THE PRACTICE OF CONSTRUCTION MANAGEMENT

People and Business Performance

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Barry Fryer

with contributions from
Marilyn Fryer

FOURTH EDITION
revised by
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Preface to the Fourth Edition

In the Preface to the Third edition, Barry Fryer acknowledges the 'unprecedented changes' affecting the practice of construction management in the mid-1990s. Ironically, change appears to be the only constant in all our working lives, therefore it comes as no surprise that change has continued unabated in the construction industry during the late 1990s and early 21st century. Witness the growth in partnering, prime contracting and strategic alliances, the emphasis on integrated project teams and supply chain management and the importance of innovation in construction. Moreover the adoption of new techniques, once the preserve of the professional consultant, has now entered the domain of the construction manager. Value and risk management, for example, are *de rigueur* as the contractor becomes central, rather than peripheral, to the project team.

Accordingly, construction managers face new and sometimes far more subtle pressures, as they seek to balance relationships with commercial issues, to develop new skills and to promote a culture of collaborative working. Contractors are no longer 'in the pay' of the professional team, they are the 'paymasters'. So with this new found power, is there the opportunity to shape future development?

Since the last edition of the book in 1997, many new initiatives and government sponsored reports have begun to impact on organisational strategy, organisational culture and the culture of the industry in general.

1998 saw the publication of the Construction Task Force Report – *Rethinking Construction*. The report has in many ways been viewed as an agent for change both in terms of productivity improvements and the meeting of clients' needs. Further initiatives such as the Movement for Innovation (M4I) and 'Respect for People', a commitment to people as our important asset, have also gained widespread recognition. In June 2002, the UK Government launched an initiative entitled 'Revitalising Health and Safety in Construction' (HSE, 2002), a key aspect of 'Respect for People'. This is designed to inject new impetus into the health and safety agenda. The industry continues to work towards a fully qualified workforce and the Construction Skills Certification Scheme (CSCS), and other equivalent training schemes, are already being acknowledged as a minimum industry standard.

In terms of research and how this might contribute to the construction industry, Sir John Fairclough's Report – *Rethinking Construction Innovation and Research* (2002) and Sir Gareth Robert's Report (*Robert's Review*, 2003) on the future of

Research Assessment are likely to shape the future of research, at least in the next five years.

Charles Egbu
Robert Ellis
Christopher Gorse

Chapter 1

The Development of Management Thinking

Management is both a fascinating and frustrating subject. It abounds with exciting and challenging ideas, but even the most promising ideas don't always work. Throughout the twentieth century, managers searched for a set of guidelines for running a business. The result has been a jungle of diverse and often conflicting ideas about what managers are and what they do – or ought to be doing.

People have looked at management in different ways. Some have tried to identify the things managers do, whilst others have looked at how they do them. Some have put forward management principles to apply to all organisations, whilst others are sure there are none.

Despite many attempts to describe management, no widely accepted definition has emerged. Simple definitions include 'running things properly' and 'getting things done through people'. Rosemary Stewart (1997) brings decision-making into her definition of management – 'deciding what should be done and then getting other people to do it'.

To be more precise, we need to say how and why the manager does these things; what tasks or processes are involved. The early management writers, who were mostly practising managers, said that these processes included planning, organising, directing and controlling. This led to definitions like:

> Management is the process of steering an organisation towards the achievement of its objectives, by means of technical skills for planning and controlling operations, and social skills for directing and co-ordinating the efforts of employees.

Although harder to take in, this definition highlights the complexity of management. Yet it still tells us little about *how* managers work. Like the simple definition, it tells us that a manager is someone who plans and gets things done; that the role involves achieving objectives and co-ordinating the work of others. It does not tell a site manager whether to use the same planning techniques as a factory manager, or how to get co-operation from a site team.

Such definitions also give little indication of how management is changing. Management today is harder and less intuitive than in the past. Building and civil engineering firms used to be smaller and simpler. There were fewer specialists and fewer rules. Jobs were more flexible. Managers were closer to the work and communications were better.

Today, many construction firms have grown and their activities are more complex. The ratio of managers and specialists to workers has increased. There are more rules and procedures. Roles are more tightly defined and there are many external controls.

Managers need more skills and more information to cope with these changes. In large organisations, the days of the individual manager running things have gone. The efficient organisation of big business now demands *team* management.

In the recommendations of the joint review of the industry, *Constructing the Team*, known as the Latham Report, Sir Michael Latham (1994) drew attention to the wide-ranging scope for improving the construction industry's performance, through improved management practices and procedures, including more carefully thought out project strategies, more systematic quality assurance and productivity measures, and improved teamwork on site between contractors, trade specialists and consultants.

The Egan Report (1998) and the Fairclough Report (DTI 2002a) have called for improved collaboration between industry and academia in research, increased focus on diversity and equality issues, and performance-based approaches to tackle the challenges of modern day management of construction organisations. As such these reports recognise the increasingly competitive environments in which managers in the construction industry have to work due to globalisation, changing construction procurement routes, mergers and acquisitions, the potential arising from the exploitation of information communication technologies, and changing employment practices.

Early contributions to management thinking

The systematic study of management to find out what managers ought to be doing emerged at the end of the nineteenth century. The industrial system was well established. People had migrated to the towns to work in the factories and mills. They worked long hours for low pay. They worked hard – or they lost their jobs. The managers were powerful and this made their jobs easier.

Some of the managers wanted to learn more about their work. They tried to analyse their jobs and the events happening around them. They wondered if there could be principles of management that would work anywhere – a science of management. Their experiences seemed to support this, for managers everywhere appeared to be doing similar things – drawing up programmes, marshalling resources, allocating tasks and controlling costs.

They came to believe that it was possible to devise an ideal organisation using a set of design rules that would apply anywhere. The two main contributors to this line of thinking were Henry Fayol (1841–1925) and Frederick Winslow Taylor (1856–1917). The books they wrote formed the basis of the *classical* or *scientific* management movement. The design rules were later developed and refined by writers like Lyndall Urwick. These rules or principles included:

- *The principle of specialisation.* Every employee should, as far as possible, perform a single function.
- *The principle of definition.* The duties, authority and responsibility of each job, and its relationship to other jobs, should be clearly defined in writing and made known to other employees.
- *The span of control.* No one should supervise more than five, or at most six, direct subordinates whose work interlocks.

How useful are such guidelines to a manager setting up a civil engineering site, or a resourceful joiner wanting to start a small building firm? The answer is that they offer only general guidance rather than a blueprint for designing an organisation.

The principle of specialisation is heavily qualified by the phrase 'as far as possible'. How many people in construction perform only 'a single function'? What is 'a single function' anyway?

The principle of definition is sometimes impractical. How many managers in construction have a clearly defined, set task? Most have to adapt to each new project and cope with constantly changing problems as it moves from start to finish.

The principle of the span of control is very specific and has been widely quoted among managers. Many now believe it is too restrictive. Some writers have modified the principle, saying that a manager's span of control should be limited to 'a reasonable number', but this reduces the principle to a statement of the obvious.

Certain factors clearly affect the size of group a construction manager can handle. They include:

- The manager's character and abilities.
- The attitudes and capabilities of the members of the group.
- The amount of time the manager spends with the group.
- The type of work the group is doing.
- The proximity of the manager and group members.
- The extent to which the manager is supervising direct or sub-contract personnel.

A site manager can co-ordinate a site team fairly easily. Contracts managers controlling projects spread over a sixty mile radius will find it more difficult. They may spend a lot of time travelling!

People have used arguments like these to refute many of the early management ideas, although they probably worked well enough in their day. Applied to modern organisations, the management principles can be justifiably challenged because:

- Conditions have changed radically. Projects are technically and contractually more complicated; legislation affecting businesses is more extensive and demanding; competition is fiercer; people's attitudes towards work and towards their managers have changed. These and many other changes have altered the manager's job significantly compared to that of the tough task-master of the early 1900s.

- Evidence now suggests that there is a divergence between what managers do and what management writers say they ought to do. Henry Mintzberg (1973, 1976) found, in his studies, that managers were not very systematic. He dismissed much of the early management thinking as folklore, saying that managers are not the reflective, analytical planners they are made out to be. Instead they spend their time liaising and negotiating with people and coping with an unrelenting stream of problems and pressures.

Most managers today recognise the importance of people in organisations, but the early management thinkers concentrated mainly on the tasks of the business. They thought the main problem in the factories and mills was to design efficient workplaces and control resources tightly. Most of them treated labour as a resource, to be worked as hard as possible.

From the outset of the Industrial Revolution, a few managers showed concern for the well-being of employees, but experience of large-scale industry was limited. No one fully understood the effect the new workplaces would have on people, but some managers quickly sensed that they could not treat people like machines.

Management and the social sciences

During the early decades of the twentieth century, social scientists began to study people in industrial settings. At first, their interest centred mainly on how work practices and working conditions affect people. Later, some of their attention switched to how workers affect organisations. Elton Mayo is regarded as the founder of this *human relations* movement, which brought into prominence the idea that employees must be understood as human beings if organisations are to be run efficiently. Mayo's far-reaching research at the Western Electric Company near Chicago – the Hawthorne studies – generated momentum for other work, including extensive research on group behaviour at the University of Michigan.

In the UK, one of the most determined and practical studies of the relationship between organisational efficiency and employee well-being was initiated at the Glacier Metal Company in London. It involved many years of close collaboration between managers and social scientists. The Glacier team took the view that the manager not only has a technical role, but a social one of creating an organisation with which workers can identify and in which they can participate and exercise discretion (Brown and Jaques, 1965).

Other studies have looked at specific topics, such as:

- Communication
- Worker participation
- Leadership
- Stress
- Labour turnover

- Performance
- Motivation.

Such work is still going on, supported, in the UK, by bodies like the Medical Research Council and the Economic and Social Research Council. The research has yielded many interesting results. For instance, an early discovery was that work groups exercise considerable influence over their members' behaviour and, in particular, over how much work they do. It was found that workers consider pay less important than had been thought. Many of them ranked factors like steady jobs, good working conditions and opportunity for promotion, higher than pay. Other findings suggest, for example, that:

- Satisfaction and dissatisfaction depend not so much on physical conditions, but on how people feel about their standing in the firm and what rewards they believe they deserve.
- Complaints are not necessarily objective statements of fact, but symptoms of a more deep-seated dissatisfaction.
- Giving a person the chance to talk and air grievances often has a beneficial effect on morale and performance.
- Employees' demands are often influenced by experiences outside, as well as in, the workplace.

Whilst these conclusions are fairly simple and clear, many research results are complex, fragmented and difficult to apply. Some construction managers are openly sceptical about the social sciences, arguing that many studies pursue trivial and obvious relationships, whilst findings are often difficult to interpret. Psychology, for instance, is every bit as concerned with the behaviour of building workers on site as it is with the study of mental disorders. Yet the applications of psychology on site have rarely been made clear and busy site managers are left to make their own conceptual leap from theory to application (M. Fryer, 1983).

Nevertheless, psychologists and sociologists have made a substantial impact on management ideas and business practices. There has been a noticeable shift in attitudes over the years (see Fig. 1.1). Managers are more aware of the construction worker's needs and aspirations and take a more humane approach.

Legislation has also compelled managers to give employees a better deal, and collective bargaining between the unions and employers has improved the terms and conditions of employment of most construction workers.

By the 1960s, so much was being written about the relationship between people and organisations that managers came under pressure to modify their leadership styles, get subordinates involved in making decisions and give them more autonomy in their jobs. The work of American writers like Argyris, Herzberg and Likert, and British writers, such as Emery, Trist and Rice at the Tavistock Institute, were brought to the notice of managers through books and business courses. For a time, it seemed that so much attention was being lavished on the worker by management

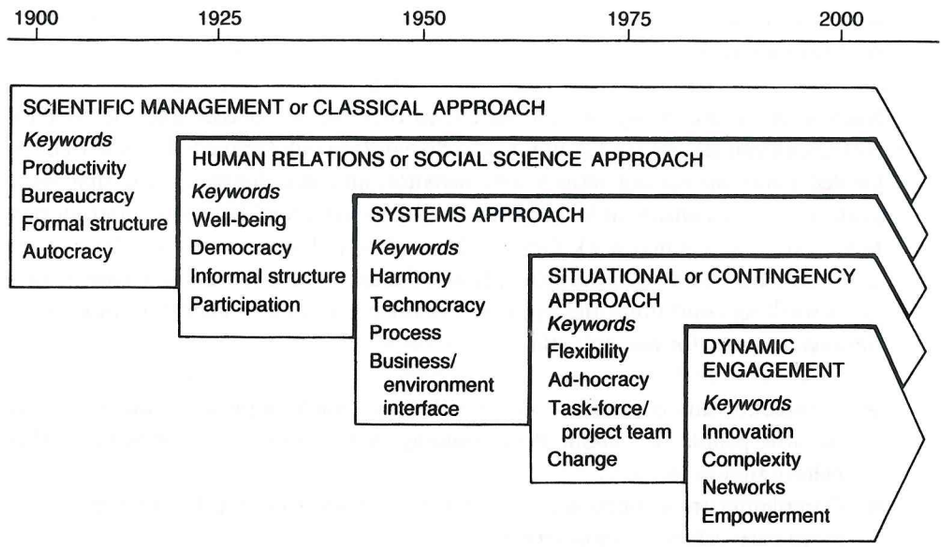


Figure 1.1 The development of management thinking.

writers and educators that managers might forget that their organisations still had work to do and profits to make.

Eventually there was a call for a more balanced approach to management, which would recognise the importance of both people and tasks. Indeed, the Tavistock Institute researchers were among the first to express this view. Two new trends in management thinking started to emerge and gain ground in the 1960s and 1970s, namely that:

- people and tasks must be considered as related parts of an organisational *system*; and
- managers must be more flexible and tailor their approach to the needs of the *situation*.

Systems management

Since the 1960s, people have tried to apply systems thinking to organisations, to see if it could help make them more manageable. The essence of *systems theory* is that the structure and behaviour of all systems, whether living organisms, machines or businesses, have certain characteristics in common. The manager who is aware of these characteristics is better able to predict the behaviour of the system and understand why it sometimes breaks down.

The construction project is a good example of a system that can be studied over its full lifespan. The project can be viewed as a temporary system, set up for a specific purpose, with well-defined tasks and a set timescale (Miller and Rice, 1967).

In systems thinking, the emphasis is not so much on the parts of the organisation – site set-up, head office departments, and so on – but on the relationships between them. There is a *technical* subsystem, the network of activities for erecting the structure or building, and a *social* sub-system, the people who contribute their energy and skills to the project. The human and technical problems cannot be divorced from one another. A change in a site bonus scheme will affect the quantity and quality of work. Changing a work method or introducing new equipment may influence operatives' attitudes and morale. The parts of the system are intertwined.

Moreover, the system is open and is influenced by events outside the organisation. The success of a building project depends not only on the project team, but on the activities of competitors, suppliers, government, clients and local communities. Many of the factors affecting the business are not only external, but are beyond the manager's control.

The project is an input/output system. Inputs of information, materials and mechanical and human energy, are turned into outputs of finished buildings. The inputs are not wholly within the manager's control and depend on the co-operation of many people, including designers, sub-contractors and suppliers. Outputs include profit, wages and job satisfaction. But there are unintended outputs too. They include noise and waste, toxic fumes and other damage to natural systems. People are injured and exposed to health hazards. They may become dissatisfied and alienated. Profits can turn into losses. Taking a systems approach means looking at the bad consequences of the organisation as well as the good!

Systems thinking emphasises the importance of *feedback*. In every organisation, managers and other employees rely on feedback to regulate their performance. For instance, managers have long acknowledged the importance of feedback in the principle of 'management by exception', where the manager puts most effort into tackling problems and breakdowns and keeps a minimal eye on the trouble-free operations. In systems terms, management by exception means that the manager is acting on negative feedback – feedback which shows something is wrong – and devotes his or her energies to bringing the system back on course.

Some of the feedback the manager receives is intermittent, giving an incomplete picture, or delayed (feedback 'lag'), which may mean that by the time the feedback reaches the manager, it is too late to take corrective action.

> A contractor made a detailed monthly comparison between unit costs and the unit rates in the bills. One month, the comparison showed that the bulk excavation was making a loss of 98p per cubic metre. By the time the information reached the site agent, some 10 000 cubic metres had been excavated, making an irretrievable loss of nearly £10 000.

Managers need quick and reliable feedback on costs, progress and the quality of materials and workmanship. The time taken to obtain each kind of feedback varies. Feedback on progress can be very fast, providing the manager is keeping a close eye on operations, has a good system for recording work done and finds time to compare this data with a well-formulated programme. Cost feedback is probably the slowest and can also be the most inaccurate, since the information on which costings

are based is often distorted. Labour returns are often inaccurate, and managers themselves are not always systematic in their record keeping.

Systems analysis gives a fresh angle on management. Managers have the delicate task of regulating a complex system, maximising the intended goals, whilst keeping unintended effects to a minimum. This requires a high standard of performance. Managers have to strike a balance between the technical and human demands on their time. They must keep the system in tune with the world outside and maintain its internal harmony.

Petit (1967) points out that the job of keeping the firm on course and coping with outside pressures is not the same as running the day-to-day operations of the business. Using a systems approach, he defines three distinct kinds of managerial work:

- *Technical.* At the technical level, managers run the production process. In construction, this takes place mainly on site, although some of the office work is directly concerned with production too. Site managers co-ordinate direct and sub-contract labour, plant and materials in order to achieve short-term project goals. They are protected from some of the outside pressures on the business, because the senior managers cope with these.
- *Institutional.* The senior managers are at the institutional or corporate level and Petit defines their task as relating the firm to the world outside. They cope with the risks and uncertainties caused by events and long-term trends over which they have little or no control. The survival or long-range success of the firm is their prime concern. Technical managers have access to a fair amount of reliable information for solving their problems, but senior managers deal with the unforeseen and rely heavily on intuition and judgement.
- *Organisational.* A third group of managers mediates between the other two groups, co-ordinating and integrating their tasks. These organisational managers often have to search for compromises between the strategic concerns of the top managers and the immediate, operational problems of the technical managers. They have the difficult task of supporting production, making resources available when needed, whilst ensuring that the day-to-day activities contribute to the long-range goals of the enterprise.

Figure 1.2 illustrates these levels of management, although they may merge and overlap. In small firms, the same manager may perform all three roles and will need to understand the demands of each role, know when he or she is performing each and apply the appropriate skills. In larger firms, the three levels are likely to be separate. They will be carried out by different people, often relatively independently of one another.

Viewing the construction *site* as a system in its own right, a rather different picture emerges. The site manager is the top manager of this smaller, 'task-force' system. This job involves welding together an effective team as well as dealing with outside influences, such as the local labour market, competitors, local authorities and suppliers. Site managers may regard the design team and even their own head office as outside forces which make demands on them that are difficult to meet.

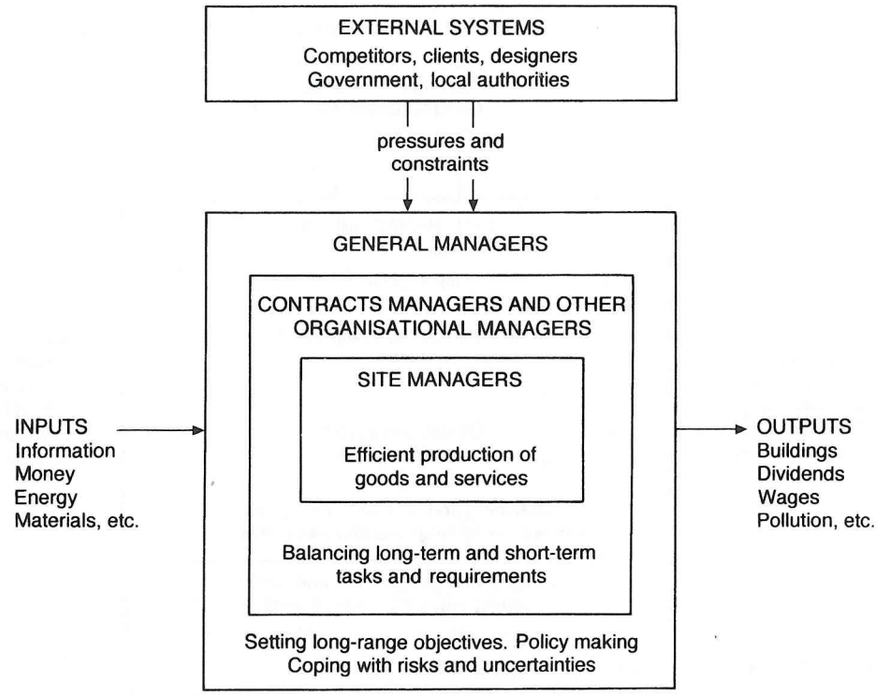


Figure 1.2 Management of a construction firm: a systems view.

