

Project Management

Prof. A. Ramesh

Department of Management Studies


Indian Institute of Technology Roorkee

Week: 3

Lecture 11 : Project in the Organization structure

Dear students, in this lecture we are going to discuss about the different organization structure for the project. In the last class we discussed about negotiation, so in this class we are going to discuss about project in the organization structure. In the previous class we discussed about negotiation. So, the agenda for this lecture is what is the need for organization structure, then why we need to have project oriented organization structure. Then we discuss about some organizational issues for project oriented structure, then major organization structural forms like line, project, matrix, composite. So, four organization structure we are going to study and their advantage and disadvantage.

Phase-I Project Initiation	Course outline
Introduction to project management-I	
Introduction to project management-II	
Agile project management	
Project selection models	
Examples of Project selection Model	
Project manager	
Attributes of Effective Project Manager	
Managing for stakeholders	
Resolving Conflicts	
Negotiation	
Project in the organization structure	
Human factors and the project team	



Agenda

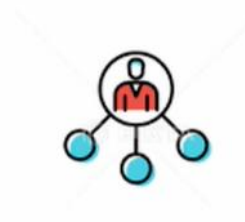
- Need for Organization Structure
- Need for project-oriented organisations
- Organizational issues for project-oriented structure
- Major organizational forms
- Project Characteristics and Project Home
- Selecting a Project Form



Then project characteristics and the project home. So, what kind of project characteristics, what kind of structure is required. Then finally, some tips for selecting the right project organization structure. First we will discuss what is the need for organization structure.

Need for Organization Structure

- The focus of the structure is the specialization of the human elements of the group
- As long as its organisational structure is sufficient for its imposed tasks, the structure tends to persist
- When the structure begins to inhibit the work of the firm, pressures arise to reorganize along some other line



© 2013 Pearson Education, Inc. All rights reserved. Project Management: A Practical Approach, 10th Edition, P. D. Cioffi

So, the focus of the structure is the specialization of human elements of the groups. If say if there are 100 people we want to group that people based on certain characteristics, so that grouping is called organization structure. So, what will happen as long as its organizational structure is sufficient for its imposed task structure tends to persist. Suppose I have one structure using that structure if I am able to do all the activities then there is no problem that structure will be fine for me. When the organization structures begin to inhibit the work of the firm the pressure arises to reorganize along some other

lines.

I have some existing structure but the workload I am not able to categorize and execute all the workload there is a conflict among different groups. So, then we need moving from one structure organization structure into another organization structure so that that all the work will be done efficiently. Now, we will discuss about types of project organization structure. Before that we discuss what is a project organization. In the past decade or so a new kind of organization structure has appeared in growing numbers that organization structure is called project organization.

Type of organization structures: Project organization

- In the past decade or so, a new kind of organization structure has appeared in growing numbers—the **project organization**
- Other Names
 - Enterprise project management
 - Managing organizations by projects
 - Project-oriented firm
- Such organizations have been described as **applying “project management practices and tools across an enterprise”**



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

There are different names for project organization like enterprise, project management, managing organizations by projects, then project oriented firm. These are the different names for project organization. So, such organization that is a project organization have been described as applying project management practices and tools across the enterprise. So, when we say a project organization it implies that that organization structure use project management practices and tools across the enterprise. So, if an organization using project management practices and tools then that organization will be called project oriented organization.

Need for project-oriented organizations

- Speed and market responsiveness
- Traditional methods for developing new products or services are no longer competitive
- First-to-market is a powerful competitive advantage



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

Now, why we need project oriented organization? The first reason is speed and market responsiveness because now the market want the product as quick as possible and the responsive time for customer expectation is very less. If you do the your organization in a traditional way you cannot deliver product quickly and you cannot meet the people's expectation. So, we need to go for project oriented organization. The another reason is traditional method for developing new product or services are no longer competitive. The way the products are developed in a traditional way is no longer competitive because there are so many varieties, so many design changes in the product, but the volume is more.

So, this kind of combinations more designs, more varieties at the same time more volumes can be handled only if you do that activities in the form of project. The next point is first to market is a powerful competitive advantage. If you run your organization in the form of project oriented organization you can very quickly deliver the product and you will be the first person to enter into the market. So, we need to do the activities in the form of project oriented organization structure. Another reason is now the project requires diverse specialized knowledge, but the exact mix is rarely suitable for another product and services.

