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Management Organizing Function and Activities
Series on general management and PM
Series Article 3   by Alan Stretton

Series on general management functions and activities, and their relevance to the management of projects[1]

Article 3 of 7

Management Organizing Function and Activities

By Alan Stretton

BACKGROUND TO THIS SERIES

General management provides the foundation for building project management skills and is often essential for the project manager. On any given project, skill in any number of general management areas may be required. General management literature documents these skills, and their application is fundamentally the same on a project. (PMI 2004:15)

As noted in the two previous articles of this series, this lead quotation reflects the widely acknowledged importance of general management skills in the management of projects. The coverage of general management skills in the project management literature is somewhat uneven. Some aspects are quite well covered, others less so.

This series of articles is primarily concerned with presenting a broad coverage of traditional/ classical materials on general management, which hopefully may fill in some of the gaps in current coverage in the project management literature, and help project managers either directly, or by pointing to sources for more detailed coverage of particular general management materials.

Another aim of this series is to look in a little more detail at various ways in which the functions and component activities of general management are relevant to the management of projects. I have tended to focus on materials that I have found to be most relevant and/or useful in over sixty years' experience in both general management and project management.

The first article of the series (Stretton 2015g) proposed a general management knowledge framework, as summarized on the right. The second article (Stretton 2015h) developed the "basic" general management function of planning, and its component activities, and discussed their relevance to the management of projects. This third article discusses the function of management organizing, and its component activities, *developing organization structure*, *management delegation*, and *establishing relationships*.

"BASIC" MGT. FUNCTIONS

- PLANNING
- **ORGANIZING**
- LEADING
- STAFFING
- IMPLEMENTING/ CONTROLLING

"TECHNICAL" MGT. FUNCTIONS

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[1] This series of articles on the relevance of general management activities and functions to project management is by Alan Stretton, PhD (Hon), Life Fellow of AIPM (Australia). Alan is a pioneer in the field of professional project management and one of the most widely recognized voices in the practice of program and project management. Long retired, Alan is still accepting some of the most challenging research and writing assignments; he is a frequent contributor to the *PM World Journal*. See his author profile at end of this article.

PM World Journal
Vol. IV, Issue IX – September 2015
www.pmworldjournal.net

Management Organizing Function and Activities
Series on general management and PM
Series Article 3   by Alan Stretton

MANAGEMENT ORGANIZING

Definitions and components of management organizing

MANAGEMENT ORGANIZING
Developing organization structure
Delegating
Establishing relationships

Management Organizing*: the work a manager performs to arrange and relate the work to be done so that it may be performed most effectively by people* *(Allen 1964:163)*

Allen identifies three primary component activities of management organizing:

- *Developing Organization Structure*: The work a manager does to identify and group the work to be performed.

- *Management Delegation*: The work a manager performs to entrust responsibility and authority to others, and to establish accountability for results.

- *Establishing Relationships*: The work a manager performs to create the conditions necessary for mutually cooperative efforts of people.

MANAGEMENT ORGANIZING OVERVIEW

One of the key differences between organizations in the general management context and projects is that the former is generally concerned with permanent organizations, whilst projects are temporary organizations. The latter are a particular interest of the Scandinavian School of project management (Morris 2013:69).

However, most, if not all, permanent organizations undertake projects. In this context we distinguish between two types of such permanent organizations. I follow Cooke-Davies 2002 in describing these as production-based organizations and project-based organizations, and borrow from Archibald et al 2012 (who use different descriptors) in defining them:

- ***Production-based organizations*** derive most (if not all) of their revenue and/or benefits from producing and selling products and services. They utilize projects to create or improve new products and services, enter new markets, or otherwise improve or change their organizations.

- ***Project-based organizations*** derive most (if not all) of their revenue and/or other benefits from creating and delivering projects.

Organizing projects in production-based organizations

Clearly the main general management interest re permanent organizations is with production-based organizations. When such organizations undertake projects, these can be done in two ways (or a mixture of these two ways). One is to have the projects undertaken by an external (normally project-based) organization which provides such services. The other way is for the projects to be undertaken internally within the organization, with its own people. For the moment, we focus on the latter.