They usually lack administrative help and have to perform both technical and institutional roles. To cope with the conflicts between these, they have to be organisational managers as well, using both quantitative methods and judgement to find compromises between the short-range goals of the project and the long-term strategies of the company (see Fig. 1.3).

Some site managers enjoy considerable autonomy in running their sites, but others have a narrower role and are expected to leave some of the tasks to more senior managers – contracts managers or directors – and concentrate their efforts on the day-to-day running of the site.

Clearly, managers with the same job title may not always have the same responsibilities, and managers at different levels in an organisation perform quite different roles. They are responsible for different aspects of the system's performance.

Situational or contingency management

The long search for similarities between managers' jobs, to build up a picture of the ideal manager, has had only qualified success. In the late 1950s, people started to

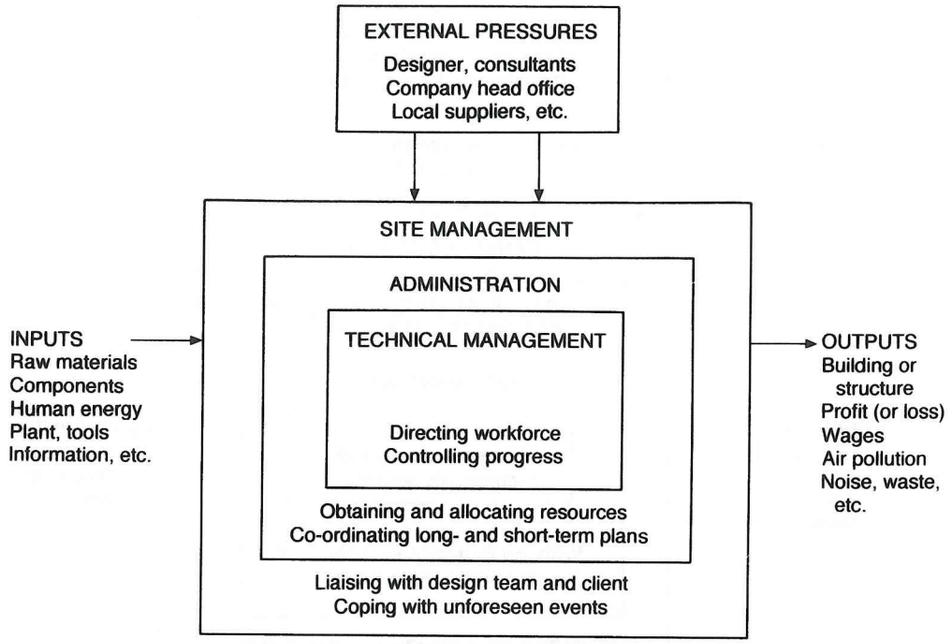


Figure 1.3 Management of a construction site: a systems view.

take a serious look at the differences between managers' jobs and collected evidence that management is really a family of roles in which managers do different things.

A site manager, co-ordinating the contractor's work with that of a dozen or more sub-contractors, may have a very different task from the production manager in a textile mill whose more stable workforce is doing repetitive work. There is increasing evidence that firms vary in their approach to management and that this has a lot to do with their size, the type of work they do, the people they employ and external and market forces.

This *situational* or *contingency* approach to management argues that there is no single best way to run a business and that managers must adapt their style and methods to suit the circumstances. In other words, the way a firm is organised and managed is 'contingent' upon factors like its size, tasks, technology and markets.

Joan Woodward (1958, 1965), in a pioneering study of British firms, showed that there are important variations in the management of different technologies. She identified three technology groupings:

- Unit and small batch production
- Mass production
- Process production.

In processing and mass production industries, Woodward found that there are many managers, many levels of management and more administrative rules. The top

managers are rather divorced from production and industrial relations easily become strained.

Businesses like construction, producing one-off or small batch products, have shallower management structures, fewer specialists and less formality in their procedures. With fewer management levels, senior managers have more contact with employees and labour relations are usually better. The informality gives people more opportunity to negotiate their roles and define the boundaries of their jobs. In other words, they have more freedom.

Woodward's fresh approach showed that many of the so-called *principles* of management were derived from experience of mass production or process operations and may not apply to industries like construction. She showed that it is possible to compare large numbers of organisations and draw conclusions about management that are firmly based on and specific to the situation.

Burns and Stalker (1966) looked at the management of 20 British firms and found two kinds of management structure which they called *mechanistic* and *organic*. The more rigid, mechanistic approach to management seems to work best in firms operating in relatively stable conditions, where the technology and markets are changing slowly. The more flexible, organic approach to management works well for firms operating in unstable conditions, where markets are unpredictable or technology is changing fast. Both kinds of management structure work well, providing they 'fit' the markets and technology concerned.

Studies in the United States produced similar results. For instance, Morse and Lorsch (1970) found that the manufacture of standardised containers in a stable technology and market was most efficient when organised along fairly rigid lines, with managers exercising tight control. But companies carrying out research and development work in the fast-changing, unpredictable field of communications technology were most successful when organised flexibly, with employees having considerable freedom and with few rules and managerial controls.

The construction industry does not have to cope with rapid technical change but the market for buildings is changeable and unpredictable. Designers, builders and civil engineering contractors are likely to find a flexible style of management more effective.

A similar conclusion was reached by Lansley *et al.* (1975), who measured the commercial and human performance of 25 building companies. They pointed out that for general contractors, every new project poses fresh problems, making programming difficult. Flexibility is essential and co-ordination and teamwork are vital. However, for specialist contractors, projects tend to follow a pattern, making programming easier. Managers can exercise tighter control. The situation differs again for small works contractors (where little co-ordination is needed) and for firms that sub-let most of their work. Each type of work involves its own problems and constraints.

These and other results add weight to the argument that there is no single ideal way of organising construction and no best style of management. It seems that managers must look critically at what they are trying to achieve and the prevailing

conditions, and adapt their organisations accordingly. In a period of rapid change, the need for flexibility becomes vital. Peter Lansley has contrasted the relatively stable construction environment of the 1950s and 1960s, where the passwords were productivity and efficiency, with the unstable conditions of the 1970s and 1980s, where the password became *flexibility* (Lansley, 1981).

Dynamic engagement

The ideas summarised above are still influencing managers and will continue to do so, but the backdrop is changing faster than ever and managers are having to ask themselves what will happen to their organisations in the next century. Stoner *et al.* (1995) use the term *dynamic engagement* to describe this rethinking process and capture the mood of current debate about management and organisation. They argue that managers are having to rethink their activities in the face of unprecedented external changes – changes which are causing the boundaries between cultures and nations to blur; changes in which the world is becoming a global village, as international and intercultural relations expand rapidly. The term dynamic engagement stresses the vigorous and intense involvement managers are having, in order to deal with new and changing human relationships and constant adjustment to change over time.

Dynamic engagement builds on the underpinnings of contingency management but recognises more fully the implications of the extent, type and rate of change affecting business and society. Stoner and his colleagues identify six management themes emerging from this approach:

- *New organisational environments*. These consist of complex, dynamic networks of people interacting with one another, competitors, customers, suppliers, subcontractors, specialists and so on.
- *Ethics and social responsibility*. Shaping new corporate cultures which reflect the needs and aspirations of individual employees, groups, clients and others outside the organisation in the community and wider society.
- *Globalisation and management*. The expansion of business opportunities into markets and production activities which transcend national boundaries in a 'borderless' world, where global competition also features.
- *Inventing and reinventing organisations*. To find ways of unlocking the creative skills of managers and their teams, so that they can discover innovative organisation structures and ways of operating as conditions change.
- *Cultures and multiculturalism*. In a global economy and multicultural society, cultural differences create fresh challenges for managers, who must capitalise on the values and strengths of various cultural traditions, synthesising the benefits of each of them.
- *Quality*. Organising every aspect of organisational activity to meet the higher standards demanded by clients and to maintain competitiveness in an ever tougher business environment.

Peters (1992) identifies a matching concept, *liberation management*, which focuses on escaping from existing approaches to problems of organisation and striking out to find creative solutions. Hammer and Champy (1994) also argue for a dynamic approach, saying that managers need to make a fundamental reassessment of their organisations, questioning and 're-engineering' the very processes through which their firms function. Hannagan (1995) recommends an integrated approach to management, where emphasis is on the synthesis of best practice found in organisations and cultural traditions around the world.

The new Ps of managment: post-industrial, portfolio, pragmatic, post-modern

Management in a post-industrial society

Consistent with the ideas of dynamic engagement is the work of such analysts as Warren Bennis, Tom Peters and Charles Handy who are noted for their original and perceptive insights into management and their analyses of the future of business and work. Many of these contemporary analysts recognise that the *post-industrial* era has arrived and that business practices will never be the same again. Because they are having a marked effect on managers' attitudes and behaviour, these future-oriented thinkers are often labelled *management gurus* (Kennedy, 1993). They put a lot of emphasis on change, especially with respect to organisational cultures, strategies, structures and processes and the effects these have on people's work and lives.

As organisations realise that the post-industrial society has finally arrived, a lot of attention is being directed at the role of strategic managers and the impact of delayering the middle management levels, as firms try to become leaner and more efficient to combat growing global competition. But, importantly, there has been a sharp divide between those analysts who describe future organisational success in terms of improved strategies, structures and processes, and those who believe that success is ultimately rooted in more effective *people management*.

Portfolio management

Handy (1994) successfully bridges this divide, stressing that both organisation structures and employment patterns are changing fundamentally and permanently. We will have to get used to the fact that many younger people will not achieve the 'permanent' jobs their parents mostly had and that future careers will often consist of a series of mini-careers, successive short-term contracts and/or periods of self-employment, often involving different sets of skills – and interspersed with periods of unemployment.

Handy refers to these as *portfolio* careers. They require a different kind of management and self-management and necessitate new attitudes within organisations and society. In the portfolio world, employment has to be redefined. Voluntary

work, self-employment and unemployment all have new meanings. Handy even suggests that 'agents' may become more commonplace. As well as finding work for their clients, these agents will also act as mentors, helping their clients to organise their lives, develop their skills and build their portfolios. So, a new breed of independent construction managers may emerge, people who turn to their agents to help them find 'contracts', just as many writers, actors and sports people already do.

Pragmatic management

Since the mid-1980s, there have been new fashions in presenting management ideas and approaches to managers and aspiring managers. One of these has been a flux of books by well-known and successful managers, people like Sir John Harvey-Jones (see, for instance, Harvey-Jones, 1993). Other influential books include *The Change Masters* and *When Giants Learn to Dance* by Rosabeth Moss Kanter (1983 and 1990, respectively). They are refreshingly practical books that express the seasoned management experience of their authors and (in the main) reflect well the innovations, culture changes and problems of the times. Collectively, these works cannot be ignored; they have been so successful. They could be said to represent a new *pragmatic* approach to management thinking. One drawback is that each work reflects the analysis and conclusions of only one manager, something which makes the seasoned management researcher a little uneasy.

Another development has been the explosion of 'How to' management books dealing with almost every conceivable aspect of the subject from performance appraisals to presentation skills, from time management to teamwork. These are also pragmatic in that they provide accessible and easily assimilated information for managers and some of them are very good. But the advice provided can be simplistic, often summarising major areas of the manager's work in bullet-point checklists. Management is a difficult business and is becoming more so. Managers must guard against the temptation to adopt simple 'off-the-peg' solutions to complex problems.

Post-modern management

If all these changes are taken together, management needs to take a leap into a post-industrial business environment which is bound up with what Donald Horne has called 'the public culture'. Describing this new culture as part of the *post-modern* condition, Hewison (1990) aptly refers to it as a managed, official culture, supported by both public and private corporations. This culture has become enmeshed with commerce to the extent that culture itself has largely been turned into a commodity, often mediated most effectively by television – but perhaps, in future, by computer-based information networks.

Quality and environmental management

Quality management and environmental management became major issues for managers in the 1990s. Organisations in almost every sector, public as well as private, came under pressure to deliver their goods and services not only more efficiently, but to higher quality and environmental standards. To improve one of these isn't too difficult, but to produce more added value (better quality using less resources) in environmentally acceptable ways became a central challenge for managers in almost every field of activity.

These dual issues of quality and environment have become linked. There are significant parallels between the British and European standards covering these topics and the remit of a CIRIA project, started in 1996, was to examine the possibilities for integrating the management of quality and environmental impact (as well as health and safety).

The quality movement took off first, but the explosion of information about environmental damage in the late 1980s and early 1990s has forced many managers to think about building the concept of sustainable development into their business objectives and then manage responsibly. Although environmental problems are global and need to be tackled on a broad front, much of the detailed work of overcoming them needs to be done locally, often by individual companies (Roberts, 1994). Construction managers must share in this process and urgently review processes and practices. Even small construction firms must take the environment seriously, because there are so many of them and their impact is therefore substantial (Fryer, 1994a).

Summary

This chapter has looked at the main strands of management thinking, how they have developed and how they apply to construction. Some of the early guidelines were based on experience of mass production and processing industries. They were useful in their time and laid the foundation for a more systematic approach to management. However, they have not offered the best guidance for managing construction. As technology and markets have changed, the relevance to all industries of the early management principles has been seriously questioned.

Managers have also recognised that they must give more attention to the social aspects of work. In the long run, an organisation cannot be successful in economic terms unless it is also a success in human terms, providing meaningful work and proper rewards.

There are similarities in managers' jobs because some of the tasks they perform are the same. But the differences between managers' jobs tell us more about the process of management. Managers' roles vary with their level in the organisation. Some managers deal mainly with technical matters whilst others spend their time on strategic issues.

Construction must be managed flexibly because some of the problems facing construction managers differ from those found in factory-based industries. The separation of sites from head office and the temporary nature of project teams, taking their members from many different organisations, demand a special 'task-force' manager, who is self-reliant, adaptable and capable of inspiring teamwork under difficult conditions.

More importantly, the need for flexible management arises from far-reaching changes in society and its economic and value systems. The globalisation of business means that the construction industry will increasingly work in an environment of tough, international competition, adopting innovative organisational structures and work practices in order to achieve new standards of quality, safety and environmental protection set by knowledgeable, demanding clients from many parts of the world.

Discussion and questions

A construction director of a large building company, who is also a part-time lecturer in the School of Built and Natural Environment of a UK university told his students that 'the purpose of a management course is to teach students about management, not to teach them to be managers'. Do you agree or disagree with this statement? Discuss.

Based on your experience at college or from working in the industry, describe some ways in which the principles of Scientific Management and the Contingency Theory approach to management are still used in organisations. Do you believe these principles and theories will ever cease to be a part of organisational life? Discuss.

Chapter 2
Managers and Their Jobs

The tasks of management

Asked what they do, most managers will answer with words like *planning*, *organising*, *directing* and *controlling*. A handful of words like these have dominated management thinking since they were introduced in the early 1900s by Henri Fayol, the French industrialist. Yet these words are too vague to tell us much about what managers actually do and they take little account of the differences between managers' jobs. Everyone agrees that managers make plans, but so do other people. Moreover, a site manager's plans are quite different from those of a board of directors.

Many management writers add *communicating* to the list of tasks, but it seems more useful to regard this as a management skill. After all, managers are communicating when they give orders (directing) or arrange for materials to be delivered (organising). Moreover, communication is a two-way process and the manager should often be on the receiving end.

Some managers also rank *co-ordinating* as a management task. This is a useful term but Stewart (1997) argues that it is too general to be called a separate management function. It is hard to distinguish co-ordinating from organising and it seems to overlap with directing and motivating too. Co-ordination involves planning, as in deciding who should do what and when. Swedish researcher Sune Carlson was perhaps the first to seriously question the validity of co-ordination as a separate management task, arguing that it does not describe a particular set of actions, but rather all operations which lead to unity of action. In other words, co-ordination is another word for management itself.

Peter Drucker has added a further task which he feels is a vital part of management – *developing people*. The effectiveness of an organisation will depend on how well managers counsel and support their teams. Managers can bring out the best in people or they can frustrate and stifle them.

Planning

All managers plan. They set objectives, try to anticipate what will happen and devise ways of achieving their targets. However, some planning is long-term, extending over a period of years, whilst other plans cover immediate targets, achievable in a

week or less. Long-range planning involves more risk and uncertainty, for it is difficult to know what will happen; short-term plans are usually based on more reliable information.

Planning has grown exponentially both in construction and in other industries for the following reasons.

- There are more large, complex projects, with a lot of people and resources to co-ordinate.
- The increasing reliance on sub-contracting means that the work of many organisations has to be co-ordinated.
- There are greater external controls over business activity, additional constraints have to be met and approvals obtained.
- Markets are more turbulent and economic and social change has accelerated, making the future less predictable.

The main features of a good plan are that it is realistic, flexible, based on accurate information and readily understood. The stages in planning are:

- Set clear performance objectives, usually in terms of time, quality, safety, cost and environmental impact.
- Identify accurately the resources needed and action to be taken to achieve objectives.
- Decide on the best action to take and the most effective use of resources.
- Set up procedures for monitoring the implementation of the plan.

Operational research has developed with the growth of large, technically complicated projects. Computer-aided project planning has come into increasing use. Despite such tools, planning remains difficult. The information needed for such thorough planning is seldom available and the manager rarely has enough time to plan properly.

Some construction firms have set up planning departments in which specialists prepare plans on behalf of, or in collaboration with, management. In other companies, plans are drawn up by the managers themselves. The latter may be less skilful in planning techniques, but they are likely to be more committed to a plan they have produced themselves. Centralised planning used to have the advantage that it made possible the use of a computer as a planning tool. Companies are taking up computer-aided project management (CAPM) software quite widely. They are tending to use it initially for planning and scheduling and, as they become more familiar with the software, are gradually exploiting the package's full potential (Sturges *et al.*, 1997).

Plans are usually converted into bar charts – visual statements backed by descriptive notations. They show what the targets are, how they are to be achieved and, ideally, what activities are critical to completion. Plans should be expressed as simply as possible. They must be flexible to allow for unforeseen events. In

construction, every new contract is a period of uncertainty for the construction manager.

Organising

Managers are organising when they put plans into action – allocating tasks to people, setting deadlines, requesting resources and co-ordinating all the tasks into a working system. Questions arise about how far to go in splitting the total operation into individual tasks. An easy task will not provide a challenge and the operative may become bored. A task which is too demanding may cause frustration. In either case, the task will fail to motivate and will not be performed efficiently.

Another problem is to decide how fluid to make the boundary of each job. In the building trades, jobs have been quite tightly defined by custom and job boundaries may be vigorously defended. Technical and supervisory jobs may be more flexible, with scope for the manager to vary the individual's job to create interest, improve motivation and skills and meet changing demands.

However successfully managers divide up the total operation into individual jobs and match them to people, they still have to co-ordinate them, so that one work group is not held up by another and materials are there when needed. Activities like these take up a lot of the manager's time and it may be difficult to analyse clearly what the manager is doing. The process of organising becomes inseparable from planning, directing and controlling.