Need for project-oriented organizations

- Requirement of diverse specialised knowledge, but the exact mix is rarely suitable for another product or service
- Teams of specialists
- Traditional mechanisms cannot handle large-scale change satisfactorily, but project organizations can



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

Nowadays the project demand the expertise from different field. So, if you need expertise from variety of field you have to do you have to execute that work in the form of project. Then we need a team of specialist. So, we need to go for project oriented organization and the traditional mechanisms cannot handle large scale change satisfaction, but the project organization can. Suppose there is a large scale change is required.

So, that cannot be done with the traditional way of managing the business. So, we need to go for project oriented organization structure. Organizational issues for project oriented structure regardless of the organizations project orientation or occasional projects any project initiated immediately triggers three organizational issues. As soon as you start a new project that will create a three organizational issues. The first issue is a decision must be made about how to tie the project to the parent firm.

Organizational issues for Project-oriented structure

Regardless of the organization's project orientation or occasional projects, any project initiated immediately triggers three organizational issues

First, a decision must be made about how to tie the project to the parent firm.

Second, a decision must be made about how to organize the project itself.

Third, a decision must be made about how to organize activities that are common to other projects.



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

So, the connection between the project and the parent firm need to be identified. Second issue is a decision must be made about how to organize the project itself. The third issue is a decision must be made about how to organize activities that are common to other projects. So, these are the three important issues in the project oriented structure, but this is common for other type of project also. Now we will discuss about in detail major organizational structures like functional organization structures, projectized organization structures, matrix organization structures.

Major organizational forms

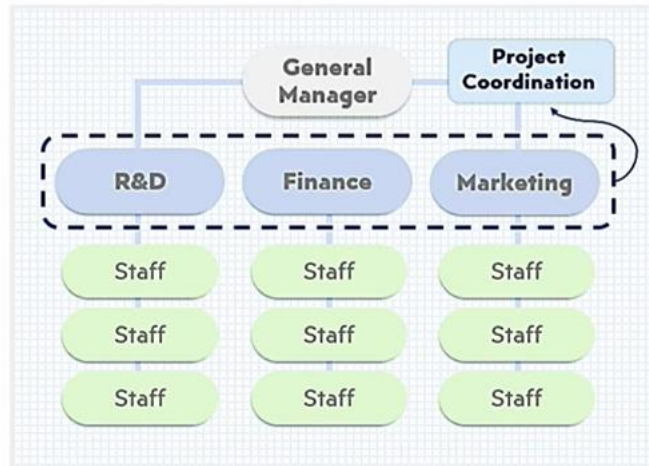
1. Functional
2. Projectized
3. Matrix
4. Composite



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

In that we will study about strong matrix and weak matrix. Finally, we will study about composite organizational structures. In between we will study advantages and disadvantages of these four type of organizational structures. First we will study functional organization structure. You see there is a different division in the organizations for example finance, marketing, operations, R&D.

Functional Organizational Structure



Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

In each division say marketing there are group of people are working. So, these people is reporting to general manager and there will be a project coordination. All these different functional divisions are coordinated by a officer called project coordination officer. Now we will discuss about projects in a functional organization. Make it part of one of the functional divisions.

Projects in a Functional Organization

- Make it a part of one of the functional divisions
 - More than one choice may exist
 - If support from other areas is needed, they are expected to help support the project
- Another way is to assign the work to all divisions with the top management overseeing the effort



Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

One thing what we can do, suppose if we have a project that project can be made as a part of one of the functional division. Maybe it can go to marketing or it can go to operations or it can go to finance. More than one choice may exist. You may go to point A or point A, whether it can go to finance or you can go to marketing. If support from other areas are needed, they are expected to help support the project.

Suppose that project need support from other functional divisions, they also can provide

the support. Another way is to assign the work to all divisions with the top management overseeing the effort. So, what we discuss here is suppose if we have a project, how to tie that project with the functional organization? One way is it can be allotted to any of the divisions or that project can be executed with the help of support from all other parent or functional divisions. The advantage of functional organization is a maximum flexibility in the use of staff. There will be more flexibility because that project need person from production, person from marketing, person from there is a flexibility among the staff.