PM World *Journal*
Vol. IV, Issue IX – September 2015
www.pmworldjournal.net

Management Organizing Function and Activities
Series on general management and PM
Series Article 3   by Alan Stretton

Typically, production-based organizations which elect to undertake projects with their own resources do so via a matrix organizational format. There is a great deal of material in the project management literature about matrix organizations.

It is conventional wisdom these days to identify three types of matrix organization – strong, balanced and weak. In a "strong" matrix organization, the project manager has the dominant say, and the ways projects are managed can be quite similar to that in project-based organizations (see below). In a "weak" matrix, functional managers have the dominant say, and the project manager acts as more of a coordinator or expediter. In "balanced" matrix organizations, the authority of functional and project managers are about equal, and much negotiation is needed.

Cleland & King 1968:172 say that disadvantages of matrix organizations include potential conflicts in balance of power between functional and project units.

Mintzberg 1979:174-5 also includes balance of power issues in his four problems of matrix structure. This is essentially one type of situation with substantial potential for conflict, and tense relationships, between general management and project management. The situation has been well summarised by Kerzner 1979:

> The project management organizational structure is an area of continual conflicts and negotiations….. The project manager does not have unilateral authority in the project effort. He frequently negotiates with the functional manager. The project manager has the authority to determine the 'when' and 'what' of project activities, whereas the functional manager has the authority to determine 'how the support will be given'.

Speaking of projects in NASA, Chapman 1972 said that a matrix structure works best for small, in-house projects, where the project duration is two years or less. He said a matrix structure begins to lose its flexibility on large, long duration projects, and that a fully project-based structure is appropriate in these circumstances.

In summary, general management organizational arrangements in matrix organizational structures in production-based organizations can be very relevant indeed to projects undertaken within the organization with their own resources. This is a type of *dependent* relevance, because the managers of projects depend on general management for many things, particularly resources. There is an evident potential to generate adversarial relations between general and project management in this situation.

Organizing projects in project-based organizations

In project-based organizations, projects are the business, and the organization is structured so as to best support its projects. Each project manager is, in effect, running a business, and is given appropriate authority and autonomy. Project team members are allocated to projects on a full-time basis wherever this is possible, but in some cases provide services to more than one project. Certain central services such a payroll and the like are also commonly provided. In summary, in an organizational context, general management is intimately connected with, and highly relevant to, the management of projects in project-based organizations.

PM World Journal
Vol. IV, Issue IX – September 2015
www.pmworldjournal.net

Management Organizing Function and Activities
Series on general management and PM
Series Article 3   by Alan Stretton

DEVELOPING ORGANIZATION STRUCTURE

Developing Organization Structure: The work a manager does to identify and group the work to be performed.

Forms of organizational structure

There is a good deal of material in the classical management literature on organizational structures, but areas of disagreement about ways of classifying them.

MANAGEMENT ORGANIZING
DEVELOPING ORGANIZATION STRUCTURE
Delegating
Establishing relationships

For example, Allen 1964 identifies two basic types of organization structure, functional and divisionalised (by product and/or geographically). One of the most widely referenced authors on the structuring of organizations was Mintzberg 1979, who identified five structural configurations – simple structure, machine bureaucracy, professional bureaucracy, divisionalised form, and adhocracy. Another way of classifying organizational structures is exemplified by Mukhi et al 1988, who identified five types of structures, namely functional, product (or project), geographic, client-centred and matrix. As far as I know, there is no definitive list to which everyone would subscribe.
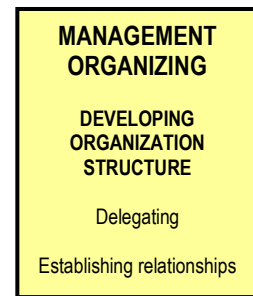
A large number of organizations have essentially a functional structure. This is in spite of its apparent lack of flexibility as the organization grows and diversifies, as technologies become more complex, and as it is impacted by internal and external changes. A common solution to the need for the functional organization to become more adaptive is to convert it to a matrix form. As Mukhi et al 1988 noted, "matrix structures have become increasingly popular as organizations seek to cope with rapidly changing, complex and uncertain conditions".