People are the manager's major asset, but some costly resources must be managed too. Plant has to earn its keep; materials and components must be stored, handled and used efficiently to avoid waste. This is all part of organising and a good plan will indicate when plant and materials are needed, what stocks to hold and when to call up deliveries.

The task of organising is very specific to the manager's role. For the personnel manager, whose concern is people, organising will not be the same as it is for the site manager, who has to co-ordinate a diverse range of material, plant and labour inputs and integrate the work of sub-contractors with that of the company's own labour.

Directing

This task involves leading, communicating and motivating, as well as co-operating with people and, sometimes, disciplining them. So central are these to the manager's work that some definitions of management put directing people at the focus. The most carefully prepared plans are useless unless people are effectively directed in implementing them. At the same time, if plans have not been made and resources not organised, work will be misdirected. People will pursue the wrong goals or their efforts will not be properly co-ordinated. Clearly, the manager's tasks are inseparable.

To direct people effectively, the manager must:

- have some influence or authority over them;
- develop a style of management acceptable to them;
- earn their respect and co-operation;
- empower them.

Delegation is an aspect of directing people which has been widely discussed. It involves passing authority down the management hierarchy. Techniques like Management by Objectives involve directing people by setting them targets rather than tasks. The manager tells subordinates what must be achieved but gives them some freedom to choose how to go about it. Self-managed teams are a development of this approach.

Many managers find it hard to delegate, with the result that they are overworked and their subordinates become frustrated. Delegation means giving people more control over their work. There may be limits to how far this can be taken, but there is little doubt that managers could do a lot more to involve employees in deciding work methods and allocating tasks within their groups. The building trades have always provided more scope for giving operatives discretion over their work than is possible in machine-paced factory work.

Delegation is vital to staff development for it provides subordinates with new experiences at a measured pace, suited to their abilities and ambitions. Carefully monitored delegation of tasks and responsibilities – *coaching*, in other words – has been recognised by construction managers as one of the most potent methods for developing managers (Fryer, 1994b).

Controlling

This task involves comparing performance with plan. The plan is the yardstick, without which the manager cannot control anything. If the manager does not control performance, the plan is of no value. So, planning and controlling are dependent on each other and the manager must appreciate this. Apart from environmental impact, the main factors to be controlled, whether on site or in a contractor's or designer's office, are time, safety, cost and quality of work. Time is monitored by assessing progress against programmes, whilst quality and safety yardsticks are provided by specifications and regulations. Priced bills of quantities, subcontractors' quotations and the estimator's unit rate analyses contain the information for controlling project costs.

Because the term controlling can have connotations of punishment and censure, some managers and writers prefer to talk of *reviewing*, *monitoring* or *measuring*. After all, much of the manager's controlling work consists of obtaining information (feedback) and comparing it with various documents. A variance between performance and plan may lead to censure, but more often will simply result in the manager taking corrective action. One could say that controlling includes both, (a) reviewing and monitoring operations, and (b) taking decisions to correct variances.

The site manager is controlling when he/she decides to bring more personnel on site after bad weather has delayed progress.

The difficulty over the definition of management words is endless. For instance, when a site manager decides to fence a storage area on site, or use the services of a security patrol at night, is the manager controlling or organising?

Developing staff

Many writers have argued that people are an organisation's most important asset, particularly in a labour-intensive industry like construction. The effective use of a company's resources, whether on a building site or in a designer's office, depends on the motives, abilities and attitudes of people. Good managers have recognised implicitly the importance of staff development for a long time. But it required legislation to make many firms take a serious look at the problems of training and development. This was spearheaded by the Industrial Training Act 1964, which led to the setting up of the Industrial Training Boards, although many have since been disbanded.

There has been a spectacular growth in formal training in construction and other industries, but many managers are sceptical of much of its value – and rightly so. Formal staff development programmes which take people out of the organisation to acquire new knowledge and skills have certain advantages over learning 'on the job', but the methods used have inherent problems. Many training activities are costly and do not produce the results expected.

Managers and training tutors have put a lot of effort into finding more realistic ways of developing staff. The emphasis has gradually shifted from teaching people facts (which they can usually find out for themselves) to helping them learn skills. Some of the more exciting training activities now focus on practical problems rather than subjects, and managers are realising that people learn best when they work at their own pace, using the study methods they prefer. Managers can play an important part in developing their subordinates by giving them increasingly difficult tasks, mentoring and counselling them, and arranging periods of job rotation in which they experience other parts of the company.

Many managers and management tutors are most interested in helping people learn how to learn. This emphasis on the process of learning rather than its content is most appropriate in a time of rapid change, when knowledge quickly becomes obsolete but what the individual discovers about how to acquire fresh information and skills equips him or her to be an adaptable, life-long learner.

Indeed the concept of life-long learning has been embraced by government through the University for Industry and Learndirect, by professional institutions such as the Chartered Institute of Building and the Royal Institution of Chartered Surveyors and by the vast majority of higher education institutions.

How managers spend their time

The early management writers tried to build a model of the ideal manager. Their focus was on what managers ought to do. A few studies, mainly since 1960, have looked at what managers actually do. Henry Mintzberg (1976, 1980) concluded that the manager's work is characterised by brevity, variety and discontinuity and that managers prefer action to reflection. Several researchers, including Mintzberg, found that managers spend a lot of time in informal, face-to-face communication with people. This can often account for 80 per cent of their working day.

Much of the information collected in the 1970s supported these ideas. Managers were not very systematic and preferred informal, 'unscientific' methods. They would rather talk than write and kept many of their plans locked up in their heads. Their decisions were often intuitive and political, their motives private and hard to define. Mintzberg challenged the traditional, formal management ideas and argued that managers perform an intricate set of overlapping roles, which he called:

- *Interpersonal.* The manager is the group's figurehead, leader and liaison officer, performing rituals and ceremonies, motivating and directing people, and developing a network of contacts and relationships with people outside the manager's group.
- *Informational.* The manager, as monitor, disseminator and spokesperson, is the nerve centre of the unit, reviewing data and events, giving and receiving information, and passing information from the group to others outside. He or she may have to deal with the public and people in influential positions.
- *Decisional.* The manager is a resource allocator, entrepreneur, negotiator and trouble-shooter, searching for opportunities, initiating change and coping with crises. The manager makes decisions and argues about priorities, allocates materials to people and people to tasks.

To perform these roles effectively, managers find ways of gaining control over their time; they use some of this saved time to decide priorities and the rest to discuss information and courses of action with their subordinates.

The roles identified by Mintzberg have largely remained valid, but his comments on managers' use of informal, unsystematic and intuitive methods have become less applicable.

Whilst many managers would still prefer these informal methods, this is not possible in a climate characterised by disputes and litigation. As managers come under pressure to meet tougher performance targets, they have resorted to using computer software to assist in the analysis and synthesis of information, formalising their tasks and committing plans and decisions to paper.

The manager's skills

During the 1960s and 1970s, some of the interest focused on the manager's skills. Robert Katz (1971) identified three broad classes of management skills:

- *Human skill.* This is the manager's ability to work as a group member and build co-operative effort in the team, to communicate and persuade. Managers with good human skills are aware of their own attitudes and assumptions about people and are skilled in understanding and influencing people's behaviour.
- *Technical skill.* Most managers have previously occupied a craft or technical role and are proficient in some aspect of the organisation's work. They have acquired certain analytical abilities, specialised knowledge and techniques, much of their training having centred on developing such skills and knowledge.
- *Conceptual skill.* This is the ability to see the organisation as a whole, how the parts affect one another and how the firm relates to the outside world. The manager with conceptual skill appreciates that a marketing decision must take account of local conditions, the state of the industry, competition and other political, social and economic forces. Such a manager recognises that the decision will affect production, people, finance and other aspects of the business.

Managers use different combinations of skills for different kinds of management work. Katz argues that human skill is important at all levels of management, but especially for junior managers, who have wide-ranging and frequent contacts with people. Junior managers also rely heavily on technical skill, but this becomes less important for senior managers, who depend more on conceptual skill. Indeed, they may get by with little technical or human skill if their subordinates are competent in these.

Each of Katz's skills is really a family of skills, which can be further analysed if managers want a closer insight into their jobs. For example, human skill encompasses the ability to deal with peers and colleagues, bosses and subordinates. It includes skills for negotiating, persuading, empowering, gaining support, encouraging and counselling – and, sometimes, disapproving and giving a reprimand. Many management tasks demand the use of several skills. Resolving a technical problem may require more than technical skill, if it affects people.

These three groups of skills can be matched against Mintzberg's analysis of management roles.

Interpersonal skills

A number of researchers have sought to analyse, and in some cases classify, the skills of the construction manager. Love and Haynes (2001), for example, suggest that construction management graduates should possess problem-solving skills, specialist knowledge, an ability to communicate and an understanding of 'how'

information and communication technologies can be used to improve business practice – skills that reflect Katz's classification.

Discussions with 22 practising construction managers and the responses of 142 senior, mid-level and junior managers in a postal questionnaire, revealed that human skills are highly valued (Egbu, 1999). Asked to identify those skills and areas of knowledge which were significant in refurbishment work, construction managers prioritised:

- Leadership
- Communication
- Motivation of others.

Such skills help to create good relationships with colleagues, subordinates and sub-contractors' personnel. They help the manager to develop a network of contacts for securing action and the prompt exchange of information and instructions.

On site, the manager has to deal with sub-contract personnel. They have a contractual duty to co-operate with the main contractor, but their main loyalty is to their own employers. Their priorities, attitudes and values may differ from those of the main contractor's team.

Managers must think carefully about how to influence people and must adapt their social skills to meet the situation. Technical and conceptual skills are essential, but their potential cannot be realised if the manager fails, through lack of human skills, to bring together a cohesive team.

Decision-making skills

Construction managers, like managers in other industries, attach a lot of importance to skills used in decision-making and problem solving. They have been taught, or have found that others expect them, to make quick decisions, thereby showing their competence and resolution. Failure to make a 'snap' decision is often thought to show weakness or lack of self-confidence.

Clearly, this can be dangerous. It is true that quick decisions are often called for and delay can cost money, but a bad decision is sometimes more costly than no decision at all. The manager has to recognise that solving a problem and reaching a good decision sometimes takes time. It relies on more than intuition and judgement. A mix of technical, human and conceptual skills is often needed to achieve a satisfactory outcome. A poor decision rarely brings credit to the manager or the firm in the long run.

Another common problem is that managers spend far too much time making short-term decisions and neglect the long-term issues. This is hardly surprising, since they are judged on the success of current operations. However, many commentators have called for a better balance between immediate and long-term decisions. The attention paid to long-range issues will ensure that the firm keeps pace with developments and survives in difficult times.

Information handling skills

Handling information has become more central to the manager's work as projects and organisational procedures have become more complicated. Managers need a combination of human, technical and conceptual skills for locating and interpreting information, judging its importance and accuracy, sorting facts from opinions and displaying data in various ways. The ability to pass on information clearly, concisely and in an acceptable form is vital nowadays. One problem is that a vast amount of information is available to managers – more than they can possibly absorb. Much of it is not presented concisely or in a suitable form. Managers waste a lot of time sifting through information, picking out important points. IT should have reduced this problem, but it often makes matters worse instead.

The manager's skills are so important that they are discussed in detail in later chapters. But managers' tasks and skills are not the distinguishing feature of their work. Most people make decisions, handle information, draw up plans and organise resources. What distinguishes managers from others is their organisational setting and authority for getting things done. To do their jobs properly and meet objectives, they need *power* over others.

The manager's power

To perform their work of getting things done through people, managers need to exert influence or power over them. This presents special difficulties for contractors and project managers because many of the people working on a project are employed by other organisations, such as professional practices and specialist contractors. These employees owe their allegiance mainly to their companies and not to the project. There are, however, many reasons why people will co-operate with a manager. They may do so because it leads to some reward or removes the threat of unemployment. They may seek the manager's respect or simply like the manager as a person. Managers must know why people co-operate with them, because this is the basis of their power. Four main power bases recognised in management are discussed below.

Resource or reward power

The manager controls some of the resources and rewards that others want and can influence the salary increases, bonus earnings and promotion prospects of his/her team. A site manager may sanction payments to sub-contractors, exerting some indirect power over their site personnel. The manager may have some influence over whether a sub-contractor is used again.

Resource power is seldom popular. People dislike the idea that their co-operation can be bought and dislike it even more when they have to co-operate with an

unpopular manager. But there is no doubt that managers can secure a partnership of effort by rewarding good performance (and perhaps by penalising bad). Reward power will only work, however, if the employee wants the kind of reward the manager is offering and believes that it is conditional on meeting the manager's performance targets. There is a subtle relationship between this and other sources of influence. Sometimes rewards work only in conjunction with other forms of power.

Position power

Managers have some power because of their positions in the organisation. Sometimes this is called *legitimate* power or *role* power. Other people recognise that the manager has the right to give orders, control progress, inspect work and sometimes reject it. Position power is strongest when the manager has explicit backing from senior management. Even when this support is weak, other employees often reinforce the manager's power by expressing group norms about behaviour and attitudes to work, which put pressure on individuals to conform to standards which have become accepted in the organisation. On the other hand, group norms may work the other way, undermining the manager's power.

Position power gives the manager access to, and control over, certain information. Managers are a focal point in the communications network and control the dispersal of information within their teams and to other departments and organisations. The pieces of the information jigsaw often have little value until they are put together. Information displays synergy – the whole is greater than the sum of the parts. Sometimes, people withhold information from managers and deliberately or unwittingly reduce their power.

Managers also have access to people outside their work groups and to other organisations, and can tap their expertise and resources. Above all, they have the acknowledged right to decide how work should be organised and what should be done when things go wrong. These are powerful influences over people's behaviour. However, sub-contract employees may be more impressed by the role power of their own managers. The main contractor cannot rely solely on position power to gain their co-operation.

Personal power

Some managers have the personality, presence or charisma to influence others without recourse to other methods. Such influence may stem from the manager's appearance, manner, poise, confidence or warmth, dominance or decisiveness. More often, it depends on a combination of such factors.

Some managers rely heavily on personal power to get co-operation, but such power can be elusive and temporary. It works sometimes and with some people. It can disappear in a crisis and can seldom be relied on to consistently replace position power. Nevertheless, it is important and managers use it wherever possible to supplement their authority.

Expertise or expert power

Special knowledge and skills give the manager power over those lacking them. Most managers have some expertise which their subordinates lack and this reinforces their position. A project manager, responsible for co-ordinating the design and construction of a complex project, will depend on such expertise.

However, many architects and construction managers lack expertise in the other disciplines of the project team and can be at a disadvantage, particularly when dealing with specialist designers and contractors. For instance, an electrical sub-contractor's site supervisor will be able to exercise expert power over the main contractor's manager by virtue of his or her specialist knowledge and skills. To retain control, the contractor's manager minimises this counteractive power by strengthening other power bases and by becoming more knowledgeable about the sub-contractor's specialism.

There is a further power base – coercive power – based on threat or the fear it induces. Few managers rely on such power, although in some day-to-day situations they may use it very temporarily to achieve a quick result.

Managers should review the kinds of power they use and watch how others react to them. People respond in different ways. They may accept power, ignore it or rebel against it. Some comply with the manager because they think it is worthwhile to do so. Rewards and company rules often lead to such compliance. Others adopt or accept the manager's suggestions because they admire or identify with him or her. Some subordinates may model their behaviour on a manager they admire. Charismatic managers can get co-operation in this way, but people may become too dependent on them. Some people develop such commitment to the task that they carry out their duties with little supervision. Managers have only to keep a watching brief. These subordinates have adopted the goals and have internalised the values and attitudes of the manager as their own.

Most managers achieve their objectives using a combination of rewards, contractual procedures, rules, sanctions, expertise and personal qualities. The methods chosen will depend on the task, the people and the support the manager gets from the organisation.

Empowerment

The early 1990s saw a switch of emphasis from the importance of the manager's power to the need for employees to exercise power. Established notions of employee participation and involvement gave way to the concept of empowerment. Empowerment of employees is based on the premise that the people who actually do a job are in the best position to learn how to do it better. Empowerment aims to eliminate close management control and unnecessary rules, procedures and other restrictions. It gives employees more control over their work (individually and as

groups) and the authority to make many of the decisions without asking the manager's approval.

It also means that managers must, to some degree, give up being *in* authority and spend more time being *an* authority – giving employees support and guidance so that they can exercise their empowered status effectively (Stewart, 1994). Seen in this way, empowerment does not lessen the manager's power, but changes the way it is applied. Moreover, empowerment is not just about giving authority to employees, but about providing them with the knowledge and resources to achieve work objectives (Stoner *et al.*, 1995).

Total quality management systems have embraced the concept of empowerment because it offers some significant benefits. Used effectively, it makes far better use of employees' skills, experience and commitment, leading to higher productivity and job satisfaction.

Dainty *et al.* (2002) suggest that empowerment strategies, used selectively, could play an important part in helping construction organisations to address increasing performance demands. However, they also identify many barriers to individual and team-based empowerment. They recommend:

- flatter organisational structures that embrace employee ownership;
- formal support networks to provide empowered individuals and teams with assistance, guidance and leadership;
- the apportionment of appropriate responsibilities for aspects of project delivery and overall strategic performance throughout the supply chain;
- placing employee participation within the context of the strategic need to secure employee commitment to organisational goals;
- a genuine and not merely cosmetic commitment to the use of empowerment.

Self-managed teams

As traditional hierarchies are broken down and organisations adopt flatter, leaner structures, the need for empowered teams increases. Sometimes called self-managed teams or autonomous work groups, the empowered team has great potential for releasing creative action, improving performance and building employee commitment.

But these teams need to be skilfully developed – they don't just happen. Training is needed so that the rationale and benefits of empowerment and team working are understood. Individual employees need to learn how to exercise power within their team: how to do this by communicating effectively and influencing others using appropriate behaviour; how to improve their skills for analysing situations and solving problems creatively; how to be assertive but not aggressive or domineering; how to negotiate compromise and reach consensus. Managers also need training. They must learn how to adapt their behaviour to interact with their new, dynamic teams: how to relinquish power; how to exercise authority when it is needed; how to act as a mentor to the group and its members; how to ensure in a non-controlling

way that the team's achievements remain in harmony with the organisation's wider goals.

Empowering individuals and setting up self-managed teams is not always easy. For example, there can be problems associated with staff calibre – a manager who is unable to adapt to the new role, an employee who can't cope with problem-solving – and attitude problems – an employee who feels it is the manager's job to make decisions. Such problems can often, but not always, be overcome by training. Clearly, there are big advantages in training a team together. Attitude changes which are difficult to bring about in an individual are often easier to achieve within an established group. In the main, case studies of organisations which have tried empowerment of individuals and teams have shown impressive results.

Professionalism and construction management

Until perhaps the 1980s, few people would have described construction management as a profession. But the discipline has steadily gained in status and recognition in the eyes of clients and other built environment professions. Of course, the definition of profession has also broadened and includes many more occupations than it originally did. Murdoch and Hughes (2000) refer to the four defining characteristics of a profession as:

- A *distinct body of knowledge*. A special competence or identifiable corpus of expertise.
- *Barriers to entry*. Professional bodies which regulate entry through qualifying mechanisms.
- The goal of *service to the public*. The true professional places the public good before other objectives. This concern is exemplified by the profession's code of conduct.
- *Mutual recognition*. The profession is recognised by other professions and it recognises them.

There is no doubt that construction managers have behaved in an increasingly professional way. They have had to, in order to keep on top of the growing complexity of projects, increasing sophistication of clients and major changes in contract procurement. But, if one applies the above criteria strictly, construction management falls some way short of being a profession in the traditional sense.

