Project Management Organization Structures

• Organization of project teams and their leadership structures differ according to certain characteristics of projects.
  - Some of the important differences are:
    • who the project leader is,
    • who has certain responsibilities and
    • who makes the decisions.

Three main types organization structures used in projects:
- Functional project organization
- Pure project organization
- Matrix project organization

Functional Project Organization

Key Characteristics
- Project teams formed within the functional units.
- Nobody responsible for the entire project.
- Leadership occurs within functional units (expertise centers).
  - Leadership belongs to technical experts.

Characteristics of projects suitable for this organization structure:
- Solution of technical problems is important.
- Integration of different functional units’ work is not necessary.
- Stable environment.
- Success depends on application of narrow technical know-how.
- Usually one functional unit is dominant (due to technical reasons).

Pure Project Organization

Characteristics
- Project requiring major changes.
- Hence, a small, self-sufficient and full-time team is set up.
- The team leader is like an entrepreneur.
- Leader has full responsibility over the project.
- Functional units are stable, provide support to project teams.
Pure Project Organization

Project Coordinating

- General Manager
  - Project Manager
  - Worker
  - Worker
  - Worker

- Human Resources
- Marketing
- Finance
- Legal

Matrix Project Organization

- A hybrid form that combines both some characteristics of functional and pure project organization forms.
- Project manager and functional managers share responsibility.
  - Project manager decides what tasks will be done, and when they will be done.
  - Functional manager decides who will work in the project and which technologies will be used.
  - Members of the project team have two “bosses” that they report to.
- Team members could be working on multiple projects.

Matrix Project Organization

- Characteristics of projects suitable for this organization structure:
  - Integration of work done by different functional units is very important.
  - Changes (instability) both inside and outside the company.
  - Success does not depend on application of a narrow expertise.

Matrix Project Organization

- Matrix structures differ according to the “weight” of the project manager (relative to functional managers):
  1. “Lightweight”
  2. “Middleweight” - the traditional one
  3. “Heavyweight”

Lightweight Matrix Project Organization

General Manager

- Functional Manager
  - Worker
  - Worker
  - Worker

- Functional Manager
  - Worker
  - Worker
  - Worker

Project Coordinator
Lightweight Matrix Project Organization

- In lightweight structures ...
  - Representatives from each functional unit
    - perform coordination and support.
  - Functional managers have real power.
    - They provide functional input.
  - Project coordinator
    - Is responsible for the coordination/integration of inputs from different functional units.
    - Does not have direct authority over the workers.

Heavyweight Matrix Project Structure

General Manager

Functional Manager

Manager of Project Managers

Worker

Project Manager

Project Coordination

Characteristics of the project leader

- A effective manager who is experienced in more than one functional area.
- Works like a general manager (CEO) within the project. Can influence details.
- Works like the conductor of an orchestra:
  - Keeps track of how certain critical tasks are done and coordinated as a whole.

Evaluating Alternative Organizational Structures

- Use of (human) resources
  - Efficiency, flexibility, motivation
- Performance measurement
  - Career paths, performance reviews
- Focus
  - project vs. regular tasks
- Cross-functional integration
- Build-up and use of functional expertise and know-how.

Evaluating Functional Organization

Strengths

Weaknesses

Skill development

Customer interface unclear

Technology transfer

Project priority unclear

Low talent duplication

Confused communication

High personal loyalty

Schedule/cost controls are difficult

Technology development
### Evaluating Pure Project Organization

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountability clear</td>
<td>Talent duplication</td>
</tr>
<tr>
<td>Customer interface clear</td>
<td>Technology development</td>
</tr>
<tr>
<td>Controls strong</td>
<td>Technical sharing</td>
</tr>
<tr>
<td>Communications strong</td>
<td>Career development</td>
</tr>
<tr>
<td>Balances technical, cost and schedule</td>
<td></td>
</tr>
</tbody>
</table>

### Evaluating Matrix Organization

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single point accountability</td>
<td>Manager skill level high</td>
</tr>
<tr>
<td>Customer interface clear</td>
<td>Competition for resources</td>
</tr>
<tr>
<td>Rapid reaction</td>
<td>Employer recognition</td>
</tr>
<tr>
<td>Duplication reduced</td>
<td>Management cooperation required</td>
</tr>
<tr>
<td>Technology development</td>
<td></td>
</tr>
<tr>
<td>Career development</td>
<td></td>
</tr>
<tr>
<td>Disbanded easily</td>
<td></td>
</tr>
</tbody>
</table>