1. Introduction

A project manager will need to consider issues around how a project is to be staffed. In this topic, we will look at project staffing and the skills that are required for a project.

The presentation below illustrates how project staffing fits in the project management roadmap.

In project initiation, the go-ahead and approval for a particular project has been given, so project staffing is the next main technique used to identify the right individuals required for the project.

Objectives: Project Staffing

Upon completion of this topic, you should be able to

- identify the skills required for a project
- create a staffing plan for a project
- use an assignment chart to assign responsibilities to project staff

2. Project Staffing

Let us now look at the four main skills required for a project.

Click each tab below to learn about the main four skills required for a project.

<table>
<thead>
<tr>
<th>Project skills</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Functional skills</strong></td>
</tr>
<tr>
<td>Individuals who are able to perform a particular activity such as business analysis, requirements analysis, system design or testing.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Management skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals, or subject matter experts (SMEs), who are able to manage sub-projects or teams, clients and external vendors.</td>
</tr>
</tbody>
</table>
Industry skills
Individuals who are able to provide knowledge about a particular industry domain, eg, supply chain management and consumer banking.

Technical skills
Individuals who are able to provide technical knowledge in a particular technology or product, eg, SAP, Java, networking and hardware.

An individual who is well-honed in a particular skill is likely to be able to work more productively than an experienced individual who may need some time to 'learn the ropes' and undergo training. For technical skills, it is not unusual for staff to be certified in the use of a particular tool or technology. Often, these certifications will be issued by the vendor of the particular tools or technology.

Not all staff will be required right at the start of a project. Some staff will only be needed at certain stages of the project life cycle. For example, testers may only really be required for the testing phase of a project rather than the early phases of a project. A project manager therefore has to make decisions about when staff are needed and for how long.

Project managers also need to consider the availability of staff. When are staff actually available to work on the project? If in-house staff are being used, it is possible they might be taken up on existing projects. In such a case, a project manager may need to consider hiring external staff on a consultancy or contract basis. However, a project manager should be aware that with external staff, knowledge is lost from the project when the individual eventually leaves the project. In such cases where a critical role is being performed by an external staff, it is wise for a project manager to pair up external staff with a permanent member of in-house staff, or at the very least, ensure all the relevant knowledge is documented.

A project manager will also need to take into account the personalities of the individuals on the project and the potential for personality clashes, which might have a disruptive effect on the project.

Once the right staff are onboard the project, a project manager still has to consider staffing issues. Two challenges associated with project staffing are:
1. Instability and lack of continuity in project staffing. This is where experienced personnel leave the project/organisation either voluntarily or involuntarily, resulting in loss of personnel and expertise
2. Lack of staff commitment, low morale. This might be evidenced by a lack of discipline or interest, or an unwillingness to engage in work activities

3. Staffing Plan
For larger projects involving tens or even hundreds of individuals, a project manager might create a staffing plan as a tool to assist project staffing. The staffing plan defines the required human resources needed to deliver the desired project deliverables and involves the selection and assignment of a project team.

Click each icon below to learn about the steps involved in creating a staffing plan.

Step 1: Identify resource pool
As a first step in creating the staffing plan, the project manager first considers the potentially available resource pool. This can be existing staff, potential new staff, or external staff contracted for services.

**Step 2: Determine skill sets**

Second, the project manager must determine the skill sets needed to execute the project tasks. The skill sets should include functional, management, industry and technical skills. A project manager should create the job description for these roles based on the required skills.

**Step 3: Match staff to roles**

Third, staff in the resource pool are matched with the roles on the project on the basis of their skill set. When a match is found, the project manager might interview the individual before considering him or her for the project.

**Step 4: Ensure availability**

Fourth, the project manager must ensure that the right people, with the right skills, are available at the right time. In modern project management tools, a project staffing profile can be created that shows the composition of the project team at any given point in the project’s life cycle. For instance, at the start of a project, planners and project managers might constitute the entire team. In the middle of the project, the team may consist mainly of designers and developers. At the end of a project, testers and quality assurance (QA) individuals may dominate the team.

**Responsibility assignment**

A project team is formed to bring people with a variety of skills together to accomplish the project’s objectives. A project responsibility chart is a simple device commonly used to clearly state who is responsible for each project activity. The following chart is adapted from one presented by Andersen (1996).

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### Project responsibility chart

<table>
<thead>
<tr>
<th>Activities</th>
<th>Develop Project Plan</th>
<th>User</th>
<th>PM</th>
<th>CE</th>
<th>SA</th>
<th>PT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Initial project plan</td>
<td>A</td>
<td>I</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>Detailed plan of system modules</td>
<td></td>
<td>X</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A3</td>
<td>Revise overall project plan</td>
<td>d</td>
<td>d</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A4</td>
<td>Complete resource, time and cost estimates</td>
<td>P</td>
<td>X</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A5</td>
<td>Review</td>
<td>d</td>
<td>d</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>A6</td>
<td>Final plan revision</td>
<td>I</td>
<td>I</td>
<td>X</td>
<td>I</td>
<td></td>
</tr>
</tbody>
</table>

**Personnel:**

<table>
<thead>
<tr>
<th>Personnel:</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>User</td>
<td>For whom the system is to X Executes task</td>
</tr>
</tbody>
</table>
This chart can be used to clearly delineate the responsibilities of all parties involved. Also valuable is the information related to who must be consulted, informed or is available for advice.

Responsibility assignment helps co-ordinate the efforts of the diverse skills found on IS project teams.

### 4. Exercise

Click the link below for an exercise to practise making decisions about IS project staffing.

**Exercise: IS project staffing**

**Exercise Alternate Text**

**Exercise Alternate Text**

You are the project manager involved in the project staffing phase of Downtown Medical’s integrated patient handling system. Go to the next page to answer questions regarding staffing issues.

**Q1.** The project manager has just finished matching staff in the resource pool with the roles on the project on the basis of their skills set. Since he is using in-house staff, he does not need to interview anyone. As part of his staffing plan, what should the project manager do next?

1. Determine skill sets of staff
2. Ensure availability of staff
3. Create a project responsibility chart
4. Look for staff with medical administration industry skills

The correct answer is

- option 2, Ensure availability of staff

**Q2.** Here is a partial list of roles that the project manager expects to be involved in the project.

Match them to the four main skills required in an IS project.
5. Self-Assessment

Now, try the self-assessment questions to test your understanding of the topic. Click the following link to open the Self-Assessment in a new window.

Self-Assessment

Q1. A project manager needs to recruit a person who is able to set up the network infrastructure for the project. Which one of the following skills should a project manager consider?
   1. Functional skills, which is knowledge about a particular industry
   2. Industry skills, which is the ability to perform an activity such as business analysis or systems design
   3. Management skills, which is the ability to perform an activity such as business analysis or systems design
   4. Technical skills, which is knowledge about particular technologies or products

Q2. Which one of the following strategies is the most appropriate in project staffing?
   1. Get all project staff onboard right at the start of a project
   2. Get the right staff onboard the project at the time when they are needed
   3. Ensure there is more manpower than work available
   4. Utilise external and contract staff

Q3. Which one of the following would the staffing profile on a typical IS project show?
   1. A constant number of team members throughout the duration of the project
   2. A variable number of team members throughout the duration of the project
   3. An equal number of managers and developers
   4. A higher number of people at the end of a project than the start

6. Summary

This topic covered the following main points:
   - Project staffing involves consideration of the skills likely to be required for a project.
   - Project staffing skills relate to functional, management, industry and technical skills.
The purpose of the staffing plan is to match the required staff profiles with individuals in the available resource pool to ensure that the right skills are available on the project at the right time.

Reference