There is no shortage of a corpus of knowledge, but the barriers to entry are somewhat ill-defined. This stems from the fact that there isn't a single professional body regulating entry or a single qualifying route. Engineers, architects or quantity surveyors could (and indeed do) perform the role of the construction manager if they have the necessary experience and skills. Engineers are frequently promoted to construction management. QSs who have worked extensively for contractors can progress to project or contract management roles. Organisations like the Chartered

Institute of Building and the Association for Project Management are about the closest thing to a professional institute for construction managers, but they have wider categories of membership. This also creates some difficulty in meeting the criterion of mutual recognition among professions.

A further difficulty is that most construction managers could not say, in all honesty, that public service is uppermost in their minds. Most of them would probably rate the interests of their employer or the client as their first priority. Of course, one can speculate that the established profession's members do not always put the public interest first. But at least they have codes of conduct and the threat of censure.

There are, of course, problems inherent in professionalism itself. The institutions it creates can easily become bureaucratic and resistant to change. Professions try to guarantee reliable service but cannot always succeed – all organisations contain a mix of people of varying competence. Professionalism can create rigid role demarcations which are not always in the best interests of specific projects, where flexibility is essential and interdisciplinary teamwork is needed (Murdoch and Hughes, 2000).

Summary

Managers' jobs are demanding, complex and varied. There are certain common features in the role of manager, but individual jobs differ markedly. Most managers, regardless of their field of operation, have to manage people, information and decision-making processes. They perform these roles using varying combinations of human, technical and conceptual skills to plan, direct, organise and control people and resources. The amount of time they spend on each role and its associated skills depends on their function and level, and on the abilities and motivation of team members. Staff development and mentoring is becoming an important part of most managers' jobs.

Research in the 1960s and 1970s showed that managers were not always the systematic, analytical thinkers that early management theories thought them to be. However, the development of information technologies has meant that managers now have better information with which to manage and powerful techniques for analysing information, planning and decision-making. Even though many managers prefer informal, intuitive methods, they have been forced to adopt more structured techniques in their work because commercial pressures are demanding ever greater efficiency and this has necessitated a more rational and systematic approach to management, and greater professionalism.

Most managers in the construction industry rely heavily on social skills. Good leadership and effective communication are needed in a wide range of situations. These skills are vital in site management, where the work of many organisations has to be co-ordinated.

Some of the power exercised by managers is based on their personal characteristics and behaviour. However, personal power cannot always be relied on to get results and the manager must utilise several power bases to maintain effective control, especially where sub-contractors are involved.

There is continuing interest in empowerment, a process which shifts some of the power from managers to employees, individually and as self-managed teams. Employees, being closer to the workface and having superior knowledge of the work and its environment, are often in a better position to make decisions; empowerment gives them the opportunity to use and develop their talents more fully.

Debate motions and presentation topics

Debates provide a valuable learning opportunity – allowing participants to develop and express their own ideas and to listen to the opinions of the opposition. As Northledge (1993) observes, in an effort to explain a point, you may frequently hear yourself expressing ideas in a form that you had not been quite aware of before – in short, discussion helps you think.

Motion 1

Expertise in the use of computer-aided planning techniques is more important to the construction manager than are people management skills.

Motion 2

The construction manager is unable to influence the motivation of individuals within the project team.

Motion 3

All construction managers should have a professional qualification in construction management.

Chapter 3
Organisation

Many small businesses work well without formal structure or rigid rules. The enthusiasm of the owners or managers keeps these firms on course. But as organisations grow, the work of more and more people has to be co-ordinated. Special attention has to be given to how tasks and relationships are organised and communications maintained.

Organisations as we know them today have only emerged in the last century or so, with the growth of industry and commerce. Many of them have become *bureaucratic* – that is to say, hierarchical, impersonal and controlled by a system of rules.

An organisation can be seen as a set of roles or positions rather than a collection of people. Employees can be replaced by others with similar knowledge, skills and attitudes. The posts or roles are arranged in a hierarchy and those higher up have authority over those lower down. Difficult problems are referred up the hierarchy to a level at which they can be solved, whilst decisions are passed down to the level at which they are implemented. Activities are broken down into manageable, specialised tasks. The number of subordinates each manager has is limited, so that effective control is maintained.

This approach gives rise to the classic 'family tree' organisation structure. Specialist advisers are needed and this leads to the *line* and *staff* distinction present in many companies. Line people are the generalists, responsible for production. Staff are specialists, who give them technical and administrative support.

There has been much criticism of bureaucratic organisations and managers have tried to improve them. A fundamental objection is that they become rigid and inefficient and do not take enough account of human behaviour. The result is breakdown and failure – people do not always comply with orders or accept company goals. They may challenge the power bases in the firm.

The idea that an organisation should be continually restructured and its rules altered as circumstances change was not widely accepted until after World War II. Change and uncertainty are now forcing organisations to be more flexible. Managers in many industries have experimented with temporary task forces or 'project teams', which can adapt quickly to new challenges and conditions.

Cicmil (1997) believes that the emerging paradigm of project management represents a renaissance of the discipline in a contemporary business context. Project management is perceived to have something new to offer organisations that are keen

to improve their efficiency and effectiveness (Thoms and Pinto, 1999). Maylor (2002) concurs, stating that modern business is characterised by change and that a project-oriented approach to management could be used to transform client need into reality. Moreover, he recognises that the discipline is no longer dominated by the construction industry, believing that project management is applicable to all organisations.

Managers in the construction industry have wide experience of setting up temporary project organisations of considerable size and complexity, lasting months or even years. Project organisations are created for a specific purpose, have clearly defined goals, change their composition over their life span and are disbanded when the work is done. However, the need to improve performance within the construction industry is an inescapable conclusion of many government and professionally sponsored reports (Latham, 1994; Egan, 1998). Egan, some authors argue, is not asking the construction industry to reflect upon what it is doing already and do it better. Seemingly he wants the industry to operate in an entirely different way.

Organisational activities

One way of analysing an organisation is to consider it as a system and identify its sub-systems. In broad terms, the organisation can be split into a decision sub-system and an action sub-system, but a more detailed analysis suggests four major activities:

- *Deciding on objectives and policies*. An organisation must have a sense of direction and purpose. A high level sub-system works out priorities, sets standards, lays down codes of ethics and gives overall guidance.
- *Keeping operations going*. There is a sub-system for the routine productive tasks of the business necessary to achieve its purpose. This includes most of the production function, office administration and accounting system. Selling comes under this heading, but not the whole of marketing.
- *Coping with crises and breakdowns*. Things will go wrong. A 'trouble-shooting' sub-system deals with problems. Failures can occur anywhere in the organisation. A routine production task may break down because materials are delivered late. A marketing decision may fail because trading conditions change unexpectedly.
- *Developing the organisation*. Some activities are aimed at changing the organisation or its methods. Research and development and parts of production, personnel and marketing contribute to the organisation's development. For instance, the personnel function of staff development is a key aspect of organisational change.

In construction, deciding policy and developing the organisation are mainly the province of the parent companies. The project task-force will be largely concerned

with keeping things going – getting the job built on time and within budget – and coping with operational problems.

Objectives

Whatever form an organisation takes, the ultimate measure of its success is whether it meets the needs of the people who have an interest or stake in it. Yet most industrial organisations have fairly limited objectives and have not always catered well for the needs of employees or local communities. Only exceptionally have such organisations attempted to take over some of the functions usually performed by society. In Japan, this approach is more common.

The objectives or goals of those contributing to a construction firm or project are not always clear. Yet managers need to know these goals to measure how well the organisation is doing.

Traditionally, managers have stressed *economic* goals like profitability, high productivity and expansion. Typical economic objectives are:

- To provide a fair return to shareholders.
- To satisfy clients' requirements.
- To utilise resources efficiently.
- To improve the company's position in its markets.
- To develop products which can be sold profitably.

Profit has been the main measure of business success, although it has come under attack from time to time. Changing attitudes have forced profit into a less central role in management thinking, where it is viewed in the context of other objectives.

The modern view is that an organisation is a coalition of people. The organisation, being mindless, cannot have goals – only the people in it can. Therefore, all objectives are really *social*. The so-called 'organisational objectives' are the goals laid down by the more powerful or influential people in the business. Increasingly, these goals have been challenged by groups within and outside the organisation. Unions, governments and other bodies have scrutinised organisations and put pressure on senior managers to modify their actions and expectations. Managers have had to make changes to meet statutory demands and to ensure the continued co-operation of the workforce.

The Business Impact Task Force (2000) argues that organisations should operate their business in a socially responsible way and uphold the following principles:

- To treat employees fairly and equitably.
- To operate ethically and with integrity.
- To respect basic human rights.
- To sustain the environment for future generations.
- To be a caring employer in the community.

Not only will adherence to these principles be of benefit to society, but it will also build business sales, build the workforce and build trust in the company as a whole (BITF, 2000). Corporate social responsibility (CSR) is here to stay as debate within the EU focuses on the introduction of mandatory regulations.

Environmental objectives

Since the 1950s there has been growing concern about the impact of human societies on the global environment. The energy crisis of the early 1970s highlighted the potential vulnerability of developed economies to changes in energy supply (mainly oil) and triggered the development of efficiency improvements. During the 1980s much of the impetus for energy efficiency, at least in the UK, was dissipated as energy supply increased and prices fell in real terms. However during this period much more fundamental concerns emerged about the impact of the burning of fossil fuels on the global climate and ecosystems. At the same time, it became increasingly clear that tackling the environmental problems would require action that reached every part of the global community and dealing with economic and social issues as well as technology. The need to understand and tackle the problems involved prompted the United Nations to set up the Brundtland Commission in 1983, giving rise to the notion of *Sustainable Development*, which was defined as 'development which meets the needs of the present without compromising the needs of the future' (World Commission on Environment and Development, 1987). This idea is fundamental to the environmental challenge that faces all societies.

The construction industry has a crucial role to play in ensuring that the goals of sustainable development are met. The buildings and infrastructure it constructs consume resources, impact on ecosystems through activities such as material extraction and increase the use of energy (and consequent greenhouse gas emissions) during construction and in occupation. Increasingly, the industry as a whole, designers, constructors and upstream suppliers, will be required to respond to changing demands, designed to minimise environmental impact. The need to mitigate climate change through increased energy efficiency of buildings is already a central plank of UK and European policy (DTI, 2003; European Commission, 2003) and is framing the development of building regulations (Bell and Lowe, 2000, 2001; Lowe and Bell, 2000) and impacting on technology (Lowe *et al.*, 2003a and Lowe *et al.*, 2003b). In addition, it is recognised that some climate change is inevitable and that the industry will need to adapt to the changing climate in the way developments are designed and constructed.

The changes required in response to environmental objectives will have far reaching impacts. Not only will technological change be necessary but construction industry organisations will have to adapt to an environmentally aware market place, assess the financial risks of development in a climate prone to increased flooding and extreme weather events, and develop commercial strategies that recognise the impacts of environmental requirements (maintenance of habitat, increased flood protection and the like) on such things as land values (Hertin *et al.*, 2003). Perhaps

the most fundamental change that organisations will be required to make in the first decade and a half of the 21st century will be the need to marry the long time horizons involved in achieving the goals of sustainable development with short term commercial imperatives. This is likely to lead to fundamental shifts in the way organisations see themselves and in the way that they operate.

Underlying objectives

However, many so-called objectives are not objectives at all. They are the means by which underlying goals are achieved. For example, profitability can be viewed not as a goal, but as a way of ensuring that organisations survive, wages are paid, shareholders are rewarded and, perhaps, managers' self-images are satisfied! Similarly, the social objective of secure employment is not a goal in itself, but a means of giving employees satisfaction and self-respect from having a place in society and the ability to supply their needs.

If any goal can truly be said to be organisational, *survival* is perhaps the only one. The survival of an organisation affects owners, employees, their families, shareholders and the community. In many organisations, profit is a prerequisite for survival and, for this reason, is important.

The purpose of setting up project organisations is to build buildings and structures. Construction can be thought of as a strategy for achieving a variety of goals for the people involved. Ideally, these goals will be achieved by completing projects on time, at the right cost and quality, but in practice some of the objectives conflict.

Managers use time, quality and cost to measure project performance. These criteria are more quantifiable than social objectives and therefore easier to use. They include cost targets, dates for starting and finishing each operation and specifications of materials and work.

However, it does seem important that the economic goals of the companies contributing to a project should help achieve social and environmental objectives. Organisations should ultimately serve people, both the stakeholders in the business and the members of society at large. People should not be the slaves of organisations, nor should their environment be seriously degraded.

Characteristics of organisations

Organisation structure

Most organisations are not designed, they grow. They eventually reach a size where it becomes necessary to write down who does what, otherwise the managers lose sight of the whole picture and jobs are forgotten, or done twice. The purpose of organisation structure is to ensure that work is allocated rationally, that there are effective links between roles, that employees are properly managed and that activities are monitored.

Structure is the skeleton of the business: it creates enough standardisation of roles and procedures to allow work to be performed economically and to keep the organisation in tune with the procedures of the firms with which it does business. It facilitates control by creating a communications network of instructions and feedback.

When designing or improving an organisation, senior managers must ensure that:

- tasks and responsibilities are allocated to groups and individuals, including discretion over work methods and resources;
- individuals are grouped into sections or larger units and the units integrated into the total organisation;
- formal relationships are set up, spans of control considered and the number of managerial levels decided;
- jobs are clearly defined, but are not too rigid or specialised;
- authority is delegated and procedures are set up for monitoring its use;
- communication systems are created, improving information flow and co-ordination;
- procedures are developed for performance appraisal and reward.

Structural weaknesses in organisations lead to many business problems, including too much paperwork, people overloaded with work, poor or late decisions, inability to cope with change, low morale, industrial conflict, increased costs and lack of competitiveness.

Specialisation

Most organisations have introduced specialisation in the belief that it leads to better use of people and resources, but it has drawbacks too. It leads to fragmentation and the need to control and integrate tasks more tightly.

In construction, the fragmentation is very marked. Parent firms contribute only a specialised input to projects, and jobs within that limited input are themselves specialised. Specialisation leads to isolation and can cause co-ordination problems. For instance, the R&D laboratory of a heating and ventilation contractor may be annexed in a country house, whilst top managers occupy a high-rise office in the capital. Production takes place anywhere the firm is willing to work, perhaps over an area of hundreds of square miles.

In professional and technical jobs, specialisation can create challenge; in clerical and manual jobs it can lead to boredom. Writers like Friedmann and Argyris have argued that highly routine jobs, requiring little learning, are not a humane use of people because their full potential cannot be tapped. Some managers have recognised the need to adapt work to meet employees' needs and their companies have successfully introduced schemes to enlarge and enrich jobs, making them more satisfying. Many firms, however, have not come to grips with the problem.

Drucker (1968) offered three simple guidelines for improving routine jobs:

- A job should be a distinct step in the work flow, so that the worker can see the result.
- The design of a job should allow workers to vary their pace.
- A job should provide an element of challenge, skill or judgement.

It may be impossible to achieve this in every job, but it can often be done for small work groups, where roles can be swapped, provided that rigid job demarcations are dropped.

There are arguments for and against closely-defined jobs. Drawing up a precise job description forces management to think clearly about the purpose and content of the job and both management and employee know where they stand. On the other hand, job descriptions can be inflexible and unrealistic when conditions are changing fast.

Indeed, the future success of organisations will depend less on traditional jobs and more on the creative use of information, ideas and intelligence – things that don't fit neatly into old specialisations. Work will *have* to be more flexibly defined and organisations will have to be even more adaptable. There are many reasons for this and Handy (1995) explains them well. New roles that we never heard of before will (and already have) come into existence and many of them will need to be organised and managed in new ways.

Information technology is just one of the factors affecting organisation structures. Computer-based decision-support and information systems can lead to different choices of structure and influence the extent of de-centralisation of decision-taking and control (Mullins, 2002). Regrouping of tasks may result from developments in information management, creating new specialisations.

Hierarchy

Most organisations are hierarchical. They are made up of a series of tiers, each having authority over the levels beneath them. The number of levels in the hierarchy may vary from two in a small building firm to a dozen or more in some large organisations. The size of the firm largely dictates the number of tiers, although management may decide to widen spans of control to limit the number of levels.

Where spans of control can be widened successfully, there is a strong case against tall organisation structures, which increase overheads, create communication problems and weaken senior management control. The more levels in the hierarchy, the harder it is to distinguish between the duties and responsibilities of people at different levels. This can restrict the scope for subordinates to show initiative, thereby reducing their motivation and job satisfaction. A small organisation can opt for a flatter structure with few levels of management or it can keep spans of control small, making the structure taller. It will usually choose the former.

A large organisation has a more difficult choice. It is necessary to maximise the span of control to prevent the structure becoming too tall, but clearly there are limits beyond which effective supervision becomes very difficult.

Large organisations employ more specialists who relieve the line managers of some of their tasks. This makes it possible to increase spans of control to levels which would otherwise be impractical. The manager's span of control will also depend on the work and the people involved. Routine, repetitive jobs may need less supervision than complex, non-routine tasks, but this also depends on the capabilities of employees. The span of control can be widened if the manager is very able, if subordinates are competent and willing, and if they share the same workplace. An area manager may have subordinates spread over a wide radius.

Downsizing

A phrase which became popular in the 1990s, downsizing refers to the trend among many organisations to reduce their overall size, often by decreasing the number of levels in the hierarchy, producing a flatter structure. Businesses have done this partly to create flexibility, so that they can respond more quickly to change, and also to achieve improved efficiency to satisfy new quality management systems.

Downsizing has become a competitive imperative for many organisations, but it creates an ethical challenge for managers, who have to cope not only with redundancies but with problems of retaining the loyalty, motivation and sense of security of the employees who stay (Stoner *et al.* 1995). Moreover, downsizing has in many cases resulted in a loss of key skills, knowledge and organisational learning (Littler and Innes, 2003).

Centralisation v. decentralisation

An important structural feature affecting an organisation's efficiency is the degree to which it is centralised or decentralised. This can be measured by:

- The extent to which managers delegate authority and decisions from the top to the lower levels in the business.
- The extent to which the administrative functions of the firm are carried out at head office, rather than being spread through the organisation. For instance, some contractors have a central buying department for all material purchases. Others allow managers in different areas or divisions to organise their own purchasing.

Decentralisation can be based on area or product. If a contractor is working over a wide area, regional decentralisation may be vital to cope with local conditions. If a company builds hospitals and factories and also undertakes speculative housing work, product decentralisation may improve organisational efficiency. In speculative housing, policies and procedures for accounting, estimating, buying and so on, will differ from those suited to contract work.

However, no organisation is likely to be totally centralised or decentralised. Most firms strike a balance between the two. What this balance should be depends on several factors:

- *The size of the organisation.* This is important because the larger it gets, the harder it becomes to control everything from the top, without depriving junior managers of authority and autonomy. Since the 1950s, when the problems of large-scale organisation were becoming clearer, managers have become keen on decentralisation because it permits more realistic control and greater flexibility.
- *The type of work the firm undertakes.* This is important for two reasons – diversity and pace of change. If its operations are diverse, it is difficult for the top managers to keep track of everything. If conditions are changing fast, it is better to leave more of the judgements and decisions to people on the spot. Indeed, some technical decisions have to be delegated because the junior staff are more technically up-to-date.
- *Staff capabilities and motivation.* A decentralised organisation is often more satisfying for people to work in, but staff must be competent and willing to make the necessary decisions. This means that the organisation must have good calibre employees in key positions in its decentralised units.

Centralisation and decentralisation each have their strengths and weaknesses, so a compromise between them is usually best. The advantages of decentralisation are the drawbacks of centralisation, and vice versa, so it is only necessary to consider one of them. Table 3.1 summarises the points for and against decentralisation.

Table 3.1 Advantages and disadvantages of decentralisation.