Matrix organizations are essentially an overlay of either products, clients, territories or projects over a traditional functional structure. People in various functional units contribute to products, clients, territories or projects as allocated. Our concern here is with project-related matrix organizational structures, and some aspects of undertaking projects within such organizations have been discussed above.

Organizational structures on individual projects

Identifying and grouping the work to be performed on individual projects is a very different proposition from doing so in permanent organizations. Projects are temporary organizations, with several distinctive phases, often with quite different people contributing to each phase. This typically involves quite different approaches to effectively structuring the work for each phase, and organizing resources accordingly.

Therefore approaches to developing organization structures in the general management context do not appear to be particularly relevant to organizing individual projects.

PM World Journal
Vol. IV, Issue IX – September 2015
www.pmworldjournal.net

Management Organizing Function and Activities
Series on general management and PM
Series Article 3   by Alan Stretton

MANAGEMENT DELEGATION

> **MANAGEMENT ORGANIZING**
>
> Developing organization structure
>
> **DELEGATING**
>
> Establishing relationships

Management Delegation: *the work a manager performs to entrust responsibility and authority to others, and to establish accountability for results.*   *(Allen 1964)*

Allen defines the components of delegation as follows.

- *Responsibility* is the work assigned to a position.
- *Authority* is the sum of the powers and rights assigned to a position.
- *Accountability* is the obligation to perform responsibility and exercise authority in terms of established performance standards

Allen 1964 points out that "delegation tends to be limited by the availability of effective controls". Without such controls, delegation could degenerate into abdication, and this is not what delegation is about.

Parity of authority and responsibility, and matrix organizations

There is widespread agreement in the classical/traditional literature that delegated authority should be commensurate with the delegated responsibility. This is spelt out, for instance, in Allen's 1964 Principle of Commensurate Authority, and in Koontz & O'Donnell's 1978 Principle of Parity of Authority and Responsibility.

However, ***in the context of projects*** undertaken in matrix organizations with their own resources, this principle often does not apply. As Cleland & King 1968 point out,

> Considerable opportunity exists for the project manager's responsibility to exceed his authority. Support people are often responsible to other managers [functional] for pay, performance reports, promotions, etc.

Discussing the NASA project management system, Chapman 1972 said:

> Responsibility for project performance clearly is focused on the project manager, yet he rarely has the authority, without concurrence from several other levels, to decide a major issue. Nearly every decision is the result of successive reviews and negotiations with systems managers, experimenters, functional managers, and headquarters representatives. But this shared authority brings the advantage of broader participation to cover technical and other problems in greater depth, as it brings a sense of responsibility by those participating to work for the common goal and refrain from aggrandizing their own interests.

So, in situations like that just described in NASA, disparities between levels of responsibility and authority are not necessarily seen as wholly negative. However, in most situations, they appear to have strong potential for contributing to conflict between general management and project management. In any event, here we have a case where a general management principle is not relevant in a particular project environment.

PM World Journal
Vol. IV, Issue IX – September 2015
www.pmworldjournal.net

Management Organizing Function and Activities
Series on general management and PM
Series Article 3   by Alan Stretton

Single reporting relationships, and matrix organizations

There is a substantial level of agreement in the traditional/classical management literature that each person should be accountable to only one superior. This is what Allen calls the Principle of Single Reporting Relationships, and Koontz & O'Donnell call the Principle of Unity of Command.

Once again, *in the context of projects* undertaken in matrix organizations with their own resources, we have another key principle of delegation from general management which often does not apply. As Stuckenbruck 1979 put it,

> In a balanced matrix organization various people in the organization have two bosses. …..in reality, just not on paper, the project personnel do have two bosses.

Lloyd 1979 was even more direct:

> Matrix organization, put simply, is a form of organization in which a subordinate is required to respond to more than one supervisor.

So, here we have a second principle of delegation from the classical/ traditional general management literature which is totally at odds with what happens in practice with projects in the matrix organizational context. However, here again, there appears to be strong potential for this two-boss situation to contribute to direct conflict between general management and project management.

Delegation in project-based organizations

There are no such problems of delegation in project-based organizations. As noted earlier, each project manager is, in effect, running a business, and is given appropriate authority and responsibility, as well as being held accountable for the results on his/her project.