Advantages-Functional organisation

Maximum flexibility in the use of staff

Experts can be utilized by many different projects

Specialists can be grouped to share knowledge and experience

Functional division serves as a base of technological continuity

Functional division contains the normal path of advancement



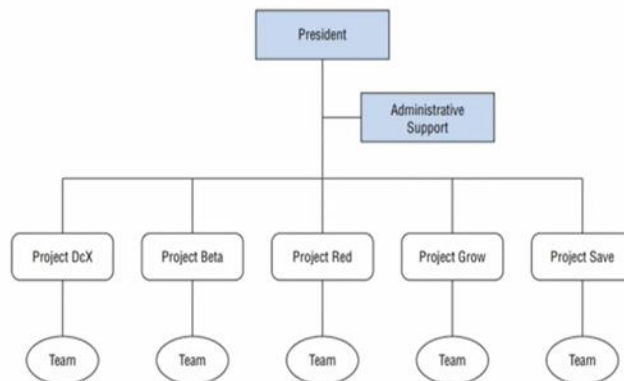
Then experts can be utilized by many different projects. So, the experts in technology, the experts in operations can work on different projects. The specialist can be grouped to share knowledge and experience and functional division serve as the base for technological continuity. Suppose if you are working a project which is technology oriented project, so if you work in the form of functional division, there will be a continuity in the project. Functional divisions contains the normal path of advancement because stage 1, stage 2, stage 3.

These are the advantages of using project in the functional organization type. What are the disadvantage? Client is not the focus of this activity. So, when you execute a project in a functional organization, so the client is not the focus. The functional units tend to be oriented towards activities of that function. Suppose I am marketing person, I will focus more on only marketing not on the other functions like finance.

No individual is given full responsibility. This is very important disadvantage. Since there is no proper responsibility, so nobody will climb if there is something goes on the project. And response to the client's need is slow and arduous. Tendency to sub-optimize the project and motivation tends to be weak.

A holistic approach to the project is not facilitated. These are the disadvantages of functional organization. The next type of organization is projectized organization. Look at here there is a project DCX, project beta, project red, project grow, project save. So, under the each project there are group of people, the teams are working.

The Projectized Organization

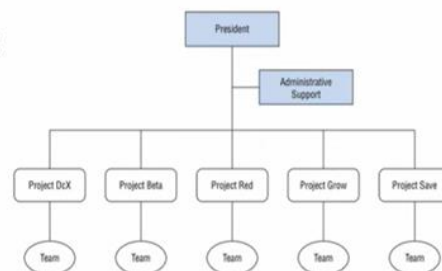


Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

So, there is administrative support will be there for all these projects. They directly report to the president. So, this is the projectized organization. For this subject, we recommend only this type of organization structure. Here the firm's administrative support groups like HR, legal, finance, other controller report to the president or CEO as a staff unit.

Project in projectized organization

- Here the firm's administrative support groups (HR, Legal, Finance, Controller, etc.) report to the President or CEO as staff units
- Projects have a full complement of functions
- Each project is stand-alone with its own technical team, its own staff, and so on



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

Projects have a full complement of functions. Each project is standalone with its own technical team, its own staff and so on. So, here every project is done as an individual entity. The advantage of projectized organization is project manager has full authority.

All members report to the project manager, short lines of communication.

Advantages- Projectized Organization

- Project manager has full authority
- All members report to the project manager
- Short lines of communication
- For similar projects, expertise can be retained
- Strong and separate identity
- Swift decisions
- Unity of command
- Structurally simple and flexible
- Supports a holistic approach



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). Project management: a strategic managerial approach. John Wiley & Sons.

So, very quickly we can communicate. For similar projects expertise can be retained, strong and separate identity, swift decisions, very quick decision. There will be a unit of demand structurally simple, unflexible and support a holistic approach. These are the advantages of projectized organization. Now we will discuss about disadvantages.

Disadvantages- Projectized Organization

- Duplication in staffing
- Stockpiling
- Workers tend to fall behind in other areas of their technical expertise
- Inconsistency in policies and procedures
- A project takes on a life of its own
- Worry about life after the project is over



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). Project management: a strategic managerial approach. John Wiley & Sons.

Duplication in staffing. So, in your project X there may be some experts. In project Y also there is a same type of experts may be there. So, what is happening? There is a duplication of underutilization of staffing. Then stockpiling, project X also will have some stocks, project Y also will have stocks because all are separate entity. Workers tend to fall behind in other areas of their technical expertise.