Advantages	Disadvantages
Makes junior posts more challenging	Makes overall control more difficult
Decisions are taken by those who have to live with the results	Difficult to keep track of decisions taken
Encourages people to show initiative and creates greater commitment among employees	Difficult to keep an overall perspective and safeguard the interests of the whole organisation
Easier to judge the performance of a manager who is responsible for a decentralised unit	Creates higher administrative costs owing to duplication of specialists

Rigidity v. flexibility

Some of the differences between firms were highlighted in Chapter 1. For instance, Burns and Stalker (1966) contrasted the rigid, mechanistic organisation with the more flexible, organic one. As with centralisation, it is unlikely that any firm will adopt an extreme policy. Most will opt for a structure somewhere between the extremes. Size is again important. The larger the firm, the more formal and inflexible it is likely to be, although the degree of rigidity can vary a lot from

department to department. For instance, the production part of a firm is often more formal than the sections dealing with marketing or research. In a construction firm, the buying department is likely to be more rigid than the estimating department, whose workload is usually varied and unpredictable. There are several indicators of rigidity in a company, as described below.

Rules and procedures

Rigidity often shows up in the number of rules and procedures used and the extent of written, rather than spoken, communication. All firms have rules governing who is allowed to authorise cheques, sign contracts, buy materials, and so on. The rules are not always written down and this can give a false impression of informality in a formal set-up. Up to a point, procedures and rules are necessary to ensure that tasks are allocated and performed systematically. They underpin the authority of managers and help reduce the number of decisions to be taken. But they can become an end in themselves instead of a way of improving efficiency. Rules and procedures should be kept under review to ensure that they still apply.

Some formality is imposed on the organisation from outside. For example, a contractor's disciplinary procedures are partly dictated by legislation and codes of practice. Similarly, the statutes impose many site safety rules on the contractor.

Organisation charts

Many firms draw up some form of organisation chart, a kind of map of the firm. The chart gives an overall picture of how roles are allocated and helps senior managers to identify organisational problems and develop procedures and succession plans. It gives new employees a better idea of the 'shape' of the organisation.

But organisation charts have their limitations. They give only a crude picture, unless there are detailed explanatory notes to accompany them. Even then, they tend to oversimplify relationships because there is a limit to the amount of information they can show. They tend to emphasise vertical relationships in the organisation, rather than horizontal. They stress the formal links, rather than the informal. They give little indication of status differences between managers on the same tier in the hierarchy. Most important of all, they are static and can quickly become out of date. When this happens, organisation charts are not simply useless but misleading.

Job descriptions and organisation manuals

These documents set out the functions or duties of individuals and departments and the relationships between them. They can be quite detailed. They are intended to make the organisation more efficient, but they can create rigidity, making it hard for people to respond sensitively to unexpected changes.

Paperwork and committees

Paperwork and meetings are a feature of most organisations. The extent to which firms use forms, reports, memoranda and committees, and the diligence with which files and minutes are kept, give a measure of the firm's formality. Many committees meet regularly, even when there is little to discuss. Forms are often filled in, even though the information is little used. Reports are written and considered at length but, all too often, no action is taken. Such waste of time and resources must be eliminated.

Some records, such as accident report forms and records of disciplinary meetings, are kept to comply with legal requirements and codes of practice.

Types of organisation

Line and staff organisations

Most construction firms have an organisation structure of the line and staff type which has dominated management thinking for many decades. The 'line' managers are responsible for production. They pass instructions and information down the hierarchy and monitor what happens. 'Staff' are the functional specialists – engineers, accountants, estimators and so on – who provide a back-up service to the line managers. Some of the specialists run departments and therefore have both line and staff responsibilities. Their authority is, however, limited to their own specialism. Senior planners, for instance, have line relationships with their bosses and subordinates, and staff relationships with the operations managers for whom they provide planning services.

In its basic form, the line and staff structure is split into *functions* as shown in Fig. 3.1, but there are many variations. When a firm widens its scope, it may split into product divisions, each specialising in a type of work or market, such as housing, refurbishment or road construction. A company which expands geographically is more likely to become area-based. Here it makes sense to decentralise some of the administrative functions and perform them locally.

In both cases, divisions are usually fairly autonomous and are responsible for their own profitability. The parent company retains a headquarters, mainly for strategic planning, policy-making and overall financial control. The divisions have their own estimators, project planners, buyers, etc.

In both area- and product-based organisations, the problem of how best to group activities remains. Each division may be split into functional specialisms, so that it appears to be a microcosm of its parent firm. However, the division can respond more quickly and flexibly to the demands of its product or area, than can its parent. Complications arise when a company both expands and diversifies. It may need some of the features of product and area organisation and must operate a blend of functional, area and product organisation.

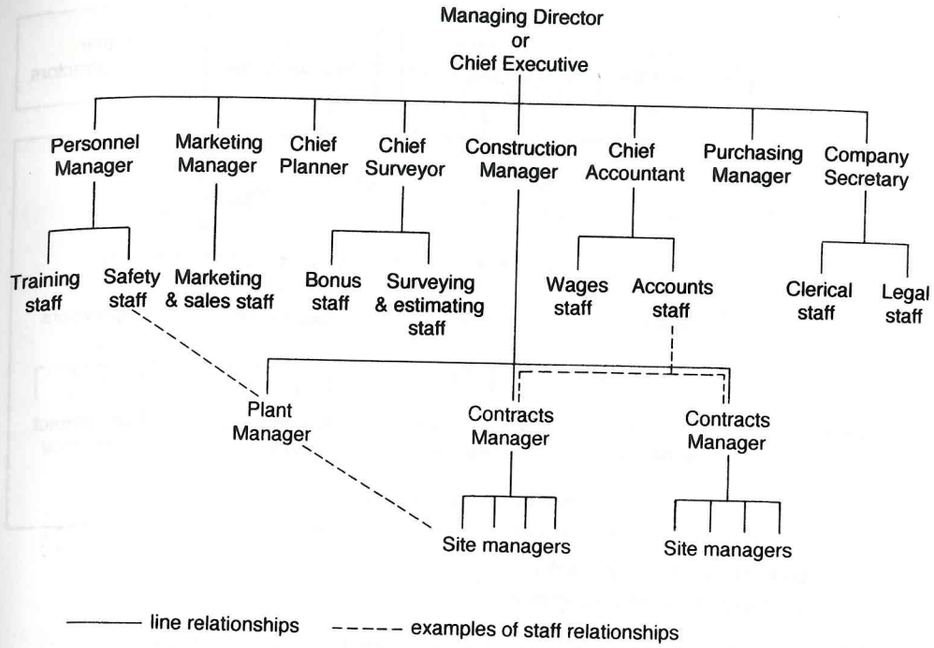


Figure 3.1 Line and staff organisation structure: construction firm.

Matrix organisations

Unlike the parent firms, project organisations do not evolve over a period of years, but have to become operational in weeks. Special attention must be given to the design of large or complex project organisations for power stations and other heavy engineering works. These temporary, task-force organisations may be better served by the matrix organisation structure, which first attracted widespread attention in the 1970s. The traditional management hierarchy – the chain of command – is partially replaced in the matrix structure by a network of lateral and vertical role relationships better suited to the need for teamwork and integration (Fig. 3.2).

In the matrix organisation, managers and supervisors responsible for the various trades and specialisms report vertically to their 'line' bosses in the parent firms and laterally to the project manager. This separates the roles of managing people and managing tasks. Project staff have both a functional boss, who runs their careers and tries to balance the demands of the project and the parent organisation, and a project boss, who 'bids' for their services. Clearly, this can create problems of loyalty and commitment. Ideally, individuals remain loyal to their company, but are committed to the project. A number of construction firms and professional practices have tried the matrix approach because they were dissatisfied with traditional methods. There are still problems. The success of this form of organisation depends on people's willingness to break away from established methods and attitudes, shifting their allegiance from specialist group to task group. A buyer has to see him/

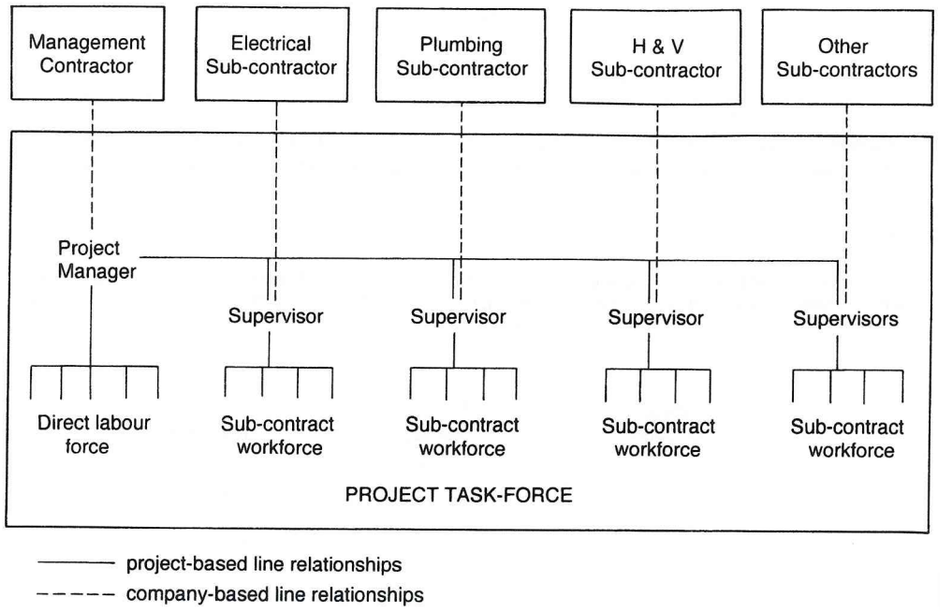


Figure 3.2 Matrix organisation structure: construction project.

herself not primarily as a member of the buying department, but as part of a project team.

Wood (2001) recognises the organisational complexity of projects, the inherent conflict between function and projects and the propensity to fracture along professional lines. He cites an alternative interpretation of these structures (Figure 3.3).

A project organisation is further complicated because its structure changes over its lifespan. This is a major difference between projects and factory-based manufacturing. The skills and resources needed within the project team alter sharply over a period of weeks or months. The team members have to collaborate closely, but their backgrounds and skills are quite different.

A project organisation should be flexible. It should respond to the type and complexity of the job. It will vary, for instance, with the ratio of specialist engineering and services work to main contractor's work. The traditional line and staff organisation may not encourage the close co-operation and good communication that are essential to the success of projects. Rigid roles, captured in job descriptions, can create problems. Loosely defined, overlapping roles can encourage the kind of teamwork needed in construction. The organisation structure must provide for ideas and information to flow in all directions, so that people are better informed and become more supportive of one another. Informal, lateral communications are legitimised in the matrix structure because they are essential for bringing the task-force members together and focusing their attention on mutual problems.

Figure 3.3 Matrix humour (Wood, 2001).

The characteristics of a matrix organisation for a construction project are summarised in Table 3.2. The main variables are its goals, timescale, tasks, people and environment. These alter considerably from project to project, so it is important to adopt a contingency or 'best-fit' approach. The resulting project organisation may not always be tidy, but what matters is whether it works. Adherence to time-honoured principles of organisation is pointless unless, in the end, the project goals are achieved.

Writers like Harrison (1992) have emphasised the special features and problems of project organisations. The characteristics of complex, one-off projects are summarised below.

- Decisions are not repetitive and a bad decision early on can affect the rest of the project. It may be impossible to recover from an early mistake.
- The learning time for those involved is limited. A manager may only experience each stage of a complex project once every few years.
- It is difficult to define suitable work patterns, planning and co-ordination methods, and control systems.
- Project personnel are drawn from many organisations and some contribute to the project on a 'part-time' basis. Their work must be thoroughly integrated.
- The companies and departments involved usually work simultaneously on other projects, each of which is probably at a different stage in its life-cycle.
- As work progresses, the emphasis shifts from design to procurement, then to site organisation and construction, and finally to commissioning and operation. No single firm or department is the most important over the whole project lifespan. No single manager (except a project manager) can assume the leading management role for the entire project period.

Table 3.2 Characteristics of a project organisation.

Goals	Clearly defined and short-term, in comparison with those of the parent firms. Stated as cost targets, time deadlines, quantities and standards of performance, quality and materials. Most project goals are quantifiable and progress towards them can be measured.
Timescale	Relatively short-term. The project lifespan is finite, with specific dates for commencement, completion and key stages of the project.
Tasks	Variable in scope and technical complexity. Less repetitive than most manufacturing tasks. Assembly of a wide range of raw and partly processed materials and components. High level of task specialisation, reinforced by trade practice and custom.
People	Wide range of backgrounds, knowledge and technical skills. Mixture of specialists, craft workers, semi-skilled and unskilled. Many involved for only part of the project duration. Willing to tolerate job mobility, low job security and poor working conditions.
Environment	Comparatively stable for the duration of the project, except for the weather, which is highly variable, and the labour market, which fluctuates in response to local competition and changes in workload.

Summary

We live in an organised society, depending on organisations to satisfy most of our needs. Yet the activities of organisations do not always contribute to people's well-being and there is a need to balance economic, environmental and social objectives

of business. Moreover, attitudes to work and to organisations are changing and employees expect a fairer deal from their employers.

There are many types of organisation, but no single ideal one. A well-designed organisation enables tasks and resources to be allocated efficiently and provides a system for co-ordinating and controlling them. Rules and procedures ensure that tasks get done and are carried out efficiently. Good organisation ensures that information flows and decisions are taken.

The size and complexity of organisations has encouraged a shift towards decentralising some organisational functions. At the same time, there is growing support for reducing the level of specialisation in some jobs, where it has been taken too far. Jobs are being re-examined with a view to making them more varied and interesting.

When a client decides to build, the construction industry has to create a temporary, project organisation and make it operational in a very short time. Construction projects have special characteristics and the kind of structure which suits them may not suit their parent firms. The success of a project relies a lot on effective co-ordination of design and production and of main contractors and specialist subcontractors. The task-force or matrix structure offers some advantages for organising construction projects.

Some organisations need to be more flexible than others, but flexibility is a vital dimension in project work. The ability to adapt to change may be the most important factor affecting the success and survival of many organisations. Downsizing is purported to be one of the ways used to improve organisational efficiency and competitiveness.

Discussion topics

The Association for Project Management's Body of Knowledge (BoK) details the knowledge and experience that people involved in the formal management of projects should possess (www.apm.org.uk/pub/bok.htm).

Revision 4 of the BoK contains the following sections:

- General
- Strategic
- Control
- Technical
- Commercial
- Organisational
- People

Rank the importance of these skills to the construction manager and highlight the principal differences between the roles of the project manager and construction manager.

The complete document can be downloaded from the APM web-site, subject to the stated copyright agreement conditions.

Chapter 4
Leadership

Management and leadership are not the same thing. Management evolved with the growth of formal organisations, but leadership is one of the oldest and most natural relationships in society. Managers have to be appointed, but leaders emerge naturally, whenever people get together to do things. But if the manager is not the person the group would choose as its leader, there could be problems. One of the fascinating debates in management is whether managers can learn to be better leaders and if so, how.

Leadership has been a popular subject for over half a century. It was eclipsed for a while by new ideas about worker participation and group decision-making, but has re-emerged with a new focus which recognises that the leader's role varies with the circumstances.

Leadership is hard to define for it is a complex process. There have been countless leadership studies, but almost all have looked at only a small part of the picture. Few studies have pulled together all the features of leadership in a comprehensive way. Moreover, much of the research overlaps with other areas like power, motivation and group processes. The piecemeal approach to leadership has meant that much of the work is inconclusive and some of the most exciting ideas, put across with conviction and enthusiastically received by many managers, have no sound empirical basis.

One of the many attempts to distinguish management from leadership defines management as 'ensuring effective and efficient operations' and the core of leadership as 'direction setting' (Novelli and Taylor, 1993).

The idea of direction setting is underscored by Schmidt and Finnigan (1992) who cite research that stresses the importance of the leader's ability to create and communicate a vision that inspires the team. These authors also remind us of Warren Bennis' witty remark that while managers give their attention to doing things right, leaders focus on doing the right things!

Without doubt, the concept of management has become debased in the 1990s 'now that everyone claims to manage something' and future-oriented leadership may supersede management as we understand it (Thomason, 1994).

Measuring the leader's behaviour and performance is difficult. One can measure the group's output, but this will depend on many factors, of which the leader's behaviour may be one of the least important. One can ask subordinates, peers or

superiors to rate a leader's effectiveness, but they will have the same problem. Moreover, they will find it hard to be objective, because of their personal feelings about the individual. Many biases creep in.

Taking a broad view, the ideas about leadership fall into three categories, focusing on:

- The leader's personal characteristics or traits.
- The leader's behaviour or leadership style.
- The setting or situation.

The characteristics of the leader

For a long time, the popular view was that certain people make good leaders because of their personality traits. Indeed, there have been hundreds of studies of leaders' traits. As personality was thought to be inherited, it was believed that leaders were born not made.

The evidence from psychology now strongly indicates that personality is only partially decided by hereditary factors. Good leaders are not just born, their personalities develop through experience.

Researchers have looked for links between personality and effective leadership. Knowing the ideal personality, firms could then select good leaders, even if they couldn't train them. Long lists have been produced of desirable leadership qualities, like intelligence, good judgement, fairness, insight, self-confidence and imagination. Others include honesty, courage, perseverence, imagination, reliability and industriousness. Yet some of the most successful leaders in history have not had certain of these qualities. Indeed, some have been unjust, neurotic, narrow-minded and even insane!

Certainly, good leaders can be above average in intelligence and may have been chosen for this reason. But many intelligent people never become leaders and research has shown that the correlation between intelligence and effective leadership is low. At best there is merely a *tendency* for leadership and intelligence to go together. Similarly, personal characteristics like dominance and extroversion only correlate weakly with the leader's effectiveness.

The personal traits and qualities of leaders influence their success – but only partially. The writer has found that employees in the construction industry look for qualities like fairness, competence and decisiveness in their leaders. Research findings do not deny the value of such qualities, but suggest that they cannot wholly explain the leader's success or failure.

A common objection to the trait approach is that it labels people as good or poor leaders on the basis of rather subjective measures of leadership performance and fails to take account of other factors which affect the leader's behaviour. To demonstrate whether or not personal traits affect leadership ability, one would need valid and reliable measures of:

- The traits themselves.
- The criteria on which a leader can be considered successful.

So far, this has proved difficult, because both personality and leadership behaviour are dynamic. People often exhibit different characteristics in different situations. A manager who is a good leader when things are going well may not be successful in a crisis.

The overall picture does not suggest an ideal leadership personality. Rather, good leaders come from many backgrounds and the personal qualities they need depend on the circumstances.

Leadership style

The search for an ideal style of leadership was spurred on by the belief that people work harder under the right style of leadership. Styles are commonly classed as *authoritarian* and *democratic*. The difference reflects the personality and attitudes of the leader and the power structure of the firm. Handy (1985; 1993) uses the less emotive titles of *structuring* and *supportive*.

The structuring leader retains most of the power for controlling rewards, settling disputes and making decisions in the group. The supportive leader shares power with the group, so that they have control over what happens.

The extreme authoritarian leader decides objectives and gives orders without consulting the group. The democratic leader seeks the group's views and keeps members informed. The authoritarian tends to be aloof and concentrates on the task. The democratic leader participates as a team member and shows an interest in the group's well-being.

The style a manager adopts reflects his or her attitude to people and assumptions about authority. Negative attitudes lead to a more autocratic style. The authoritarian manager believes that people are basically lazy and need firm control. The democratic manager has a positive attitude to the team, seeing them as responsible, keen and capable of exercising initiative and self-control. The democratic manager listens to their ideas and gives them encouragement.

In the 1950s and 1960s, democratic leadership became very popular and was thought to produce better results. Many people prefer a democratic leader and such a style can improve morale and reduce labour turnover and disputes. But there is little evidence that people will work harder for a democratic leader. Cause and effect are difficult to separate. An efficient, happy group may permit a democratic style rather than result from it. Moreover, some people prefer an autocratic leader and will work harder for one. Some managers believe that in the world of business, democratic leadership is unworkable.

