

## Matrix and project-mode organisations

### Introduction

This paper describes the distinctive characteristics of matrix organisations. It will be seen that organisations which work in “project-mode” (i.e. where their outputs are produced by a stream of projects rather than by a continuous and repeated process) are a special type of this general category with their own particular features.

Efforts to define matrix organisation have met some difficulties, partly because of a failure to recognise the range of organisational forms it encompasses. However the common feature is generally accepted to be that matrix organisations abandon the classical organisational principle of unity of command in favour of some sort of dual basis of authority such that at least some managers report to two bosses.

Two fundamentally opposed bases for grouping activities can be identified: by function and by market. Each has distinctive strengths and weaknesses and so when one is chosen the benefits of the other are foregone. In essence matrix organisation in its various forms represents an attempt to simultaneously achieve the benefits of both simultaneously: to have your cake and eat it.

Matrix organisation is characterised by some managers reporting to two bosses rather than the customary one. Usually the two bosses are a project / product / programme manager on the one hand [market basis] and a functional manager on the other. The two managers will have different roles in that the project etc. manager will normally focus on task performance and delivery of outputs to specification (i.e. the achievement of business results) whereas the functional manager will normally be concerned with professional standards and development.

Organisational forms come in a limitless range of possibilities and matrix arrangements can exist at a variety of different organisational levels: between the business units in a Group, within a single business unit or within a single functional area e.g. a research laboratory or an IT department. However three reasonably distinct versions of matrix organisation can be identified and these will be outlined in turn as a means of exploring the range of possibilities. They have been labelled: coordination matrix, balanced matrix and project mode. There is also the matrix-like arrangement often used within single functions and variously described as “out-housing” or dotted line reporting, and this too will be briefly discussed.

### The coordination matrix

This is basically a functional organisation which has probably experimented with temporary task forces and other ad hoc coordinating mechanisms and now appoints project or programme managers to coordinate the contributions of the various functional departments to the delivery of products or projects. The individuals may become part of a new functional department of project/programme/product management. The responsibility and accountability for getting the work done rests primarily with the heads of functional departments as does

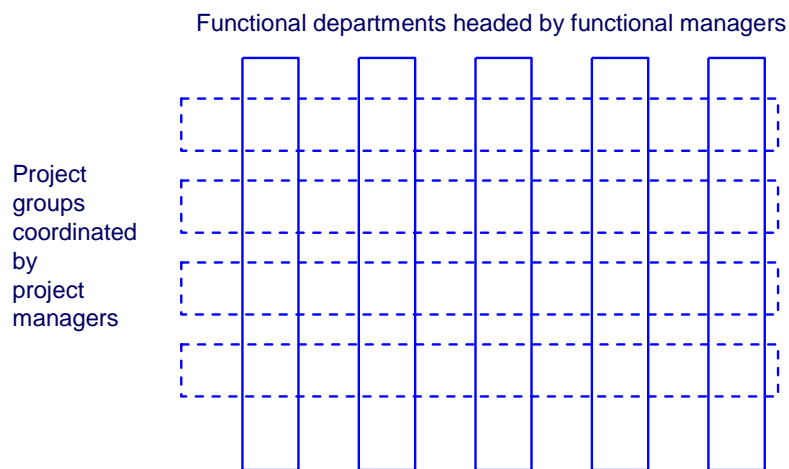
T 0118 988 8736 F 0118 988 8848 E [peter@peterhyde.co.uk](mailto:peter@peterhyde.co.uk) W [www.peterhyde.co.uk](http://www.peterhyde.co.uk)

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authority over the use of resources. The project managers have little or no formal authority and seek to manage the situation by the exercise of interpersonal influence skills, by bringing information to the attention of those with the power to commit resources and in other fairly informal ways. They are frequently frustrated by having responsibility without power.

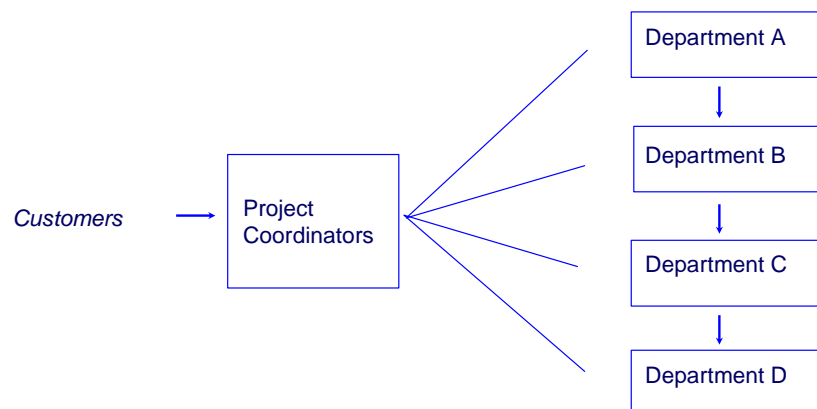
The situation may be represented on the organisation chart like the diagram below which emphasises that while there is dual authority, the balance of power is tilted heavily towards the functional managers.