That is that workers may not know what is happening in other areas. There is no holistic

Projects in Matrixed Organization

	HR	Finance	IT	Marketing	Operations
Project A	Person	Person	Person	Person	Person
Project B	Person	Person			Person
Project C		Person	Person		Person

The diagram illustrates a matrixed organization structure. It features a grid with three rows representing projects (Project A, Project B, Project C) and five columns representing functional departments (HR, Finance, IT, Marketing, Operations). Each cell in the grid contains a black person icon, indicating that resources are dedicated to specific projects across different functional areas. For example, Project A has dedicated resources in all five departments, while Project B has resources in HR, Finance, and Operations, and Project C has resources in Finance, IT, and Operations.

A small video inset in the bottom right corner shows a man with dark hair, wearing a blue jacket over a purple shirt, speaking. He is in a modern kitchen setting with a window in the background.

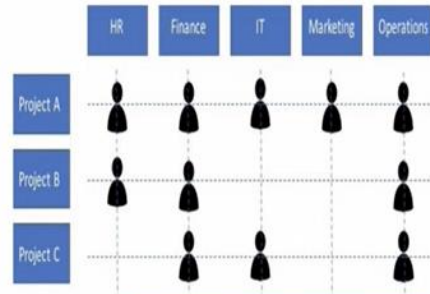
Project C, people who finance, IT and operations. So, this type of organizational structure is called the matrix organizational structures. It is a combination of standalone, projectized and functional organizational structures. Previously we discussed about functional organization structures and also discussed about projectized organizational structures. So, the matrix is the combination of these two.

In effect, the functional and the projected organizations represent the extremes. It can take on a wide variety of specific forms depending on which of the two extremes, whether it is fully or functional or it is fully on projectized or standalone in most resembles. Suppose if the project is fully on standalone, then we call it as strong matrix. But the project is working in the like a functional organization, then we call it is the

weak matrix organization. We will study about in detail in the next slide.

Projects in Matrixed Organization

- It is a combination of standalone projectized and functional organization structures
- In effect, the functional and the projectized organizations represent extremes
- It can take on a wide variety of specific forms, depending on which of the two extremes (functional or standalone) it most resembles



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

Types of Matrixed Organization

- The “projectized” or “strong” matrix most resembles the projectized organization
- The “functional” or “weak” matrix most resembles the functional organisation
- Finally, the “balanced” matrix lies in between the other two

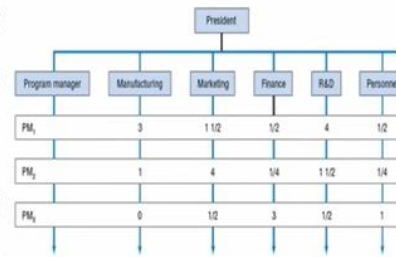


Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

Now we will discuss about types of matrixed organization. The projectized or strong matrix most resembles the projectized organization. The functions or weak matrix most resembles the functional organization. Finally, the balanced matrix is in between the other two. So, if the organization is most resembling with projectized organization, we call it as a strong matrix.

Strong matrix

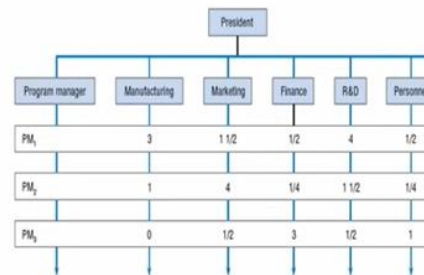
- Being a standalone organization, like the standalone project, the matrix project is not separated from the parent organization
- Although not always the case, here the project manager of Project 1, reports to a program manager who also exercises supervision over two other projects having to do with the same program



The project is more resembling with functional organization, then we call it is weak matrix. If there is a combination of these two, if there is an equal representation from both projectized and functional, we call it is balanced matrix. First we will see the strong matrix. Being a standalone organization like the standalone project, the matrix project is not separated from the parent organization. Although not always the case, here the project manager of project one reports to the program manager who also exercise supervision over other two projects having to do with the same program.

Strong matrix

- These individuals are assigned to the project full-time or part-time, depending on the project's needs
- PM controls **when and what these** people will do while Functional managers control **who will be assigned to the project and how the work will be done**, including the technology used



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. I. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

So, this is an example of strong matrix because it is similar to your projectized organization, but in the form of matrix. So, these individuals are assigned to the project full time or part time depending on the project's needs. So, there is a strong commitment of the project manager for that project. So, project manager controls when and what these people will do, while functional manager controls who will be assigned to the project and how the work will be done including the technology used. Here the project

manager is very powerful person, he will decide who will do the activity, but the functional manager will say who will be assigned to this project.