Delegation on individual projects within such organizations no doubt varies with different types of projects and/or application areas. My main experience has been in the construction industry, where delegation to low levels of the project is common. As Borcherding 1976 has pointed out, very important decisions may be made at very low levels, as

> primary responsibility for project work falls on the craftsman, for he is the prime mover in the building process.

In summary, two principles of delegation from the classical/ traditional general management literature conflict with what happens in practice with projects in some matrix organizations which undertake projects with their own resources.

However, in project-based organizations, classical/traditional delegation principles do appear to apply equally on projects.

PM World Journal
Vol. IV, Issue IX – September 2015
www.pmworldjournal.net

Management Organizing Function and Activities
Series on general management and PM
Series Article 3   by Alan Stretton

ESTABLISHING RELATIONSHIPS

Establishing Relationships: *the work a manager performs to create the conditions necessary for mutually cooperative efforts of people.* *(Allen, 1964:217)*

MANAGEMENT ORGANIZING
Developing organization structure
Delegating
ESTABLISHING RELATIONSHIPS

Formal relationships

In the general management context, formal organizational relationships are typically represented on an organization chart. Probably the most prominent formal relationship, certainly in functional organizations, is the superior-subordinate one. As Cleland & King 1968 put it,

> The chain of authority relationships is from superior to subordinate throughout the organization. Central, crucial, and important business is conducted up and down the vertical hierarchy.

Other formal relationships include line and staff relationships, specialised and personal staff, and line and staff assistants (Allen 1964:Ch.19; Koontz & O'Donnell 1978:Ch.11).
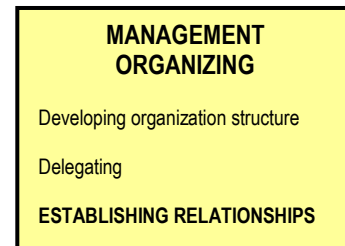
However, there are limits to how much information about relationships can be put on an organization chart. In Allen's words (1964:165),

> Properly prepared, the chart can identify the large areas of work that are to be performed, it can indicate basic relationships, and it can specify who gives orders to whom. But this about marks its capacity.

In the context of individual projects, the tool which appears to best facilitate their organization is the Responsibility Chart (or, as it was originally described by Clelend & King 1968, the Linear Responsibility Chart). As far as I am aware, this is a tool that was specifically developed in the project management environment, and is very appropriate for projects, particularly in view of their temporary nature.

Essentially, a responsibility chart is a matrix, with horizontal rows representing work elements, and vertical columns representing resources (departments and/or people). Various types of involvement by resources in the work elements can be depicted by symbols in appropriate squares – for example, X: executes the work, D: makes decisions, C: must be consulted, I: must be informed, etc.

I have no hard data on how much organization charts are used on projects. One would expect that they may well be quite extensively used on long-duration mega projects, for example. However, in my experience, they have less utility on smaller projects. We rarely used organization charts on Civil & Civic projects, but often used our own version of what amounted to dynamic responsibility charts, particularly on repetitive stages of building projects. We pioneered this approach, which we called multi-activity charting.

PM World *Journal*
Vol. IV, Issue IX – September 2015
www.pmworldjournal.net

Management Organizing Function and Activities
Series on general management and PM
Series Article 3   by Alan Stretton

On balance, it would appear that formal relationships are typically shown in organization charts in the general management arena, and also, with unknown frequency, in the project management field. In the latter context, responsibility charts have been found particularly useful.

Less formal relationships

Many general management writers have pointed out the importance of having good informal relationships to supplement and complement formal relationships, and there is a little material on informal relationships in matrix organizations. However, there is a good deal more material on this topic in the project management literature, which has built on the relevant general management material to a substantial extent.

In the context of projects, it is characteristic of many, if not most projects, that complex webs of authority, responsibility and informal relationships are the norm. As Cleland & King 1968 said about relationships on projects in matrix organizations:

> A web of authority and responsibility relationships exists. …
> Elements of the vertical chain exist, but prime emphasis is placed on horizontal and diagonal work flow. Important business is conducted as the legitimacy of the task requires.
> Peer-to-peer, manager-to-technical-expert, associate-to-associate, etc., relationships are used to conduct much of the salient business.

