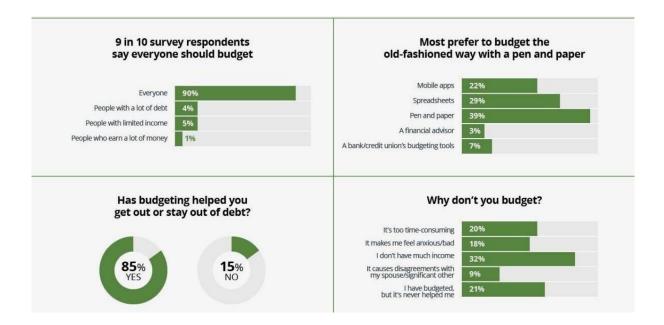
EPM 11 - Resource Planning



Resource Planning

- 1. Importance
- 2. Relationship to Schedule Planning
- 3. Human Resources
- 4. Other Resources
- 5. After you have created the first draft of your schedule, an important step is to identify the resources required
- 6. Sometimes the same resource is needed for two different tasks, so they cannot be carried out concurrently
- 7. Resources include
 - a. Human resources
 - b. Other resources such as equipment, office space, computer hardware or software, construction materials

Relationship Between Schedule Planning and Resource Planning

- Based on the WBS, the PM and team have prepared the initial draft of the schedule
- This is a key step
- If you don't yet understand the scheduling part of the planning process, review it before proceeding to resource planning

Estimating—tools and techniques

- 1. Expert judgment
- 2. Alternative analysis
- 3. Published estimating data
- 4. Project management software
- 5. Bottom-up estimating

Resource Leveling

- 1. If two or more concurrent activities need to use the same resources, the schedule may need to be adjusted
- 2. If a very expensive piece of equipment such as a crane is required, the tasks may have to be rescheduled consecutively rather than concurrently
- 3. This can also happen due to staff requirements
- 4. Software such as MS Project has resource leveling tools

The mythical man-month

What is the impact of adding people to a project that is struggling to meet deadlines?

HR Planning

- 1. The most important resource is the people
- 2. Select the right people
 - a. Technically skilled
 - b. Motivated
- 3. Provide them with the resources and training they need
- 4. Nurture them—provide compensation and recognition
- 5. Deal with issues promptly and as directly as possible

The person-day

- 1. The work of one person for one day is a person-day
- 2. You may also work with person-hours
- 3. Think about how easy or difficult it is to substitute one person for ten days in place of ten people for one day on different tasks:
 - a. Installing ten dozen new PCs on desktops in an office area
 - b. Configuring the server which the PCs will use for file and print sharing
 - c. Creating a new computer game
 - d. Pouring a foundation
 - e. Building the forms into which the foundation will be poured

Typical project team roles

- 1. Project Manager
- 2. Developer
- 3. Engineer
- 4. Subject matter expert
- 5. Team members
- 6. Customer/client representative

The HR environment

- 1. Laws
 - a. Employment regulations such as wage legislation, holidays
 - b. Health and Safety
- 2. Culture
- 3. Organizational standards
- 4. Collective Agreements

Employee performance management

- 1. Employee performance
 - a. employee's work results such as quality or quantity of outputs,
 - b. work behaviour (such as punctuality)
 - c. job-related attributes (such as cooperation and initiative)
- 2. After conducting employee performance reviews managers should:
 - a. provide feedback to employees about how well they have performed on established goals
 - b. provide feedback to employees about areas in which the subordinate is weak or could do better
 - c. take corrective action to address problems with employees performing at or below the minimum expectations
 - d. reward superior performers to encourage their continued excellence

Maslow's Hierarchy of Needs

- 1. Physiological
- 2. Safety
- 3. Love/belonging
- 4. Esteem
- 5. Self-actualization

Emotional Intelligence

- 1. Self-awareness
- 2. Self-regulation
- 3. Empathy
- 4. Relationship management

Personality Types

- 1. Myers-Briggs: four dimensions:
 - a. Extroversion <-> Introversion
 - b. Sensing <-> Intuition
 - c. Thinking <-> Feeling
 - d. Judging <-> Perceiving
- 2. Sixteen personality types can be derived from the four dimensions
- 3. Generally, a MIX of personality types on a project brings strength
- 4. Knowing your own type and the types of other team members can help people work together

Dimensions of Leadership

- 1. Robert Tannenbaum and Warren Schmidt leaders are either autocratic or democratic
- 2. Harold Leavitt leaders are pathfinders (visionaries), problem solvers (analytical), or implementers (team-oriented)
- 3. James MacGregor Burns leaders are either transactional (focused on actions and decisions) or transformational (focused on the long-term needs of the group and organization)
- 4. Fred Fiedler contingency theory, the ability of leaders to adapt

Negotiation

- 1. A key project management skill
- 2. Frequently, PMs have accountability but may have limited authority
 - a. Matrix management structure
 - b. Subject matter experts
- 3. Negotiating with
 - a. Other managers
 - b. Suppliers
 - c. Customers
 - d. Others

Conflict

- 1. Conflict is not a bad thing—it can be healthy for people to be able to express differences about how to approach the work
- 2. Conflict-resolution styles:
 - a. Avoiding
 - b. Forcing
 - c. Collaborating
 - d. Compromising
 - e. Accommodating

Delegation

- 1. PM is not expected to DO all the work
- 2. Must identify and clearly assign work to others on the team
- 3. Make expectations clear
- 4. Recognize performance
- 5. Follow through

Resource management techniques

Resource levelling

- 1. The objective is 100% utilization
- 2. Software can help

Resource Planning Summary

- 1. Planning for resource utilization is a key process in preparing a project plan
- 2. Resource planning follows the first draft of the schedule and impacts the schedule
- 3. Resources include human resources and other resources
- 4. Managing human resources includes hiring, training, motivating, rewarding
- 5. A number of models can be used to help the team work together
- 6. There are several theories of leadership; leadership is more than issuing directives