Strong matrix

- Project 1 has assigned to it three people from the manufacturing division, one and one-half people from marketing, one-half of a person each from finance and personnel, four individuals from R & D, and perhaps others not shown

	Program manager	Manufacturing	Marketing	Finance	R&D	Personnel
PM ₁		3	1 1/2	1/2	4	1/2
PM ₂		1	4	1/4	1 1/2	1/4
PM ₃		0	1/2	3	1/2	1



Look at the picture on the right hand side. Project one has assigned to it three people from the manufacturing division, one and half people from marketing, one half people a person each from finance and personnel and four individuals from R&D and perhaps others not shown. So, this is an example of a strong matrix because there is a more representation from the finance people. So, they are working under project manager 1. Project 1 might involve the design and the installation of new type of manufacturing processes for a new product alpha.

Strong matrix

- Project 1 might involve the design and installation of a new type of manufacturing process for a new product Alpha
- Project 2 could involve marketing for the new product
- Project 3 might concern the installation of a new financial control system for the new product



Project 2 could involve marketing for the new product. Project 3 might concern the installation of new financial control system for the new product. So, there are three projects people are working same people are working in different projects. For example, see the marketing person is working in the project one also and project three also.

Similarly, the finance person is working in project one and the project three. All the while the functional divisions continue on with their own routine activities.

Strong matrix

- All the while, the functional divisions continue on with their routine activities
- The project manager may report to a program manager, or a functional manager



So, the meaning here is the people coming from manufacturing marketing they will do their own activity also at the same time they are involved in the project also. So, the project manager may report to a program manager or a functional manager. Now, we will discuss about weak matrix. One end we have seen when if the matrix organization is looking like a standalone project we call it is a strong matrix. On the other hand of the spectrum of matrix organization is the functional or weak matrix.

Weak matrix

- At the other end of the spectrum of matrix organizations is the functional or weak matrix
- A project might have **only one full-time person, the PM**
- Functional departments devote capacity to the project
- Primary task of the project manager is to coordinate project activities carried out by the functional departments



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

Here the project might have only one full time person as a project manager. Functional departments devote capacity to the project. So, the primary task of project manager is to coordinate project activities carried out by the functional departments. Here the role of project manager is very less his role is only the coordination.

So, this is an example of weak matrix. For example, the project manager of a project set up to create new database for personnel might request the basic design be done by the IT group in the administrative division. So, the personnel job would then be added to the normal workload of the IT groups. Here what I am doing that we need a some job has to be done. So, that work will be done along with the works of the IT division.

Weak matrix

- For example, the PM of a project set up to create a new database for personnel might request that the basic design be done by the information technology (IT) group in the administrative division
- The personnel job would then be added to the normal workload of the IT group



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

Balanced matrix

- Between these extremes is the balanced matrix, which is typically anything but balanced
- There are many different mixtures of project and functional responsibilities
- When a functional group's work is frequently required by projects, it is common to operate the group as a functional unit rather than to transfer its people to the project



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

Now, we will discuss about balanced matrix. Between these extremes is the balanced matrix. What is these extreme? One end there is a standalone project, another end there is a functional project. So, between these extremes the next type of matrix organization comes called balanced matrix, which is typically anything but balanced between these two extremes. There are many different mixtures of the project and functional responsibilities. When your functional groups work is frequently required by

the project, it is common to operate the group as a functional unit rather than to transfer its people to the project.

Advantages-Matrix Structure

The project is the point of emphasis

The project has access for labor and technology in the entire organization

The project's completion has reduced anxiety.

Response to client needs is rapid

Access to administrative units of firm

Better balance of resources

Great deal of organizational flexibility



What is the advantage of matrix organization structure? The project is the point of emphasis. Many people from functional divisions they will come and work in each project. Sometimes the same person from the functional division may work more than one project also. So, that is the meaning of the project is in the point of emphasis. The project has access for labor and technology in the entire organization.

The project's completions has reduced anxiety, response to client need is rapid, access to the administrative unit of the firm, better balance of resources, great deal of organizational flexibility. Most of the software organization they work in the form of matrix organization structure. What are the disadvantages of matrix structure? Power balance is delicate, project compete for resources, project it is still a serious disease. So, division of authority and responsibility is complex. Matrix management violate the management principle of unity of command.