*Coordination matrix*



The process operates like this:

*Coordination matrix*



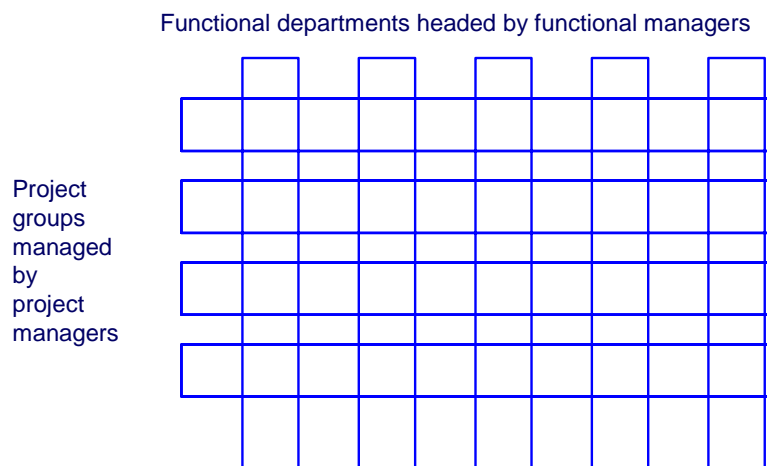
Overall, this form of matrix retains the advantages of functional organisation and gains an increase in the level of coordination. If the functional departments are very strongly entrenched the gains may be small and achieved at the cost of much suffering by the project managers, who will probably be heard recommending the establishment of dedicated project teams to give them some authority over the people who are supposedly working on their projects.

### The balanced matrix

This represents a thorough-going attempt to attend to two organisational dimensions at once with dual authority and in principle equal power for managers representing both dimensions. The two dimensions might be function and product, product and area or area and product. Three way matrices combining all of these are not unknown. A typical structure is shown below.

The structure is drawn in a similar way to the coordination matrix above, but what is different is that the people in the matrix are subject to two lines of authority in a much more continuous and structured way.

#### *Balanced matrix*



#### **Advantages**

The advantages of such a structure are :

- It forces interdependencies to be acknowledged and dealt with.
- It increases the amount of lateral communication which takes place.
- If all goes well, it marries the technical excellence of the functional organisation to the customer focus of the market organisation.

### ***Disadvantages***

However, a number of drawbacks have been identified:

- Stress and ambiguity for two-boss managers.
- Institutionalised conflict and power struggles: the imperatives of the project manager are to get the best people to work for him/her as and when they are required, whereas the functional manager is trying to achieve high resource utilisation in the short term and longer term staff development as well.
- A large overhead of meetings and paperwork to achieve the necessary coordination and resolve conflicts.

### ***Conclusions***

It seems clear that if this structure is to work the power must be reasonably well balanced between the two sides of the matrix. One way of doing this is to make the functional managers have cost centre responsibilities and the project etc. managers budgetary and profit centre responsibilities. The functional managers cover their costs by selling resources to the projects managers, the spend their budgets with the functional managers to meet their targets (sometimes they may have the freedom to buy from outside if the internal suppliers cannot deliver).

There is also an important role for the general manager who is directly above the matrix and who is the crossover point for the two sides of the matrix to manage the power balance and resolve otherwise irresolvable issues.

The balanced matrix is probably the most complex organisational form of matrix organisation and is not to be undertaken lightly.

### **Project mode**

In this variant of matrix management the project manager is king. All staff members belong to a functional or possibly a geographically-based unit for “pay and rations” purposes, but their productive work is done for one or more projects run by project managers. Staff “belong” to their functional manager but work for a project manager who in some versions of this model has hired them from the functional manager. Functional managers are concerned with the technical excellence and longer term development of their people and project managers attend to shorter term goals - most obviously delivering their projects to specification. In the most fluid of these situations people work on many projects at once and may simultaneously be project manager and managed.

If the people concerned are from a range of functional specialisms, they will be based in functional units. However, if they are all similar e.g. computer programmers or generalist management consultants they may simply be part of a resource pool managed as an entity.

Alternatively the base may be a series of market based groupings. In each case all the people in the matrix are seen as a single resource pool available to any project manager.

Frequently this arrangement is underpinned by an internal market in which individuals seek to find themselves work with project managers who are trying to resource jobs. In such a set-up everybody is driven by performance targets: business ones for the project managers and utilisation rates for the functional managers and individual specialists. One effect of this process is make poor performance very obvious: it will be clear which individuals functional managers can't "sell" and project managers don't want in their teams.

Alongside this fluid project based arrangement would normally sit some pooled resources providing specialised services to project teams and managed on simple functional lines eg for document preparation or some computer services.

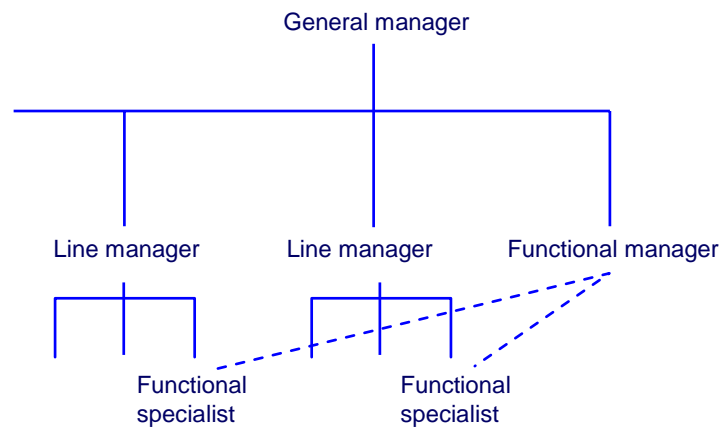
Some of the requirements for such a form of organisation would be:

- A work group of self managing professionals.
- Well developed skills of contracting at all levels (i.e. reaching agreements and keeping to them).
- A skills database and a system of manpower planning.
- Time sheets for each individual.
- Utilisation measures as a major performance criterion.

## **Outhousing**

This situation arises where functional specialists are allocated to business units. The specialists might be personnel, procurement, IT, finance or any other and the business units might be factories, divisions, businesses, regions or whatever. The element of dual authority arises where the functional specialist reports to a line manager in the business unit and to a functional manager in headquarters. This sort of arrangement is shown on the next page.

### *Outposting*



This sort of situation is not normally too problematic except where the functional manager wants to be the specialist's line manager with the dotted line being to the line manager of the business unit. This is a recipe for problems.