Another way to describe the leader's style is as 'task-centred' or 'employee-centred'. The two terms need not be mutually exclusive. Indeed, construction managers cannot afford to neglect either task or people. This opens up the possibility that managers need to combine the best features of task-centred and employee-centred leadership.

After all, the leader is responsible for certain activities and will have to schedule the group's work, instruct and train subordinates, check finished work and give subordinates feedback on their performance. The manager must decide how closely to get involved in tasks and how much to delegate. Close supervision can cause output to drop and adversely affect job satisfaction and labour turnover. People don't like too much interference!

At the same time, the manager must look after employees' needs. This includes helping them achieve personal goals, dealing with their problems and establishing warm, friendly relationships.

There is some evidence that considerate leaders get better results from their groups, and lower labour turnover and absenteeism. However, the relationship is complex. Peter Smith (1984) cites studies of Japanese firms operating in the West, which show that task-centred managers, who stress efficiency, quality control and good time-keeping, have hard-working, willing subordinates who accept exacting standards. White and Trevor (1983) suggest that such employees co-operate because managers are not aloof, work the same hours and wear the same uniforms. These managers convey a sense of unity of purpose.

Some studies of leadership style

Likert: employee-centred leadership

In a series of studies of morale and productivity, Likert (1961; 1987) concluded that the best supervisors are employee-centred. They concentrate on building cohesive work groups and focus on the human aspects of their groups. They exercise general rather than detailed supervision and are more concerned with targets than methods. They allow maximum participation in decision-making.

There have been some powerful criticisms of the way Likert's data were collected and interpreted. Most of the data was based on surveys. The research did not attempt to change the leader's behaviour experimentally, but merely recorded the relationship between supervisor behaviour and worker performance. It is very difficult to establish cause and effect from such studies.

Indeed, attempts to replicate Likert's findings have produced inconsistent results. Employee-centred leaders sometimes get poorer results than task-centred ones. Likert's work resembles the trait approach, looking for an ideal leader for all occasions. Nevertheless, his work has stimulated managers' interest in leadership style.

Tannenbaum and Schmidt: leader style continuum

In one of the best-known discussions of leadership, these writers identified a spectrum of leader styles ranging from totally autocratic or task-centred to fully

democratic or employee-centred. Between these extremes are a number of style variations, one of which may be the most suitable in a given setting. A simplified spectrum of leadership styles is shown in Fig. 4.1.

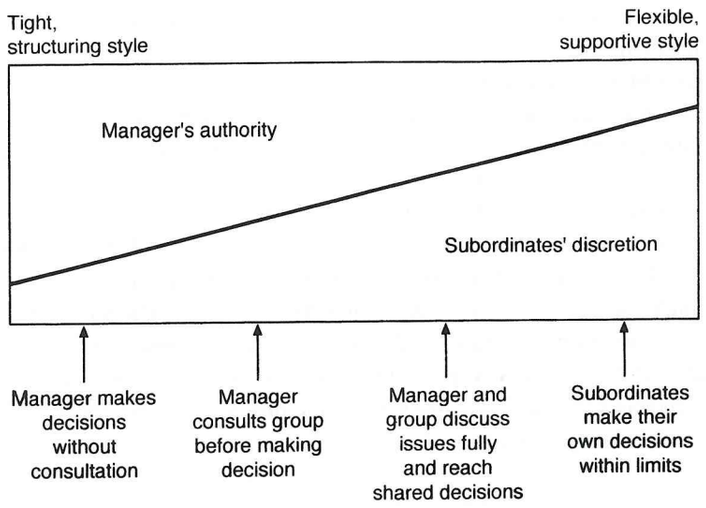


Figure 4.1 Some styles of leadership (adapted from Tannenbaum and Schmidt, 1973).

Tannenbaum and Schmidt (1973) maintain that choosing the right style depends on a careful assessment of the leader, the followers and the situation. Leaders must be sensitive to the needs of the situation and flexible enough to adjust their styles to suit.

Tannenbaum and Schmidt identify some of the factors influencing the leader's style but, like many other leadership studies, do not suggest how managers might assess and improve their own styles.

There has been a renewal of interest in employee-centred leadership, with its flexible, supportive style. This is a result of interest in empowerment and self-managed teams which managers hope will lead to efficiency gains.

Vroom and Yetton: leadership and decision-making

Drawing on previous research on group decision-making, Vroom and Yetton (1973) have developed a prescriptive model of leadership which would provide managers with definite guidelines on leader style. Their focus of attention was on the problems leaders face.

The leader must analyse the problem situation before choosing the right approach for dealing with it. The factors include:

- The qualitative importance of the decision.
- The amount of information the leader and group have about it.
- How structured the problem is.
- Whether subordinates need to be committed to the decision.
- Whether an autocratic decision is acceptable.
- How much subordinates want to solve the problem.
- How much subordinates might disagree about the decision taken.

Rules are given for relating these factors to leadership style. For instance, if the problem is serious and the manager lacks the information or expertise to solve it, participative leadership should be chosen.

Vroom and Yetton's model identifies three main styles for arriving at a solution to a group problem – autocratic, consultative and group – and identifies within this span seven leadership styles ranging from highly authoritarian to totally participative.

The authors recognise that in some settings more than one style might work equally well. In such cases, time constraints or the leader's preference should dictate the style. The effectiveness of a style is judged by:

- The quality of solution reached.
- The time taken to reach it.
- Its acceptance by subordinates.

This approach tries to offer managers a practical framework for leading. Some commentators claim that there is little empirical evidence to support the validity of the model, although Handy (1985) claims there is a lot of pragmatic evidence to support it. The approach uses a decision tree and appears rather mechanistic.

Most of the research evidence suggests that the amount of attention the manager should give to task and people depends on many factors. All in all, it seems that there is no single ideal style of leadership. For example, a style that will work on site for direct labour may not be effective in controlling sub-contractors.

The leader and the situation

Most of the evidence suggests that leadership is specific to the situation. Faced with a difficult work problem, a group may turn to someone tough, clever or experienced. In a routine or social setting, they may follow the lead of someone friendly. After a serious accident, a first-aider may temporarily become leader.

Managers need to know what kind of leadership will work in a specific situation. The main variables are:

- The leader
- The subordinates

- The task
- The setting.

The leader

The success of leaders depends on many factors, including their personalities, values and preferred styles of management, their level of competence and self-confidence. It also depends on how much they trust their teams and their ability to cope with stress.

Whether leaders choose structuring or supportive roles depends on such factors. Some leaders will trust their teams more than others do, others will feel it is their job to make the decisions. Leaders who give their teams more of a free rein must be able to live with uncertainty – and not all leaders can.

The subordinates

The success of a group partly depends on how competent its members are, how interested they are in their work, their attitude towards their leader, how much freedom they want in their jobs, their goals and how long they have worked together. On construction sites, the composition of groups can change frequently. Groups will try to balance task demands with their own needs.

The more competent they feel, the more they will want control over their work, especially if it is important or challenging. Past experience will affect the kind of leadership they find acceptable. Younger people, reared in a more permissive and democratic society, expect more involvement than many of their elders.

The task

The kind of operation is important – whether it is well defined, long term or short term, important or trivial. Mass production often needs tight supervision and control because the job has to be done in a certain way. On the other hand, research work cannot be strictly controlled. Much has to be left to the researcher's discretion, because the manager may not know what the end result will be.

Construction falls between these extremes. Some work is repetitive and interlinked and has to be tightly controlled, but other tasks are one-off and must be loosely programmed and left to the initiative of those involved.

Key issues are whether the task requires obedience or initiative, whether it is routine, problematic or pioneering and whether it is urgent. If a task has to be performed in a hurry, this may push the leader towards tighter control. Participation takes time.

The complexity of the task will affect the leader's style. Technical complexity may necessitate a supportive style if the leader lacks expertise, or may demand a tight rein because operations are closely interrelated. Organisational complexity can have similar effects. In the construction of a power station, novel technical problems may

force managers to be flexible, relying on their teams to come up with fresh answers. Conversely, a large contractor, experienced in commercial contracts, will have evolved many set procedures which staff are expected to follow.

An added difficulty is that work groups often have a variety of jobs to undertake, ranging from well-defined routines to ill-defined and long-term tasks. The leadership demands may be different for each task and this calls for a good relationship between leader and group. It is understandable that many managers give up trying to cope with such complexity and simply fall back on their habitual style.

The setting

The leader's behaviour is affected by his or her position in the firm, the extent to which the work is important and closely related to other activities in the business, and the organisation's norms and values. No manager or worker is entirely free from organisational pressures or from systems and procedures. The power the manager wields is not static; it changes from one setting to another and this affects leadership behaviour too.

Some studies of situational leadership

Fiedler: situational leadership

Fiedler's leadership studies in the late 1960s provided a much needed new focus. Arguing that leadership varies with the situation, he identified three factors which seem especially important (Fiedler, 1967):

- Whether the leader is liked and trusted by the group.
- How clearly the group's task is laid down and defined.
- The amount of power and organisational backing the leader has.

In his view, the relationship between leader and group is the most important of these factors. A leader who is liked and accepted by the team, and has their confidence and loyalty, needs little else to influence their behaviour. If the leader is unpopular or rejected, the group will be difficult to lead.

Fiedler found that the style which worked best depended on how 'favourable' all three factors were to the leader. The most favourable situation is where the task is well-defined and the manager is liked and respected and has good position power. The situation is most unfavourable when these conditions are absent. Fiedler concludes that in very favourable or unfavourable conditions, a structuring approach is better. When conditions are only moderately favourable, the leader will find a supportive approach more effective.

If the task is confused or the construction manager is unpopular or lacks power, a firm stand is needed to keep control. If the leader does not take charge, the group may fall apart. If the task is well-defined, or the manager is popular or powerful, he/

she is expected to take a firm lead, giving clear information and instructions. Under these conditions the passive construction manager may lose the group's respect.

A supportive style of leadership seems to work best in two situations. One is where the task is unstructured but the leader is popular. Here, a people-centred approach is needed to elicit the team's help in finding the answer to the problem. The stricter, directive style will not elicit the group's co-operation, for they will be afraid that their ideas will be judged unfavourably. The second is where the task is structured, but the manager lacks popularity or power. Here the leader must tread softly and be diplomatic to avoid being rejected by the group. Here the democratic leader is likely to get better performance than the tougher, controlling leader.

Fiedler's model suggests that we may have paid too much attention to selecting and training leaders, whilst neglecting the needs of the situation.

Hersey and Blanchard

Hersey and Blanchard (1982) and Hersey *et al.* (1996) put forward a variation to the situational leadership approach in which the leader's style changes over time, as the employee develops. In their model, the task-centredness of the leader starts high and diminishes as the employee becomes more experienced, skilful and willing to take responsibility. The leader's relationship behaviour (such as giving support and encouragement) starts low but increases in the early stages, eventually diminishing again as the employee achieves high levels of skill, motivation and autonomy. This approach uses a four-sector grid, reminiscent of Blake and Mouton's managerial grid. But Hersey and Blanchard's theory differs in proposing shifts in the leader's style, whereas the Blake and Mouton model argues for a single best style.

Charles Handy: 'best fit' approach

Handy (1985; 1993) puts forward a contingency approach to leadership in what he calls the 'best fit' approach. This puts the style preferences of the leader and subordinates and the demands of the task along a continuum, ranging from tight (structured) to flexible (supportive). There is no fixed measuring device for this scale – it is rather subjective.

Handy suggests that effective performance depends on some changes being made so that the three factors 'fit' together on the scale. How the leader or organisation achieves this depends on the group's *setting* – such things as the leader's power or position, organisational norms and relationships, and the kind of technology the business uses. Unless the match between the factors is improved, the group will cease to be effective. Leaders who have strong organisational back-up may pull the group and task towards their preferred ways of working. Leaders who lack this may alter their own behaviour.

Handy's approach recognises that the leader has two main roles vital to the performance of the group – ambassador and model. As ambassador, the leader represents the team in dealings with others at the same and higher organisational levels. As a model, the leader must recognise that some subordinates will copy his or her successful behaviour.

Leadership, goals and social exchange

Tolman (1932) showed that most human behaviour is goal-directed. To achieve their objectives, people often have to co-operate with others and have to choose between different courses of action. Their choices depend on many factors. Belonging to a work group is a way of achieving some of their goals and they see the leader as someone who can help or hinder them in this process.

Evans (1970) and House (1971) laid the foundations for *path–goal* leadership theory, which argues that the leader's job is to define a path along which subordinates expend effort to achieve a group goal. The approach assumes that:

- subordinates will accept the leader's behaviour if they believe it is helping them achieve immediate or future goals; and
- rewards are made conditional upon subordinates achieving the work targets set.

The effectiveness of leaders depends on their ability to help subordinates clarify their goals and see ways of achieving them. If employees feel that the leader is giving this help, their motivation will increase.

Like Fiedler's approach, the theory stresses that the leader's behaviour is influenced by subordinates, as well as task demands and environmental factors. For example, subordinates who need to work independently or feel competent at their jobs may show their dislike of having a structuring leader.

Workers carrying out routine tasks, for which the rewards are clearly identified and related to performance, would not require an authoritarian leader, because behaviour is goal-directed and the path to it clear. This conclusion differs from that of some other researchers.

Path–goal theory makes some plausible statements and House found it held up in studies in seven organisations. Research is needed to look more closely at how subordinates' expectations affect, and are affected by, the leader's behaviour.

Hollander (1978) argued that there has been a tendency to view leadership as something static, with leader and group in fixed positions. Realistically, leadership is a process in which leader and followers influence one another and their situation.

Viewing leadership as a social exchange puts the emphasis on the impact of all group members, not just the leader. Initiatives and benefits are seen to come not just from the leader but from the other team members too. Being a leader and a follower are not mutually exclusive roles.

An effective leader does things that benefit group members, but makes demands on them too. The team provides the leader with status and other privileges of position, but influences and makes demands on the leader as well. Both leader and group must give and take for the relationship to work. They are parts of a system that takes time to develop.

The leader often defines standards, sets objectives, maintains the group and acts as its spokesperson. But many situations are ambiguous, with the goals, tasks and procedures not clearly defined. Here, the leader's help is especially sought because the group wants guidance on what to do, how to do it, or why.

Trust and fairness are important. If leader and group trust each other, they are more willing to take risks. Without trust, the leader may have to resort to position power or authority. Fairness is essential in the social exchange. Even a friendly and unthreatening manager may not help the group achieve job satisfaction or meet its demands for fair play, if he or she is not fair. Members may feel they are being exploited.

Leadership: Goal setting

Before setting goals, which serve to guide, motivate and encourage people, there are a number of factors that should be considered:

- *Set task that is appropriate for the employee*. Identify the task, then consider the necessary skills, competencies, work ethics and qualities required to deliver the task. Select an employee with suitable attributes.
- *Difficulty*. Most people are motivated by tasks that are slightly more difficult, complex and interesting than their usual mundane tasks. Difficult tasks often present a challenge, encouraging people to work harder to complete the task. A heightened sense of achievement and satisfaction is often experienced when a difficult task has been completed. However, if a person considers that a task is too difficult they may avoid the task, or the thought of not being able to do the task may increase stress and anxiety, resulting in mental health problems.
- *Workload*. High levels of work can help performance. People who are busy may be less distracted than people who only have a few things to do. However, if people are given so much work that it is impossible for them to achieve all that is required, personal levels of stress and anxiety may be heightened.
- *Context*. Some people may be more willing and capable of working with different tasks, people and problems in different fields, others may not be capable or willing to work on tasks that are removed from their normal context.
- *Monitor and record*. Where people are aware that their performance is monitored and checked they are likely to increase their effort to ensure that the correct standard is maintained. The act of recording behaviour can encourage people to adopt appropriate behaviour. Quality, time, safety, absenteeism, cleanliness, co-operation or obstructive behaviour can be recorded.
- *Feedback*. Ensure that parties are aware of their performance. If improvement is required the parties need to know. Where work is performed to a satisfactory standard appropriate feedback should be given. Identifying aspects that could be improved and praising good practice are both important.
- *Reward and transparency*. All payment schemes should be clear, easy to understand and honoured. Payment should be related to effort and skill required for the task. Bonus for work delivered on time, work that is free from defects and delivered safely can serve a useful purpose. Absenteeism has become a problem for many organisations. Offering bonuses for employees who have little unauthorised absence has been shown to reduce absenteeism.
- *Trust*. Where employers or managers do not honour promises to pay bonus it is difficult to make bonus schemes work in the future.

Task and socio-emotional roles

In most groups, two leadership roles are present – a *task* role for co-ordinating the work, and a *socio-emotional* role, for looking after the well-being of the group.

Two people may even share these roles where, for example, one person is seen as competent in the task, whilst the other is more popular and recognised as having skill in holding the group together.

The leader cannot do everything. There are many roles to be performed in a group such as trouble-shooter, negotiator, advocate and counsellor. Some of these may be delegated to group members, or they may take them on uninvited. Some individuals have more status than others and will be closer to the leader. They exert more influence over the leader and the others.

Formal and informal leaders

Every work group has an appointed leader – its supervisor or manager. If there isn't one, a leader will almost always emerge, because groups need task and social leadership.

Most organisations expect one person – the *formal* leader or manager – to perform both roles. The manager has to allocate work, show people what to do and make sure they do it properly, in addition to dealing with human problems and ensuring that group members work together as a team. The successful formal leader does both things well, achieving high productivity and group satisfaction. But this is a tall order.

Blake and Mouton (1964, 1978) recognised this in their managerial grid which measures, on separate scales scoring from one to nine, the leader's concern for production and for people. The 9.1 manager concentrates on the task and shows little concern for the group; the 1.9 manager does the opposite; 5.5 is a compromise – the middle-of-the-road manager – whilst 9.9 is often regarded as the ideal, to be aimed for, but rarely achieved. Perhaps more important is that the leader knows when to concentrate on the task and when to focus on the group.

If the formal leader tends to be task-centred and fails to meet the social needs of the team, an *informal* leader may emerge within the group – someone the members turn to with their work problems and personal worries. Similarly, a group whose formal leader concentrates on the social aspects of the group may accept an

informal, task leader, especially if success at the task is vital to the achievement of their own goals. A group can operate successfully with two leaders, an official and an unofficial one, but this can lead to conflicting goals and loyalties. The group member accepted as informal leader may vary with the situation.

A further complication arises if the group's manager is ineffective in both leadership roles. In this case, informal task and social leader roles may be adopted by one or more members of the group.

The leader's competence

Many kinds of leadership study have taken account of the leader's competence or ability, either in the limited sense of technical ability or in the wider sense of competence to lead. One factor which has sometimes been underestimated is the group's view of its leader's competence. The group's perceptions of the manager's ability can account for much of his or her success as a leader. Although subjective, judgements about the leader's ability to get results carry a lot of weight with the group (Hollander and Julian, 1970).

Of course, competence may be attributed to someone who has been lucky or who has been helped by others. It may rely on a reputation built on earlier success. A successful site manager will not necessarily be an effective contracts manager.

Clearly, numerous factors affect leadership performance, yet the leader may be unaware of many of them. Researchers have often focused on only some of these variables when studying the leader's behaviour. They should not do so if they wish to discover what leaders could do to improve their performance.

Summary

The search for the ideal leader has led to the conclusion that one does not exist. There are no specific traits which can be relied on to make a manager an effective leader. Personality is not a fixed commodity. People change. A manager's confidence, decisiveness, judgement and so on, will vary over time and with circumstances. A leader may display good judgement on one occasion and poor judgement on another; be confident about some matters, unsure about others. The leader will handle some people skilfully and make enemies of others. At best, there may be certain combinations of personality factors which give the manager an advantage in some situations.

There is no mode of behaviour or ideal style which can be relied on to be effective. Leaders must learn to be flexible and alter their behaviour to suit the circumstances. Some managers are better at this than others. The evidence shows that both autocratic and supportive leaders can get good results, but attitudes to authority are changing. Many people today have been brought up to expect a better deal in their jobs and want more involvement and autonomy. Employees today will not always accept without question what managers tell them to do. Many of them want and expect to be involved in the management process.