Speaking of NASA at the time, Chapman 1972 said:

> No formal arrangement can replace the dynamic system of personal and informal relations developed by key members of the project team to meet that project's particular needs. ……….   Principal reliance is placed on informal, unwritten, face-to-face or telephone discourse.

On balance, it would appear that informal relationships are important in both the general and project management contexts, but perhaps a good deal more so in the latter, particularly in matrix organizations undertaking projects with their own resources.

SUMMARY OF MANAGEMENT ORGANIZING

In an overview of management organizing, it was recognized that most, if not all, permanent organizations undertake projects, but that there were two quite different types that do so, namely production-based organizations and project-based ones. Projects in the former may be undertaken in-house, or by an external project provider, or a mixture of both. Those undertaken in-house are typically done using a matrix organizational format.

> **MANAGEMENT ORGANIZING**
>
> Developing organization structure
>
> Delegating
>
> Establishing relationships

In these situations, projects depend on general management for many things, particularly resources, so that here we have a type of *dependent* relationship.

PM World **Journal**

Vol. IV, Issue IX – September 2015

www.pmworldjournal.net

Management Organizing Function and Activities

Series on general management and PM

Series Article 3

by Alan Stretton

In the context of the organization activity of developing organization structure, the general management approach does not appear to be particularly relevant to organizing individual projects.

With regard to delegating, two fundamental principles of delegation from general management do not apply in relation to project undertaken in many matrix contexts in production-based organizations. These are the principle of parity of authority and responsibility, and the principle of single reporting relationships. However, for projects undertaken by project-based organizations, these principles of delegation do apply.

Both formal and informal relationships need to be established in similar ways in both general management and project management contexts. The use of responsibility charts to formalize relationships appears to be most appropriate for projects.

Finally, I again confirm that, regarding the major aim of this series, which is to present a short coverage of classical / traditional general management materials to project people, I have not attempted to give a comprehensive overall summary of traditional/ classical general management materials, here in the organizational context. Instead, I have focused on those attributes which, for various reasons, turned out to be most relevant for me in sixty plus years of active involvement in both general and project management.

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Series Article 3   by Alan Stretton

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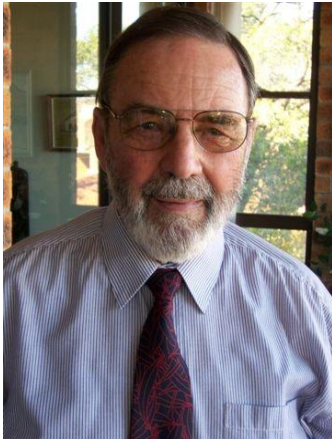
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PM World **Journal**
Vol. IV, Issue IX – September 2015
www.pmworldjournal.net

Management Organizing Function and Activities
Series on general management and PM
Series Article 3
by Alan Stretton

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Alan Stretton is one of the pioneers of modern project management. He is currently a member of the Faculty Corps for the University of Management & Technology (UMT), USA. In 2006 he retired from a position as Adjunct Professor of Project Management in the Faculty of Design, Architecture and Building at the University of Technology, Sydney (UTS), Australia, which he joined in 1988 to develop and deliver a Master of Project Management program.   Prior to joining UTS, Mr. Stretton worked in the building and construction industries in Australia, New Zealand and the USA for some 38 years, which included the project management of construction, R&D, introduction of information and control systems, internal management education programs and organizational change projects. He has degrees in Civil Engineering (BE, Tasmania) and Mathematics (MA, Oxford), and an honorary PhD in strategy, programme and project management (ESC, Lille, France). Alan was Chairman of the Standards (PMBOK) Committee of the Project Management Institute (PMI®) from late 1989 to early 1992. He held a similar position with the Australian Institute of Project Management (AIPM), and was elected a Life Fellow of AIPM in 1996. He was a member of the Core Working Group in the development of the Australian National Competency Standards for Project Management. He has published over 150 professional articles and papers. Alan can be contacted at alanailene@bigpond.com.au.

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