Organizational Structures

CMSC183 – IT Project Management
2nd Sem AY 2021-2022

Prepared by
Asst. Prof. Miguel Carlo S. Guillermo, MM

Department of Mathematics, Physics, and Computer Science
University of the Philippines Mindanao

6 Pages.
Average Reading Duration: 30 - 75 minutes

> *"Every company has two organizational structures: The formal one is written on the charts; the other is the everyday relationship of the men and women in the organization."*
> • Harold Geenen

Most IT projects take place in organizations that are trying to complete a set of objectives using IT as the enabler. Organizations exist in many sizes, industries, cultures, and structures. To increase your chances of success as a project manager, you must understand how organizations work (and not work, as the case may be).

Chapter 1 Organizational Structures

Every organization creates a unique structure, perhaps developed through years of evolutionary adjustments due to many forces. But many similar traits can be found even when terminology and names vary. As the globe continues to shrink, due largely to advances in technology, it becomes critical for project managers to understand their own organizations and how their projects need to collaborate with external entities.

Note that there is no one best way for organizations to be structured. From a project perspective, organizational structures can have a significant impact on the success of many IT projects. This structure can control the official communications channels; who is hired, fired, or promoted; who gets put on what team; and the directing of activities for subordinates. As a project manager, you may not have much of a say in how the organization is structured, but if you understand the influence a structure may have on your project, you might be able to convince management to make some adjustments, or at the very least, you will know how to function better in the current environment. For example, a typical organization has a president, and multiple vice presidents operating under different aspects of operation (e.g. vice president of operations, vice president of IT, vice president of finance, etc). Understanding the dynamics between how the different vice presidents operate under the president, their level of power, interaction, communications, and hierarchy, you can get the proper idea who to talk to when you need some assistance such as approval of the president for different project activities.

Many organizations publish, at least internally, their formal structure in the form of a chart similar to those shown in the following examples. The structure shows the official line of authority, all the departments/units that exist, and (at least by title) the major responsibilities of each.

Many small to medium organizations might not have officially created organizational charts for many reasons. If an organization does not have one, a project manager should develop one to make sure he or she understands the authority relationships. The project manager must know who has the proper authority to make decisions, to hire and fire staff, and to affect pay.

Just as important to the success of the project are the informal relationships that exist. An informal chart will not exist in any official capacity, but a project manager should discern and draw such a chart. A good practice is to draw an informal organizational chart by drawing dashed lines on top of the existing formal organizational chart. The dashed lines represent the informal relationships. Such informal relationships exist in every organization, at all levels, and they represent how individuals associate based on friendships, shared interests, family, and others. These relationships can create powerful subgroups within the organization and can have a significant impact on a project. Learning what these relationships are and learning to use them can have a major influence on the success of your project.

Chapter 2 Organizational Structures

2.1. The Traditional Organizational Structure

A traditional structure is organized around one of these characteristics: job function, end product, customer groups, a specific process, or geographic location. See example below:

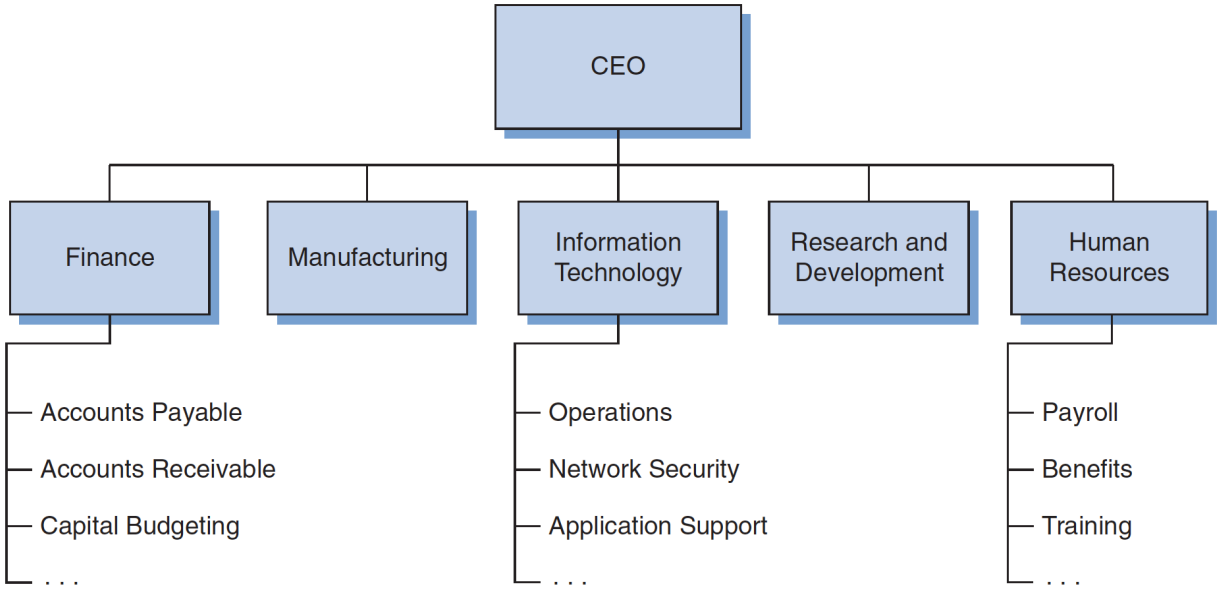

Figure 1. Functional Organization Chart

The functional structure has the following benefits:

- An individual can specialize and become proficient in one area. For example, a systems analyst who has spent the past 10 years supporting users with issues related to inventory control applications will know everything there is to know about how the process works and how the computer applications supporting the process work.

• Communication channels are well established. If you look at the chart, you can quickly see who is in charge of what and who you need to talk to about issues and problems.

• There is good control over resources because each has only one boss.

• Budgeting and cost control are relatively easy because all budgets are differentiated by defined department boundaries.

• Traditional advancement occurs within the functional department.

But regardless, organizations have found that this structure has contributed to the poor track record of IT projects discussed earlier including: It is not very adaptable, there is no accountability across department boundaries (large IT projects always cross boundaries), it does not adapt to rapid changes in technology or the supply chain, and customers are spread out across many different departments.

The following shows the drawbacks of this kind of structure:

• The project manager holds the least amount of authority in this structure. Because of this, getting the right resources, in terms of people and money, can be much more difficult.

• Resources may be underutilized, and resources may be misallocated. If the project manager needs resources from another department, he or she may have little say in which ones are provided. The department providing resources doesn't want to lose its best people or share limited resources, even if it is not utilizing them to the full extent possible, and the project manager may get a less-than-optimum choice.

• An individual's exposure to knowledge outside one's department is limited which may slow or halt career progression.

• The focus is not always on the project; everyone has his or her own job to do in addition to working on projects.

2.2. Project Based Organizational Structure

The project-based organizational structure is shown in Figure 2. This structure is organized completely around projects, and sometimes it exists only for the duration of one particular project. Meaning, when the project completes, the teams disband.

The project-based structure has the following benefits:

• One manager has authority and accountability.
• The project manager has authority for work assignments and staff salary reviews.
• Communication channels are direct and open.
• Adaptability to changes is increased, and decision-making power is put in the hands of the project manager, who is involved in the process daily.
• Project managers can build up considerable expertise from repetition of similar technologies. They can run projects that are based on similar types of applications or technologies, and with each one, they gain critical knowledge and experience.

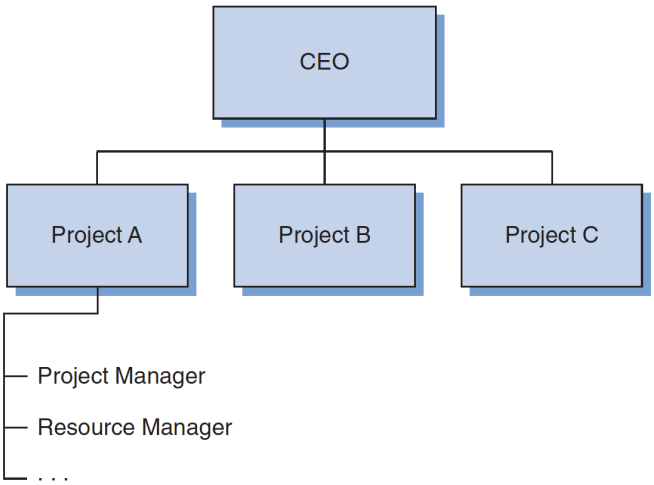

Figure 2. Project Based Organizational Structure

The project-based structure has the following drawbacks:

• There is the potential for underutilization of resources or misallocation of resources, and the sharing of resources across projects can suffer from issues similar to those of a functional structure.

• It does not take advantage of economies of scale when sharing resources (people and materials) across projects.

• Project myopia can set in: Project managers can see only the project they are working on and may lose sight of the bigger picture when they're focused on only their particular projects.

• Career progression possibilities may be limited. Project-based organizations tend to be flatter because there are fewer levels of management, which means there are also fewer possibilities for promotions. The opportunities for growth are dependent on the number of projects that people are working on.

• Support for administrative functions is more difficult, and the organization must find a way to charge each project for the support functions that span a number of projects, such as office staff, sales and marketing, and support for office computer systems.

2.3. The Matrix Organizational Structure

This structure was created as a way to combine the benefits of the functional structure and the benefits of the project structure into one organization. Organizations have come to realize the importance of adaptability and rapid change. The world is changing at an ever-increasing rate, and organizations must adopt a structure that is dynamic. Workers report to their functional supervisors for matters related to their specialization (accountants report to their accounting manager, manufacturing engineers report to their manager) and annual job performance reviews, and they report to project leaders for work assignments associated with specific projects. Despite the problems associated with this type of structure (for example, workers can have multiple bosses with conflicting agendas), many organizations are moving to this type of arrangement because it also offers many benefits. If implemented correctly, the matrix structure holds great promise for increasing the success of projects. See the section on critical success factors below for building a matrix organization.