Leadership depends on a dynamic relationship between the leader, the group members, the task and the setting in which they operate. Good leaders know the right behaviour to match the circumstances. They know when to be tough and when to be friendly. They understand that when the task is non-routine and ill-defined, as it often is in construction, they must be flexible and encourage group participation. They also know that there are times when the group may need them to take a firm lead. There are always many factors to consider, not least the abilities and preferences of the people who work under the leader's direction and how willing they are to take responsibility.

How ideas about leadership will change in the future is difficult to predict, but shifting attitudes to authority could have a big impact on the kind of leadership that will be acceptable. Nevertheless, every unique situation will still produce leaders for the job in hand. How effective they are will depend on their skills for dealing with the variables they can control and on being lucky with those they cannot.

Discussion topics

Leaders are born, not made. Discuss.

Task leaders are ineffective if they are not supported by socio-emotional leaders. Discuss.

True leaders survive whatever the situation. Discuss.

Chapter 5
Communication

Poor communication has long been a problem in the construction industry. Part of the trouble is the way the industry is organised. The project team is made up of people from many different firms. Their contributions vary and a lot of information has to pass among them. This requires a well-organised network of communication using the latest technology. Even when this network exists, communication still breaks down at a personal level, because people fail to keep their messages simple; they pass on too much information or too little; the information they give is inaccurate or misleading.

On the receiving end, people are flooded with paperwork they haven't time to read, yet often they cannot get the information they want. Estimates may be wrong, drawings out-of-date, descriptions ambiguous. Meetings go on for too long and people stop listening.

The size of the firm matters. In small organisations, communication is often good. There is more face-to-face contact, so if people don't understand what is being said, they are more likely to say so and the problem is cleared up straight away. Communication is more direct. Those making the decisions are closer to those who have to implement them.

Larger firms rely more on the written word. This puts the message on record, but misunderstandings cannot easily be cleared up. Information can be delayed and distorted as it goes up and down the hierarchy. People are separated by divisions and departments, sometimes by shifts.

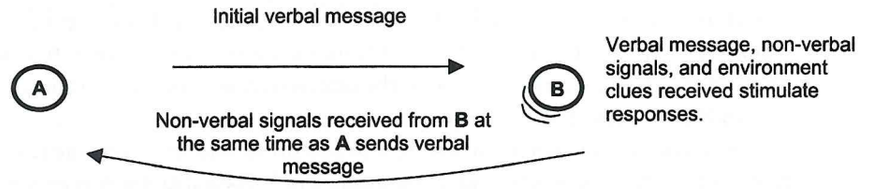
Formal communication channels can be slow and impersonal. The faster 'grapevine' takes time to develop and is often discouraged anyway. The larger the firm, the more acute the communication difficulties tend to be.

Poor communication skills make matters worse. Most people, including managers, are poor communicators and don't even realise it. Yet, improvements can easily be achieved through training or simply by making people aware of the main pitfalls and giving them feedback on how well they are communicating.

Communication process

Communication is one of those skills that we all use, yet few of us give any real consideration to how complex the process is. It is an aspect of the human that sets us aside from almost any other species on earth.

Face-to-face communication is not one way, it is transactional (Figure 5.1).



- A sends a message to B
- While A is sending the message, B is sending back communication signals, e.g. facial expression, eye movement, body language, etc.
- Both parties communicate at conscious and subconscious levels.
- Although B's body language and facial expressions suggest that B understands, other signals, such as speed of reaction and actions, suggest that B's interpretation of the message is incorrect.
- A recognises that B does not understand even though B thinks that s/he understands.
- The interesting phenomenon here is all of this can be done without B speaking and can occur before A has finished sending his/her initial message.

Figure 5.1 Non-verbal responses during interaction.

During interaction it is possible to recognise whether the people we are talking to are following and understanding what we are saying, even before we have finished a sentence. During conversation we may recognise that a person thinks that they understand what we are saying, yet their body language, facial reactions and other signals inform us that they have not actually properly understood the message. This helps us to change our sentence and add further information to help the person understand.

Because communication skills are both hereditary and developed from a very early age many of the interactions sent and received are processed at a subconscious level. We give little thought to the information being received and sent, although we do react and process the information subconsciously.

Although people are often told that they must consider what they say before they say it, during face-to-face interaction people do not process speech in their conscious mind. Conscious processing is too slow. During interaction, speech and grammatical structure, sentences and words are processed in the subconscious mind (LeDoux, 1998). While it is possible to prepare for meetings and rehearse speeches, once people react to others in a natural communication environment they will

respond through their subconscious processing. If people had to think through exactly what was to be said before verbalising each sentence the natural flow of speech would be broken up and slow. This does not mean that people cannot alter the way they communicate.

Using training, education and experience people develop a repertoire of skills that the subconscious draws upon when initiating communication and constructing responses. What this means is that the subconscious may have a library of responses and actions that it has previously used successfully in certain situations. If the situation encountered is similar to that previously encountered the subconscious quickly processes a reaction before the conscious mind has a chance to consider it. The conscious mind may be aware of the interaction as it occurs, but may take little part in the processing of the communication.

If, however, the situation is not similar to any previous encounters the reaction may be a result of the subconscious and conscious mind. The subconscious may prevent us reacting straight away with an incorrect response while the conscious mind thinks over the matter, attempting to understand and contextualise the situation.

An example of this would be when people meet and greet each other. If a person meets a close friend they do not normally take time to think about how they will greet their friend, they will normally rely on one of the ways that they have used so many times in the past. However, if a person is introduced to someone they have never met before, as soon as they encounter the person they may start to consciously and sub-consciously assess the person, considering how the person is acting, the type of person they are and what would be an appropriate response. The greeting may still be one that has been used before, or one that has previously been used in similar situations. However, greater effort will be used to think through and consciously process information, trying to determine what to say or do next.

Why experience, education and training are important for effective communication

To ensure that speech is successful, professionals should rehearse and train for different events that they are likely to encounter so that when the situation arises the speech and reaction come naturally. A natural reaction is one that is processed in the subconscious, one that is given very little thought. Although many people do not overtly train their communication skills, they may often engage others in low risk situations. During such encounters they may subconsciously practise different interaction approaches. Some approaches will not work and others will be more successful in gaining the required outcome. Once successful interaction techniques are developed in low risk situations a person's confidence may increase and they may safely enter more risky situations, drawing on the skills learnt in the low risk environment.

- *Conscious processing* is slow – when a person processes something in their conscious they are having to think things over, or rehearse, what to do or say before doing it.

- *Subconscious processing* is quick – it relies on a person's inbuilt survival skills and patterns of behaviour, which are hereditary and have evolved. Subconscious processing draws on experiences and skills learned from an early age. Experiences gained through training and education may become so well rehearsed that they no longer need any real thought and are quickly processed in the subconscious mind.

Group communication – task and relational interaction

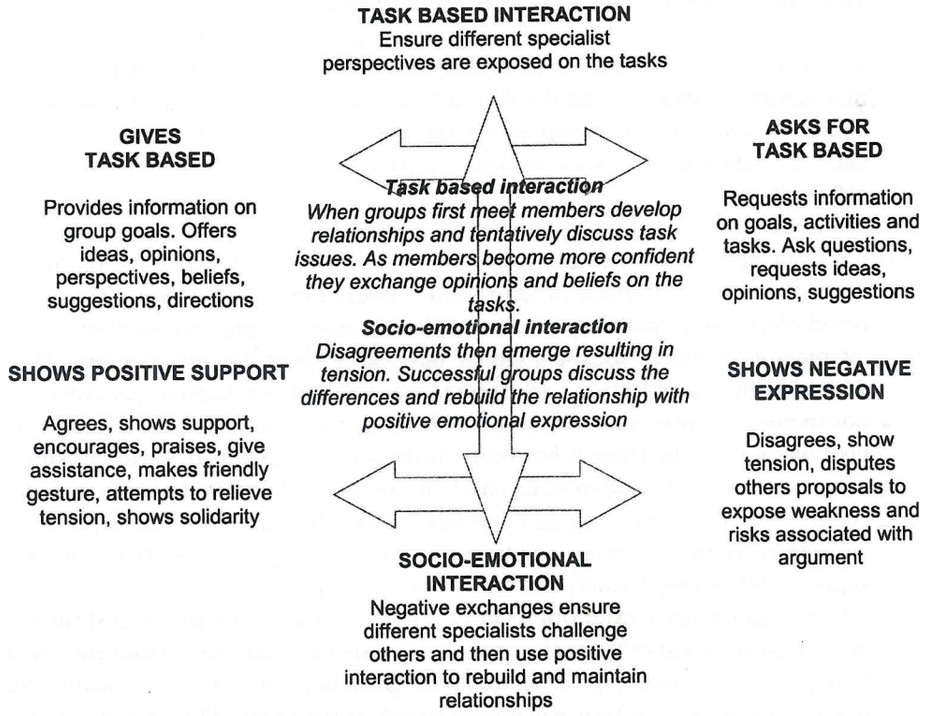
Within this diverse and complex industry it can be difficult to form and maintain inter-organisational relationships. However, without an organised social system, individuals are limited to their own efforts; the accomplishment of major projects is achieved through interlocked co-ordinated activities. It has long been recognised that communication can be divided into two distinct categories: communication aimed at achieving the group goal (task based) and interaction that is used to maintain relationships (socio-emotional) (Bales 1950, 1970; Frey, 1999; Keyton 1999, 2000).

Successful work groups balance task and relational communication (often called positive and negative socio-emotional interaction). As team members work through tasks, differences of opinion emerge and a level of conflict develops. Thus, task-based discussions result in tension that is expressed as negative socio-emotional interaction. Negative socio-emotional interaction threatens relationships. When dealing with a problematic task, group members diffuse negative emotion with positive emotional discourse (e.g. by showing support, joking, etc.), returning to the task issues once the tension has been dissipated. If negative socio-emotional talk occurs, tension is released in stages, first through task related discussion (e.g. finding common ground, explaining and reasoning, giving logical or rational explanation, etc.), then by positive socio-emotional acts (e.g. by agreeing on issues, showing support and making friendly gestures or comments).

The total communication of healthy groups is said to contain several times as much positive socio-emotional as negative socio-emotional acts (Shepherd, 1964). Group members prefer positive feedback (Jacobs *et al.* 1974); interaction that suggests the group is effective increases morale (Frye 1966). Although groups may prefer positive emotional feedback, Cline's (1994) research found that too much emphasis on agreement resulted in unsuccessful outcomes. High levels of agreement (positive socio-emotional interaction) and a very low level of disagreement and conflict are characteristics of groups that are subject to 'groupthink'. Groupthink occurs where individual members of the group feel unable to show their concern with suggestions or disagree with others, thus the group seems to be in unanimous agreement, yet, for a number of reasons, individuals may suppress their dissent. While it is clear that positive relational (socio-emotional) communication should be greater than negative interaction, the amount that it should be greater is disputed. Gorse's (2002) research into construction meetings between the management and design team found that the difference between positive and negative interaction in

successful teams was only 1–2% greater than those teams which did not achieve their objectives. The important theme that runs through all of the research is that task based discussions will result in tension (negative socio-emotional interaction), but that the tension is dispersed through positive socio-emotional interaction. Successful working relationships are maintained in a climate that has more positive than negative socio-emotional interaction. However, the occurrence of negative emotional interaction is important to encourage diversity and remove groupthink.

Figure 5.2 provides an indication of how task based and socio-emotional interaction are used.



Note: While more positive than negative socio-emotional interaction is required to help groups perform, too much emphasis on positive socio-emotional interaction can be detrimental. Failure to engage in critical discussion reduces potential to identify risks.

Figure 5.2 Use of task based and socio-emotional interaction (Emmitt and Gorse, 2003, p. 177).

Functions of communication

Communication serves many functions, all of which are important in construction management. The list below is not exhaustive and most of the manager's tasks involve several of these functions.

Information function

Information is being exchanged all the time. A manager explains a company policy to an engineer; a joiner tells an apprentice how to prepare a joint; a senior estimator tells a junior how to build up a unit rate.

But information passes both ways. The engineer will tell the manager about a problem with a sub-contractor. The joiner's apprentice will talk about a grievance over bonus.

Instrumental function

Communication is used to get things done. Good communication is vital in organisations, where groups undertake discrete tasks and depend on one another to achieve mutual goals. People need to know what they are expected to do, how quickly and how well. In construction, most of the targets are available in drawings, programmes and specifications, but the manager needs skill to communicate them clearly and make sure that they have been understood.

Social relationships function

Much of the communication which circulates round an organisation is aimed at maintaining relationships between individuals and groups, so that they continue to work as a team. The larger the organisation, the more important this social contact becomes. The contact itself is not directly productive, but it facilitates the kind of communication that is the life-blood of the business. On site, where communication channels have to be created from scratch, social contact helps create co-operation between members of the team.

Expression function

Communication enables people to express their feelings. This may happen spontaneously, as in an argument during a site meeting. But it may be carefully planned, for instance, to create a favourable impression at an interview. A grievance procedure is an example of this function operating at a formal level.

Attitude change function

Simply giving orders is not always enough. Managers may need to change employees' attitudes to get the best work from them. This would apply if, for instance, employees felt that the firm was treating them unfairly.

But this can be difficult. Some kinds of attitude are resistant to change. Others are easier to influence and personal discussion is often the best way. The manager may use group discussion to achieve certain kinds of attitude change, especially where several people are affected.

Role-related or ritual function

Sometimes people communicate because they are expected to. An operative who talks little may be labelled unsociable. The manager is often expected to give a speech or have a few words with a retiring employee.

Communication structure

An effective system for passing on information and instructions, and for receiving feedback, is essential for management control. In construction, this system must work both within and among the many firms – consultants, contractors, sub-contractors, suppliers, and client – who contribute to the design and production of the finished structure.

In large organisations, it becomes necessary to use recognised channels of communication to ensure that people get the information they need. Even in small groups, studies have shown that a communications 'free-for-all', in which anyone talks to anyone, can be less effective than a network which directs information through specific channels. In a business, these channels are:

- A leadership or line hierarchy, linking people who decide policy with those who implement it.
- Functional and lateral relationships, linking people in different sections, some of whom contribute specialist knowledge and skills.
- Procedures through which managers and workers can consult and negotiate with one another to resolve conflicts and increase commitment and co-operation.

Yet the existence of these information channels is not enough. Communications must not only reach the right people, they must be accurate, timely and clear. This demands reliable sources of data, prompt action and skilful communication.

To produce reliable information, firms need procedures for recording and storing data systematically and retrieving it in various forms to suit different needs. For instance, some of the data needed by contracts managers, estimators and planners are similar, but they want the information for different reasons and in a different form.

Information and telecommunications technologies have made the information generated during design and construction more reliable. Cheap, portable PCs have made it more accessible. But technology alone will neither make people understand a communication nor make them willing to act on it.

The direction of communication

Communication within companies and project organisations can be classed as upward, lateral or downward, although the distinction is not always helpful. Some lateral communication is between people of roughly equal status (e.g. consultant to contracts manager), whilst some is between people with functional relationships (e.g. plant manager and site supervisor).

Within a work group, a lot of lateral communication takes place and is expected to take place, as people swap information and advice about the job. Much of the information which passes informally along the grapevine is lateral and travels fast. It can be vital for getting work done quickly and efficiently.

Upward communication provides essential feedback to management. It is used for reporting progress, making suggestions and seeking clarification or help, although people often seek help from their peers before going to their bosses.

Managers may have difficulty in getting feedback on progress and costs when things are not going well. Bad news often reflects on someone's ability, possibly the manager's, so no one is in a hurry to break the news. Upward communication for control purposes is often delayed and distorted. Supervisors and managers are told what they want to hear, or what subordinates want them to hear – and only when they are in the mood to take it! Upward communication can become distorted when the sender wants promotion. People are reluctant to take suggestions or complaints to their bosses if it means admitting to failure.

Traditionally, management discouraged upward communication, but modern organisations encourage it. This is achieved through participative management, joint consultation, disputes procedures and empowerment. The employment legislation has put pressure on firms to make sure that employees can express their grievances and get a sympathetic hearing.

Downward communication is used not only to give instructions and explain strategies and objectives, but to give people information about their progress, as in appraisal interviews, and to give advice, as in contacts between head office specialists and site personnel.

More firms are recognising the importance of keeping the workforce informed about policies and activities, although some companies don't even tell their managers what is happening! However, it is widely accepted that employees ought to know about the firm's background, objectives and plans, and should be kept up to date on their prospects. Most people want to know how their work fits in with the organisation's overall goals, otherwise a sense of isolation and alienation from the task can set in.

Communication with sub-contractors demands special attention. Sub-contract site personnel have responsibilities both to their own company and to the main contractor, so that lateral and downward communications 'compete' for priority. This is a problem in any task-force or matrix organisation and there is heavy reliance on contract documents to define the duties and obligations of the contractor and sub-contractor.

It is vital that good communications are established at the outset and that contractor and sub-contractor have continual, direct contact throughout the sub-contract period. Special problems arise with engineering services on complex projects and main contractors sometimes have to appoint services co-ordinators to liaise with services sub-contractors and consultants.

Why communication fails

Many organisational problems are caused by communication failure. Breakdowns occur because of faulty transmission and reception of messages and because people put their own interpretation on what they see and hear. And, of course, the computer is often blamed! Common causes of communication failure are given below.

Poor expression

The communicator does not encode the message clearly because of difficulty in self-expression, poor vocabulary, lack of sensitivity to the receiver or, perhaps, nervousness.

People often fail to speak and write directly and simply. Obscure and redundant words clutter messages and hide their meanings. This problem shows up clearly in many formal communications such as reports and standard letters.

Reluctant communicators

People who avoid communication are often reluctant communicators. An individual's willingness to speak may lie outside the direct influence of the group (Wallace 1987); however, an individual's reluctance to communicate may affect the ability of the group to make a fully informed decision. McCroskey (1977; 1997) found that, under virtually identical situations, some people will initiate communication and others will not. Shyness may occur due to communication discomfort, fear, inhibition or awkwardness.

In groups, apprehensive individuals talk less, avoid conflict, are perceived more negatively and are less liked by other members who are not apprehensive about communicating (McCroskey and Richmond, 1990; Haslett and Ruebush, 1999). Highly apprehensive people also have a tendency to attend fewer meetings (Anderson *et al.*, 1999). Anderson *et al.*, reporting on the findings of group research, found that the degree of communication apprehension diminishes with group experience.

Communication dominance

As well as reluctant communicators, in most groups there are individuals who interact more frequently than other group members do. In decision-making groups, those who talk the most 'win' the most decisions and become leaders (Bales, 1953), unless their participation is excessive and antagonises the other members (Hare, 1976). The more proactive interactors have a greater influence on socialisation and the development of group norms. Those who dominate communication can use their influence on the group to direct questions to members; however, they may also suppress members. When less knowledgeable members dominate interaction they may suppress specialist contributions from the expert members of the group. If dominant communicators are not aware of the specialisms within the group or want to ignore other members, they may be successful in preventing experts who are less active from participating and giving their valuable knowledge.

Failing to ask questions

Asking questions is the single most effective way to extract ideas and information, yet most people are not very good at asking questions (Ellis and Fisher, 1994). The level of question asking within groups is often low compared with other types of communication activity. People have a tendency to give information, opinions and suggestions rather than ask questions (Hawkins and Power, 1999). Also, some questioning approaches can be perceived as accusation (for example 'who did that?') and can result in defensive arousal that can reduce the effectiveness of group discussions, although questions without emotional overtones do not ordinarily result in defensive behaviour (Gibb, 1961). While it would be expected that the most inexperienced or least skilled people would tend to ask the most questions, research has shown that it is often those who are more experienced or capable who ask the most questions (Gameson 1996; Gorse, 2002). Asking questions is different from asking for help. Studies suggest that where professionals do not understand a situation they are often reluctant to ask for help. This phenomenon seems to increase as the status of the professionals increase (Lee, 1997).