Project Characteristics and Project Home

Project Characteristics	Project Home				
	Functional Organization	Matrixed Organization			Projectized
		Weak	Balanced	Strong	
Authority of PM	Little to None	Low	Low to Moderate	Moderate to High	High to Complete
Availability of Resources	Little to None	Low	Low to Moderate	Moderate to High	High to Complete
Ownership of Project Budget	Functional Manager	Functional Manager	Shared	PM	PM
Role of PM	Part-time	Part-time	Full-time	Full-time	Full-time
Project Administrative Staff	Part-time	Part-time	Part-time	Full-time	Full-time

Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.



Now, we will see the project characteristics and project home. You see so far we discussed about functional organization and projectized organization. In between we discussed about the matrix organization in that that may be the weak matrix or strong matrix or it may be balanced matrix. Now, we will see the characteristics. First characteristic says authority of project manager. For the functional organization the authority of project manager is little.

But in the extreme case for the projectized organization the authority of project manager is high. If it is the weak matrix organization, authority of the project manager is low. Because it is similar to your functional organization.

But look at the strong matrix organization. Here it is moderate to high. Here the authority of project manager is high where in the strong matrix organization. But in the balanced matrix organization it is low to moderate. Then, if you look at the availability of resources. For a functional organization is little to none.

Project Characteristics and Project Home

Project Characteristics	Project Home				
	Functional Organization	Weak	Balanced	Strong	Projectized
Authority of PM	Little to None	Low	Low to Moderate	Moderate to High	High to Complete
Availability of Resources	Little to None	Low	Low to Moderate	Moderate to High	High to Complete
Ownership of Project Budget	Functional Manager	Functional Manager	Shared	PM	PM
Role of PM	Part-time	Part-time	Full-time	Full-time	Full-time
Project Administrative Staff	Part-time	Part-time	Part-time	Full-time	Full-time



But for the project organization it is high to complete. In the matrix organization if it is the weak matrix availability of resources is low. But if it is a strong matrix it is moderate to high. If it is the balanced matrix it is low to moderate. Then ownership of project budget. In the functional organization the functional manager is the owner of project budget.

But for the projectized organization the project manager is the owner of the project budget. He is the responsible for that. In the matrix organization if it is a weak matrix again the functional manager will have more responsibility, more control on project budget. If it is a strong matrix the project manager will have a control on the project budget.

If it is a balanced both are shared. Then role of project manager. In a functional organization the role of project manager is part time. But if it is a projectized organization his role is full time. If it is a strong matrix the role of project manager is full time. If it is a weak matrix the role of project manager is part time.

Project Characteristics and Project Home

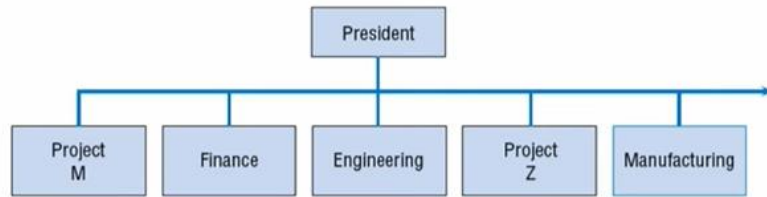
Project Characteristics	Project Home				
	Functional Organization	Weak	Balanced	Strong	Projectized
Authority of PM	Little to None	Low	Low to Moderate	Moderate to High	High to Complete
Availability of Resources	Little to None	Low	Low to Moderate	Moderate to High	High to Complete
Ownership of Project Budget	Functional Manager	Functional Manager	Shared	PM	PM
Role of PM	Part-time	Part-time	Full-time	Full-time	Full-time
Project Administrative Staff	Part-time	Part-time	Part-time	Full-time	Full-time



If it is a balanced it is a full time. Then project administrative staff. Here the functional organization they are part time. But for the projectized organization these office administrative people are full time. Similarly for strong matrix also it is a full time. But for a weak matrix they are part time.

If it is a balanced matrix still their project administrative staffs are part time. So, this table explains the project characteristics and their project home. The last type of organization structure is called composite organization structures. Here when I say composite here it is a combination of functional and the projectized organization structures. Look at the picture there is a functional division is there at the same time there also project is there. There is a project Z is there at the same time there is a functional divisions also there.

