PROJECT STRUCTURE

LECTURE 2 - PROJECT MANAGEMENT

INTRODUCTION

AFTER UNDERSTANDING THE SIGNIFICANCE OF PROJECT, NOW WE SEE HOW DO WE STRUCTURE A PROJECT SMOOTHLY?

- PROJECT STRUCTURE IS THE FORMAL ARRANGEMENT OF ROLES,
 RESPONSIBILITIES & COMMUNICATION.
- PROJECT STRUCTURE DETERMINES HOW RESOURCES ARE ORGANIZED AND MANAGED TO ACHIEVE OBJECTIVES.
- PROJECT STRUCTURE SUPPORT DECISION-MAKING EFFICIENCY BY WHO DECIDES WHAT AND HOW INFORMATION FLOW
- EXAMPLE: LIKE A CRICKET TEAM CLEAR ROLES AVOID CHAOS.

WHY PROJECT STRUCTURE IS IMPORTANT

- CLARITY OF ROLES & RESPONSIBILITIES TO AVOIDS DUPLICATION EVERYONE KNOWS THEIR TASK.
- IMPROVED COMMUNICATION CLEAR REPORTING LINES.
- DECISION-MAKING EFFICIENCY FASTER RESPONSES.
- COORDINATION OF RESOURCES TIME, MONEY, PEOPLE, TECHNOLOGY ARE ALLOCATED PROPERLY.
- CONFLICT RESOLUTION HIERARCHY DECIDES FINAL WORD.

LET IN A GROUP PROJECT, IF TWO MEMBERS BOTH ASSUME LEADERSHIP, CONFLICT ARISES. A DEFINED STRUCTURE PREVENTS THIS.

ELEMENTS OF PROJECT STRUCTURE

- PROJECT MANAGER LEADER & COORDINATOR. RESPONSIBLE FOR PLANNING, EXECUTION, AND DELIVERY.
- PROJECT TEAM MEMBERS SPECIALISTS DOING TASKS FROM DIFFERENT AREAS (PROGRAMMERS, DESIGNERS, QA TESTERS)
- DECISION-MAKING AUTHORITY WHO DECIDES FINANCIAL, TECHNICAL, SCHEDULING, AND PREVENT CONFUSION IN CRISIS
- COMMUNICATION CHANNELS DEFINE HOW INFORMATION FLOWS (MEETINGS, REPORTS). HELPS IN COORDINATION
- WORK BREAKDOWN STRUCTURE (WBS) BREAKING PROJECT INTO MODULES/TASKS.
 EACH TASK HAS CLEAR RESPONSIBILITY AND DELIVERABILITY.

WORK BREAKDOWN STRUCTURE EXAMPLE

- E-COMMERCE PROJECT DIVIDED INTO:
- 1. USER LOGIN SYSTEM
- 2. PRODUCT CATALOG
- 3. SHOPPING CART
- 4. PAYMENT GATEWAY

TYPES OF PROJECT STRUCTURES: FUNCTIONAL STRUCTURE

- HANDLED WITHIN DEPARTMENTS (E.G., IT BUILDS STUDENT PORTAL).
- EACH DEPARTMENT CONTRIBUTES ITS EXPERTISE.
- PROS: SPECIALIZED EXPERTISE, EFFICIENCY.
- CONS: SLOW DECISIONS, WEAK COORDINATION.

LET IT DEPARTMENT DEVELOPING SOFTWARE WHILE REPORTINF TO HEAD OF IT.

TYPES OF PROJECT STRUCTURES: PROJECTIZED STRUCTURE

- DEDICATED TEAM FORMED FOR THE PROJECT.
- PROJECT MANAGER HAS FULL AUTHORITY
- PROS: FAST DECISIONS, STRONG FOCUS, CLEAR ACCOUNTABILITY.
- CONS: EXPENSIVE, DUPLICATION OF RESOURCES.

EXAMPLE: A UNIVERSITY CREATED A SPECIAL TEAM TO DEVELOP ITS OWN LEARNING MANADGEMENT SYSTEM.

TYPES OF PROJECT STRUCTURES: MATRIX

- BLEND OF FUNCTIONAL + PROJECTIZED.
- DUAL REPORTING (FUNCTIONAL BOSS + PROJECT MANAGER).
- PROS: EFFICIENT RESOURCE USE, SHARED KNOWLEDGE.
- CONS: CONFUSION FROM TWO BOSSES.

TYPES OF PROJECT STRUCTURES: TEAM-BASED (AGILE)

- MODERN FLEXIBLE APPROACH.
- CROSS-FUNCTIONAL SMALL TEAMS.
- PROS: FLEXIBILITY, INNOVATION, FAST RESPONSE.
- CONS: NEEDS MATURITY & STRONG COMMUNICATION.

DECISION-MAKING IN STRUCTURES

DECISION MAKING VARIES BASED ON STRUCTURE

- FUNCTIONAL: SLOW (FOLLOW HIERARCHY).
- PROJECTIZED: FAST (PROJECT MANAGER AUTHORITY).
- MATRIX: BALANCED BUT CONFUSING.
- AGILE/TEAM-BASED: COLLABORATIVE, ADAPTIVE.
- COOKE & SLACK: BEST STRUCTURE REDUCES UNCERTAINTY.

CASE EXAMPLE: E-GOVERNMENT TAX PROJECT

- PROJECT: ONLINE TAX FILING SYSTEM.
- STRUCTURE: MATRIX (FBR STAFF + PRIVATE SOFTWARE HOUSE).
- WHY MATRIX? COMBINES LEGAL & TECHNICAL EXPERTISE.
- RESULT: SUCCESS BUT INITIAL DELAYS DUE TO DUAL REPORTING.

CONCLUSION

- PROJECT STRUCTURE = BACKBONE OF PROJECT SUCCESS.
- ENSURES CLARITY, COORDINATION, DECISION-MAKING.
- FOUR COMMON TYPES: FUNCTIONAL, PROJECTIZED, MATRIX, AGILE.
- BEST STRUCTURE DEPENDS ON PROJECT SIZE, COMPLEXITY, CULTURE.
- TAKEAWAY: STRONG STRUCTURE = HIGHER SUCCESS CHANCE.