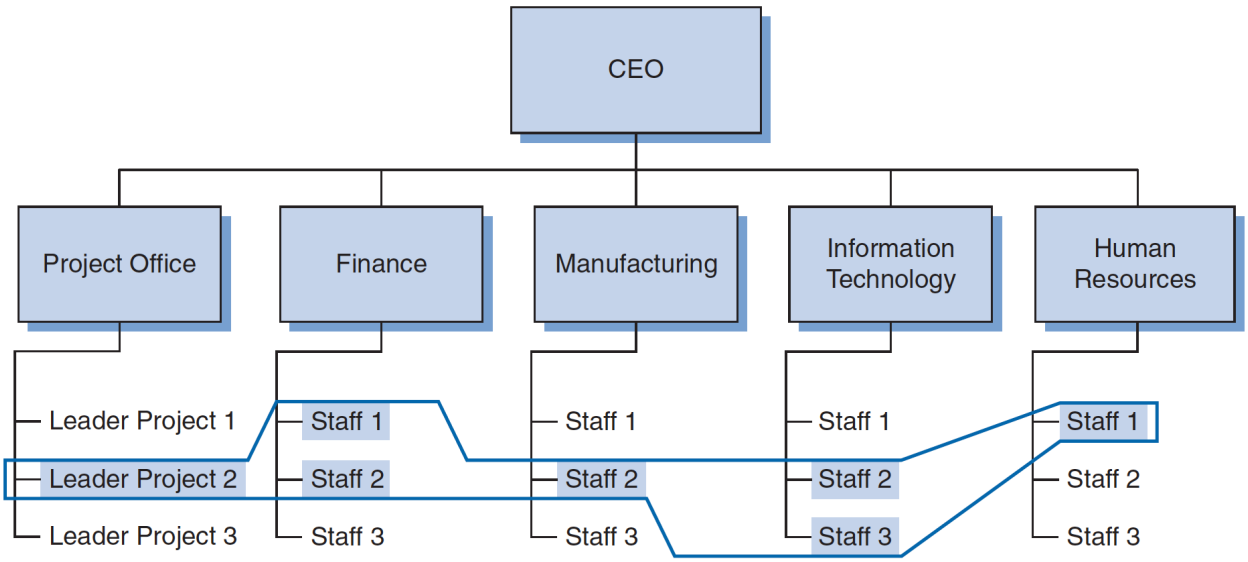

Figure 3. The Matrix Organizational Structure

Matrix organizations come in three general forms: weak, balanced, and strong. Each type represents a different level of project manager authority and a different time commitment from project team members. The determination of a weak to strong matrix structure is primarily determined by two criteria: whether the project manager is assigned to the project full time or part time and the level of authority granted to the project manager. In many balanced and strong matrix organizations, a project office has been created to manage all projects and add visibility to the importance of projects to the organization.

The matrix structure has the following benefits:

- There is formal project accountability, and the project is highly visible throughout the organization.
- It is more dynamic and adaptable to change than the other structures.
- Sharing of knowledge across projects is enhanced. The project office is responsible for monitoring all projects across the entire organization, and it becomes the archive for all project information.
- Policies and procedures can vary across projects. The organization can have one project management process, with allowed variations based on the type and size of a project.
- There is less stress about a project ending. In a project-based organization, when a project ends, a person's job may go away as well if there isn't another project waiting.

The matrix structure has the following drawbacks:

- Multiple supervisors have competing priorities. For example, the head of network support in the IT department may need to get the latest security patch applied to all the servers at the same time the manufacturing department needs the best network analyst to do an expansion of the network into the new manufacturing facility.

- Budget and cost control are more difficult, mainly due to having multiple supervisors with competing priorities.

• Project team motivation can be confusing. For example, an employee may wonder whether to listen to her boss who controls her salary or to the project manager who is giving her work assignments.

• Policies and procedures can vary across projects. This is both a strength and a weakness, if not controlled.

The following are best practices for running a successful matrix organization:

• Ensure top management commitment and support.
• Establish a project management office and clearly delineate its role.
• Establish clear lines of authority and communication channels.
• Establish formal conflict-resolution procedures.
• Use a holistic or systems approach to select, execute, and control projects.
• Establish and control the project close-out process.

Chapter 3 Ask Yourself

1. Is it important for projects to have an organizational structure? Why?
2. Describe how Organizational Structures impact projects.
3. What typical project scenarios are traditional structures more fit?
4. What typical project scenarios are project-based structures more fit?
5. What typical project scenarios are matrix structures more fit?

-end of document