Projects in Composite Organizational Structures

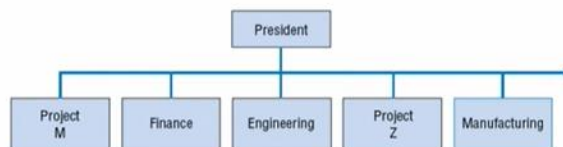


Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

So, this combination of functional and the project division in the same organization structure is called composite organization structure. So, we often see combination of the previous forms. So, for what we discussed. So, what we tend to see in practice is some combination of two or three more different forms.

Projects in Composite Organizational Structures

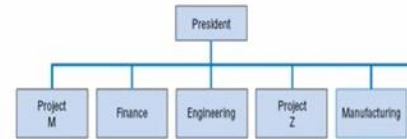
- We often see combinations of the previous forms
- So what we tend to see in practice is some combination of two or three or more different forms
- We call these “composite” structures.



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

Projects in Composite Organizational Structures

- If both functional and projectized divisions coexist in a firm, this would result in the composite form shown in Figure
- This form is rarely observed for a long duration.
- What is done, instead, is to spin off the large, successful, long-run projects as subsidiaries or independent operations.



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

We call these composite organization structure. If both functional and projected divisions coexist in a form this would result in the composite form of organization structure as shown in the figure. This form is rarely observed for a long duration. What is done in state is to spin off the large successful long run project as subsidiaries or independent operations. So, what will happen even though there is a combination of structures when the project size is increasing. So, the combination of these different structure will be separated they will work as a different or independent organization structure.

Projects in Composite Organizational Structures

- Many firms nurture young, unstable, smaller projects under the wing of an existing division, then wean them to standalone projects with their own identity, as in Figure , and finally allow the formation of a venture team—or, for a larger project, venture firm—within the parent company.



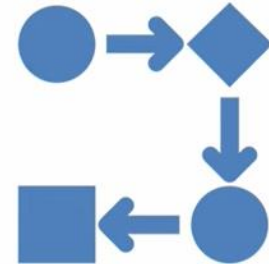
Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

Many firms nurture young unstable smaller projects under the wing of an existing division then wean them to standalone projects with their own identity as shown in the figure. And finally, allow the formation of venture team or for a large project venture firm within the parent company. So, far we discussed about four types of organization

structures. But the most important is selecting your project form whether I should go for functional organization type or projectized organization type or should I go for matrix organization type or should I go for composite organization structure.

Selecting a Project Form

- Firms typically do not set out to pick an organizational form
- Rather, the structure evolves over time
- The structure is not static
- Rather, it changes as the organization, its goals, and its environment changes



source: Meredith, J. R., Shafer, S. M., & Mantel Jr., S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

Firm typically do not set out to pick an organizational form. Initially they would not decide what kind of organizational structure is required. Rather the structure evolves over a period of time and the structure is not static. When the scale of the organization is increasing the structure may change one form to another form. Rather it changes as the organization its goals and its environment changes. Suppose an environment changes one structure may not be suitable we should go for other type of organization structure.

Functional Form Best for...

In-depth application of a technology

Large capital investment, especially when that investment is concentrated in one functional area



Now, we will see functional form of organization when it is suitable. Whenever working on in-depth application of technology then you should go for functional type of organization structures. Large capital investment especially when that investment is concentrated in one functional area then we should go for functional type of organization

structures. When is the project form of organization structure is suitable? Suppose handling a large number of similar projects if an organization is handling large number of similar projects then that organization should go for projectized organization structure. And handling a one-time project that requires much control but is not focused on one functional areas then you should go for project organization structures. When should we go for matrix type of organization structures? Project that require input from several functional areas then we should go for matrix type of organizational structures.

Project Form Best for...

Handling a large number of similar projects

Handling a one-time project that requires much control, but is not focused on one functional area



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

Matrix Form Best for...

Projects that require inputs from several functional areas

Projects that use technology from several functional areas



Source: Meredith, J. R., Shafer, S. M., & Mantel Jr, S. J. (2017). *Project management: a strategic managerial approach*. John Wiley & Sons.

The next situation is project that use technology from several functional areas then we should go for matrix type of organization structure. Dear students in this lecture I have discussed about need for project organization structures and project oriented organization. Next I have discussed about organizational issues for project oriented structures then I discussed about major organizational forms. I discussed about four

major organization structures like functional, projectized, matrix and composite.

Then project characteristics and their project home I discussed. I discussed about different characteristics, project management authority, what is their level of authority on these different organization structures. Finally, I have discussed how to select and also provided some suggestions when to go for right organizational form of structure. Thank you. Thank you. you