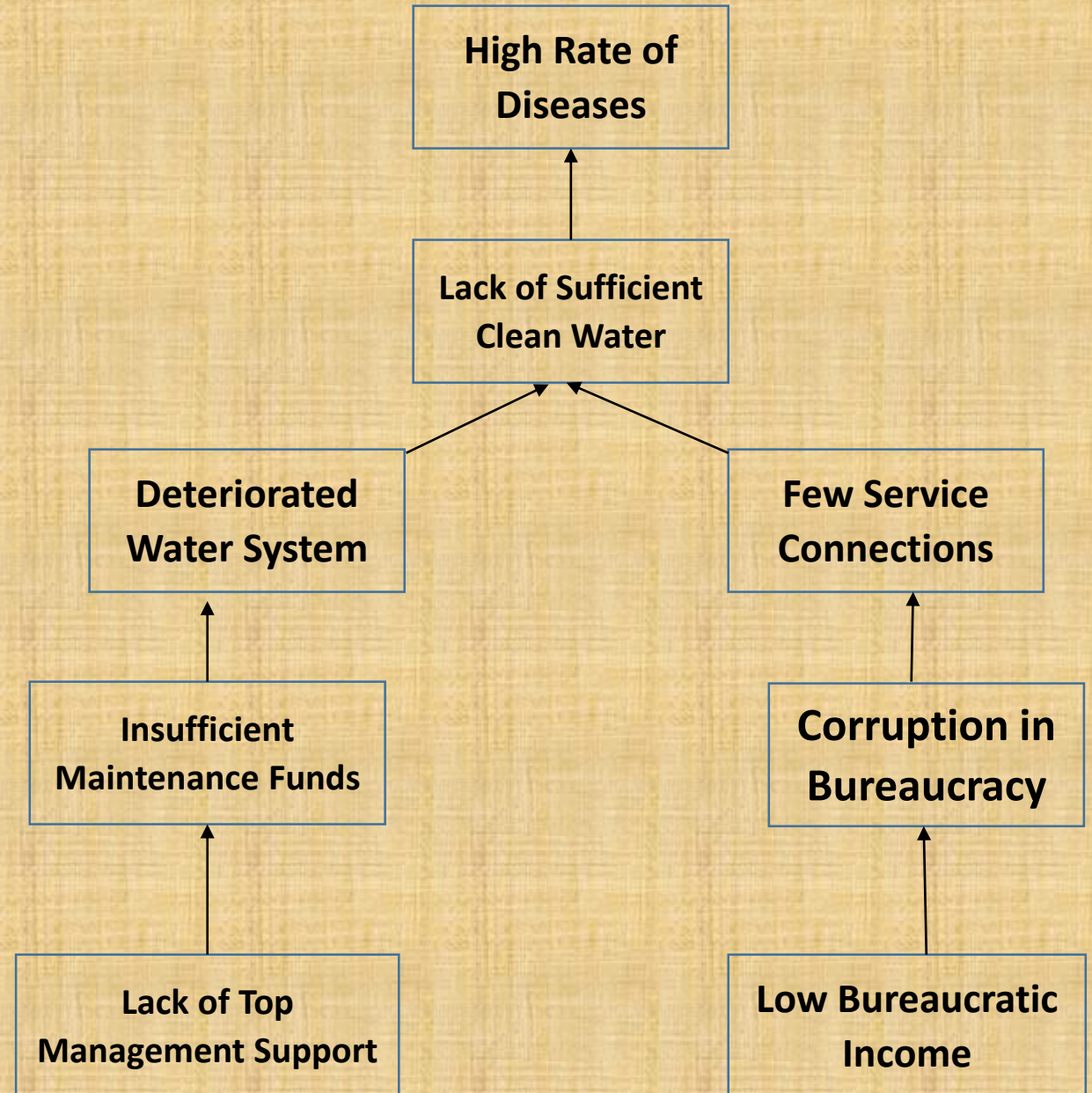
Effects

Core Problem

Major Problems

Causes

**Contributing
Factor**



Roles of Project Manager

Roles are an organized set of behaviors related to an identifiable position.

Roles of Project Manager:

- Leadership Role
- Balancing Role
- Decisive Role
- Information Role

Responsibilities of Project Manager

- Project Definition
- Project Team Building
- Stakeholders Management
- Project Planning
- Project Organization Design
- Project Implementation
- Project Progress Control
- Financial Management
- Change Management
- Conflict Management
- Project Output Delivery
- Project Termination Management

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- Project Management in Nepal, Dr. Govind Ram Agrawal, 2005, M.K. Publishers, Nepal.
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- Lecture Notes of MSTIM, Pulchowk Campus by Dr. Rajendra Prasad Adhikari.
- IT Project Management, NAAS, 2009.
- <http://web.mit.edu/urbanupgrading/upgrading/issues-tools/tools/problem-tree.html>

Brain Storming

- Select a Problem.
- Analyze the Problem.
- Draw the Problem Tree.

Thank You

Would you like to add something?