Asking closed and open questions

Sometimes closed questions, i.e. questions that have a limited or specific answer (e.g. 'yes' or 'no') can be useful to get a quick answer without irrelevant or misleading information. Other times, open questions, which allow people to explain their answers, are more useful.

Based on information collected during focus groups, many project managers claimed that their subcontractors exaggerate the truth or lie about performance. One problem that seemed to occur was that people would offer 'yes' or 'no' answers to questions rather than supplying detail. Thus, when subcontractors are asked if they will complete their work by the weekend, they often respond with a simple 'yes', when in fact only part of the work will be completed. One way of avoiding such answers is to vary the method of questioning. With trustworthy people we can ask simple questions, which may only require a 'yes' or 'no' answer. Where we have learnt not to trust people we can ask for more detail, or rather than asking a question, we can give an instruction e.g. 'Tell me what needs to be done to finish the work', or ask an open question e.g. 'Can you explain what work you have left to do?', then follow up with a more delving question e.g. 'What plant, equipment and workforce have you ordered to complete the works?'. Always take a strong interest in what is being said. Ask them to clarify dates and numbers, let them know you are recording the detail and will follow up with a visit to site 'just to check everything is

going OK'. Such attention may galvanise the person into action, if it does not, at least as a manager you are aware of the problem and need to seek a remedy.

Failing to seek help

Professionals may not seek help, even when help is required, as help-seeking behaviour implies incompetence and dependence. Research on help-seeking behaviour suggests that as the status of the professional increases they become more reluctant to seek help from others (Lee, 1997).

Research has also shown that costly errors made in multi-disciplinary projects could have been prevented by seeking expert help that was available at the time, for example, Capers and Lipton's (1993) research into the behaviours of engineers involved in the development of the Hubble Space Telescope. During the development of the telescope the engineers were monitored using surveillance equipment. The engineers were found to avoid interaction with the specialist employed to provide expert optical advice. The engineers' behaviour showed that they did not want faults to be seen by others and wanted to resolve problems on their own, even though they did not have the knowledge to resolve the problems. The result was that the telescope was launched into space with faults, and the expert who was employed to provide help and advice, but was blocked during development, was used to help correct the faults when the telescope was in space. It would have been much more effective to correct the problems before the launch by seeking help and consulting with the experts.

Help-seeking behaviours are fundamentally interpersonal; one person seeks assistance from another (Lee, 1997). Seeking help from others often occurs simultaneously with information and feedback-seeking (Morrison, 1993). Individuals are more likely to seek help from equal status peers (Morrison, 1993; Lee, 1997) and others who have helped them earlier; co-operative patterns are reciprocal (Patchen, 1993).

Failing to disagree

Disagreement is often seen as a negative term, yet it is found in most observations of group interaction. Moreover, Cline (1994) found that when groups avoid disagreement the vulnerability of a proposal may be overlooked. Conflict during discussions can have positive effects on decision-making, challenging and evaluating proposals and exposing risks of decision; however, if conflict results in a dispute (allocating blame and fault), outcomes of a satisfactory nature are substantially reduced.

A certain amount of challenge, evaluation and disagreement is necessary to appraise alternatives and reduce the risks. Furthermore, Averill's (1993) review of anger based research found that a typical angry episode would often result in change which had positive benefits, and typically the relationship within which the anger was expressed was strengthened more often than it was weakened.

Overloading

Managers often give and receive too much information at once. This causes confusion and misunderstanding. Research has shown that the amount of information a person can cope with at one time is quite limited, especially when the subject matter is unfamiliar and several communication channels (spoken, written, graphical) are being used.

Poor choice of method

People don't always stop to think how to get their message across. Sometimes the spoken word is best, but what is said is usually quickly forgotten. The written word is often preferred and it leaves a semi-permanent record. A simple sketch may be clearer than a lot of words. The method must suit the communication.

Disjunction and distortion

Sender and receiver may not share the same language, dialect, concepts, experiences, attitudes and non-verbal behaviour. Non-verbal cues can have different meanings in different cultures. A message can be misinterpreted because receivers see it in terms of their own experiences, expectations and attitudes. Their outlook and what they think is important will influence how they interpret the message.

Communicators may also 'shape' the message, sometimes unconsciously, to protect their own position or through lack of trust. People often edit information when they feel their credibility is threatened.

Distance

Designers are separated from contractors, sites from parent companies. This limits face-to-face communication and non-verbal signals, like facial expression, which help the communicator and receiver to judge each other's responses.

Status differences

People in relatively junior positions may find it difficult to communicate with those in more senior positions. The opposite can happen too. People may be reluctant to report difficulties or lack of progress to their managers, yet they often like to be consulted and given the chance to air their grievances.

Feelings

How a person feels about a message or about the sender can distort or overshadow its content. In face-to-face communication, the sender may be able to detect this problem, often through the body language of the other person. If a message is

received unfavourably, a negative attitude may be provoked in the sender and this in turn affects the receiver. Positive feedback has the opposite effect. If people are aware of this problem, they can avoid setting up a chain of negative reactions. People sometimes totally ignore negative or critical communication to protect their self-esteem.

Skilful managers recognise that each communication is more or less unique. They judge the situation and use all their skills to ensure that people understand what they are trying to convey, accept it and are willing to act on it.

Communication methods

People communicate through language and pictures. Language is conveyed through speech, writing and symbols; pictures are communicated by graphical means, such as drawings and photographs. Managers seldom give enough thought to choosing the best means for conveying an instruction, idea or piece of information. Each method offers a range of options, but has drawbacks as well as strengths. One, or a combination of, methods will usually provide the manager with the right vehicle for conveying a message.

Spoken communication

This can be direct, face-to-face conversation or an indirect telephone call or recorded message. Face-to-face communication is a powerful method, although many people do not use it skilfully. It takes several forms:

- Individual directives, such as a work instruction.
- One-to-one discussions, as in staff appraisal.
- Manager to group, as in a briefing.
- Group discussions, as in site meetings.

Spoken communication needs careful planning, clear expression and the ability to arouse the listener's interest and support.

With indirect conversation via telephone or two-way radio, lack of non-verbal feedback can cause problems. With recorded messages, the sender gets no immediate feedback at all.

If the manager wants to give the same information orally to many people, it usually pays to call them together. But if the manger wants to gauge individual reactions or understanding, the group should be small.

Spoken communication leaves no permanent record. This encourages people to speak more freely, but they soon forget most of what they hear.

Meetings

Organisations use meetings to exchange information, generate ideas, discuss problems and make decisions. Some meetings, like company annual general meetings, are required by law.

Site meetings are used to inform, co-ordinate, allocate tasks, update plans and check progress. They create commitment and enable people to get to know and trust one another. They help people to understand one another's viewpoints and problems. Problem-solving meetings have become more common because the manager seldom has all the information and skills needed to find a solution single-handed.

However, meetings can fail. They can be so formal that time is wasted on rituals. They can be so casual that they lack direction and purpose. In meetings, people seldom build on one another's ideas. Instead, they wait for the chance to make their point, ignoring what was said earlier. They often criticise and antagonise one another before ideas have been properly debated.

A good chairperson avoids competing with the others, encourages everyone to contribute, listens to what they say, keeps the group on course and makes sure all ideas are considered.

However, chairpersons can unwittingly stifle creative suggestions and discourage the positive thinking that is needed to throw up new ideas. Also, they are usually senior employees and have influence outside the meeting, so people are careful what they say.

Some people believe that unchaired meetings are more productive, but others claim that even a reasonably competent chairperson can increase the value of a meeting. He or she acts as a conciliator, controlling aggressive and defensive behaviour; and sums up, stating clearly the agreements and decisions reached.

Before calling a meeting, a manager should ask:

- Is the meeting necessary?
- What will it achieve?
- How can it be effectively managed?

Meetings and action points: make people act on action

It is common for meetings to identify issues and then decide for action to be taken; however, in many meetings the specific action agreed fails to be delivered on time.

To help instil responsibility for action:

- Discuss the issue thoroughly.
- Identify action and responsibility.
- Confirm that the action point is agreed with the person responsible.
- Ask the person responsible to specify a time when the action is to be undertaken and completed.

- Record the action, person responsible and the date that the action will be undertaken and completed in the minutes. Such information can also be recorded by the chair or project manager in their diaries to help them remind parties and check progress.
- Between meetings, remind people of action points using written communication, save evidence of reminder for the next meeting.
- Nominate someone to check on the progress of the action and report.
- If at a subsequent meeting the action agreed is not delivered by the specified date, find out why and ask for a new date of delivery. Both the previous and new date should be recorded in the minutes.
- If parties continually fail to deliver, the meeting minutes and reminders become embarrassing for the individuals and provide strong supporting evidence for employment, contractual or legal disputes. However, the act of recording dates agreed and any slippage often results in action and prevents issues developing into disputes.

Project meetings

These meetings, attended by members of the project team, are used to:

- ensure that the contractor and other team members understand the project requirements and have an opportunity to check contractual, design and production details and ask for clarification or information;
- ensure that proper records are kept and contractual obligations met;
- compare progress with targets and agree on any corrective action;
- discuss problems like delays or sub-standard work which may affect the quality, safety, cost or timing of the project;
- ensure that contractors and sub-contractors agree on action necessary to meet their obligations;
- check that changes are confirmed in writing and that work is recorded and agreed.

The designer, quantity surveyor and main contractor normally attend project meetings, together with those consultants and sub-contractors involved at each stage of the project. Normally, meetings are held at regular intervals.

Site meetings

The main contractor will hold regular site meetings, some of which will be attended by sub-contractors and key suppliers. The designer may be invited. A meeting will often be used for several purposes. These may include:

- *Internal control*, to review progress, cost, safety and quality against targets and contractual commitments; to update plans.

- *Co-ordination*, to ensure that the work of the main contractor and sub-contractors is properly co-ordinated.
- *Problem-solving*, to identify and discuss problems such as delays, materials shortages and labour difficulties, and to take action to remedy them.
- *Contract administration*, to identify any information needed; to check that proper records are being kept; to monitor the documentation and agreement of variation orders.
- *Labour relations*, to discuss problems relating to work methods, working conditions, safety, incentives, etc.

Written communication

Written communications range from a hand-written note on a scrap of paper to a formal, word processed report. They can be transmitted manually or, as is increasingly the case, by electronic means using systems like fax, e-mail or the Internet. Technology has made it possible to transfer a written communication, in hard copy, to someone's desk the other side of the world, in seconds.

Written communications can be carefully planned and leave a permanent (or at least, semi-permanent) record. On the other hand, an effective written message demands considerable skill and can take time to produce. Once published, it is difficult to retract. People are therefore careful what they write. Their readers can quickly see any contradictions when the message is on paper!

Reports

There are many kinds of report. On site, they give feedback on costs, progress and other aspects of performance. At head office, they may precede a policy decision or change of procedure, or simply give an account of something happening in the organisation. Reports don't necessarily result in decisions or action, but frequently do because they show a deviance from intended standards or targets.

Business reports can be oral, but are usually written because they deal with matters needing careful consideration. They are often supported by figures and diagrams.

A good report is clear, accurate, concise and timely. It should:

- contain everything the reader needs to know and nothing more;
- present the subject matter accurately and logically, giving sources of data, where appropriate;
- make sense to anyone intended to read it;
- clearly summarise the key points, conclusions and any recommendations.

Most reports are structured to help the reader obtain information easily. The exact arrangement depends on the purpose and subject of the report, but typically includes an introduction, the body of the report and a terminal part.

Introduction

This states the aims and terms of reference. It may explain the format of the document and give an outline of the findings. A good introduction focuses the reader's attention on the theme and purpose of the report. There may be a title page and contents page, depending on the length and formality of the report.

Body of report

This contains the subject matter and discusses the data and findings. It need not necessarily be lengthy. Some of the best reports set out the main points in short, crisp paragraphs. Sub-headings make the arrangement clearer, but should be short and self-explanatory.

If the data are bulky, they should be put into appendices at the end of the report. This keeps the body of the report short and clear and readers need only refer to the appendices if details are needed.

Terminal part

This ranges from a *Summary*, if the report has simply gathered data, to a lengthy *Conclusions* section, if advice has been sought. Some reports contain *Recommendations*, where stipulated in the terms of reference.

Busy managers welcome brevity and often rely on reading the summary or conclusions of a report. The terminal part of the report should contain nothing new, apart from any appendices and, if necessary, references and an index.

Plain talking and writing

Business communication is about getting information and ideas across to people. So much information flows through the organisation nowadays that neither manager nor team has time to waste on elaborate communications. Messages must be put over as clearly and succinctly as possible.

Engineers may wish to know that 'transmissions containing formal gearing require detergent lubricants of high viscosity range', but the fitter wants to know whether to use green label oil in the lower gear box (Maude, 1977).

Writing and speaking skills have been neglected. Few managers are trained in the use of language beyond their school-days. The following extracts from construction publications show how much improvement is possible:

> Drawings are all too rarely fully available at this stage of the proceedings, but now is a good opportunity to initiate a comprehensive drawing register and index. [27 words]

The author was trying to say: 'Start a drawing register and index now, even though some drawings are missing.' The main point comes across here in half the words.

A building magazine reported:

> It is difficult to approach the subject of the possible takeover and rehabilitation of failed housing from the public sector by entrepreneurs from the private sector with any confidence, simply because there is not a single case where this has actually happened. [42 words]

In other words: 'As no private developer has ever taken over failed council housing, it is difficult to comment'. (16 words)

Vague, general words should be driven out in favour of 'concrete' words. Key words should be near the beginning, so that the receiver knows what the message is about.

Another building publication had this to say:

> The more optimistic among us might have expected that post-war housing, taking advantage of new building techniques, would be less troubled by condensation and damp than pre-war housing. Unfortunately the reverse is the case. [34 words]

What the author meant was: 'Post-war houses have more condensation and damp troubles than pre-war housing, despite new techniques'. (14 words)

Some might argue that the original versions had more style. Harold Evans (1972) cites Matthew Arnold's advice: 'Have something to say and say it as clearly as you can. That is the only secret of style.' One of the beauties of the English language is that clarity, vigour and economy of words can go hand in hand.

Evans says that people should write positively, prune ruthlessly, and care about the meanings of words. His advice is given below.

Limit the ideas in sentences

Sentences should communicate one idea. Short sentences make for clarity. Too many compound sentences make the message heavy-going. The following sentence contains too much information:

> Three bricklayers who between them had more than twenty years' continuous service with the company and who, until now, had given no cause for complaint, were ordered off the site today by the angry supervisor, after two verbal warnings and a written warning about their bad behaviour and poor workmanship.

Be more direct

Use the active voice. 'The manager called a meeting' is more vigorous and economical than the passive version: 'A meeting was called by the manager'. A succession of passive sentences can ruin a communication.

Be positive. Make sentences assertive. 'The manager has abandoned the new bonus scheme' is more effective than the negative statement: 'The manager is not now going ahead with the new bonus scheme'.

Evans argues that government officials, reports and ministers are the worst perpetuators of the passive: 'It was felt necessary in the circumstances; it should perhaps be pointed out; it cannot be denied', and so on.

Communicators should avoid double negatives. 'It is unlikely that annual bonuses will not be paid to site staff' means that they probably will! Look at the improvement that is possible:

> At its meeting last month, the Board of Directors decided that it was highly unlikely that there would be no deterioration of the housing market and that the company could not be expected to maintain its present market share unless a drastic change of policy was agreed by all concerned. [50 words]

> The Board of Directors warned at last month's meeting that a drastic policy change is needed to maintain the company's workload in a declining housing market. [26 words]

Avoid monotony

Messages can become monotonous if the suggestions above are too rigidly followed, but there is plenty of scope for variety. The structure and length of sentences can be varied without losing vigour and directness. The function of a sentence can be changed between statements, questions, exclamations and commands.

Avoid unnecessary words

Every word should earn its keep. If a word doesn't add something to a message, it should be left out. Redundant words waste the reader's time and obscure meaning. Driving out abstract words often saves on length and aids clarity. Abstract nouns like issue, nature, circumstances and eventuality are often mere padding:

> In the circumstances, the plasterers should be paid last week's overtime, even though the issue cannot be resolved to the entire satisfaction of the manager because of the faulty nature of their work. [33 words]

> The plasterers should be paid last week's overtime, even though the manager is still dissatisfied with their work. [18 words]

Economy has to be used intelligently, but writing with concrete words is usually shorter and more interesting. As Harold Evans points out, words stand for objects, ideas and feelings. Failure to match words with objects leads to vagueness.

Car parking facilities	Car park
Adverse climatic conditions	Bad weather
The canteen has seating accommodation for 80 people	The canteen seats 80

Like words, signs and symbols also stand for objects and information. They have become popular and important in communication. When they make use of icons, as they often do, they become graphic communication.

Graphic and numerical communication

Written communication can be unsuitable when information is extensive or complex. Text ceases to be effective when:

- whole paragraphs have to be read before meaning can be understood;
- individual facts or numbers are difficult to single out from the mass of data; or
- trends are hard to identify and comparisons difficult to make.

In construction, there is heavy reliance on graphic and numerical communication, mostly as drawings, diagrams, schedules and charts. A single drawing often conveys a great deal of information in a much clearer way than would be possible using words alone. Drawings are very useful as long as they are accurate, easy to understand and supplied at the right time. Bills of quantities use numerical data linked with tightly structured text to give condensed information. They are expected to fully and accurately describe a project. Bar-charts and network diagrams are good ways of presenting information which is partly numerical and partly written. They are a valuable tool for management control.

These communication methods are not always satisfactory. A designer's drawing may be supplied late or may be unclear. Bills of quantities don't always describe the work as fully as they should. Programme charts are based on approximate information and may not be kept up-to-date.

However, charts, tables and graphs are powerful methods of communicating certain kinds of information. They are often regarded as an aid to text communication, but can in fact do the main work of communicating (see Fig. 5.3). Tabulated information:

- makes the information clearer by presenting it in a logical way;
- communicates more concisely than would be possible using words alone;
- makes comparisons much easier, by arranging data in columns and rows.

Graphic presentation is especially useful for:

- highlighting key trends or facts in complex information;
- showing relationships and differences;
- displaying information that can best be understood against some visual scale.

On the other hand, graphic information takes time to produce and can only effectively show a limited amount of information at one time, without causing confusion.

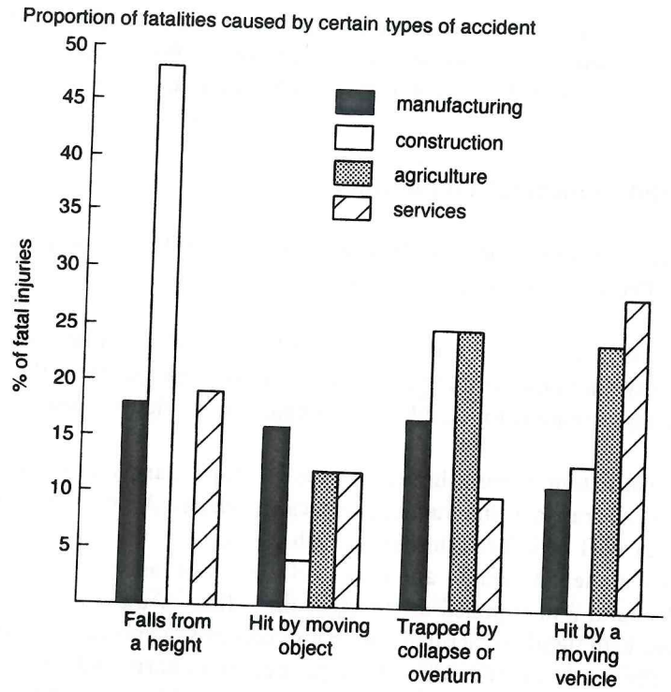


Figure 5.3 Example of graphic communication.

Information management

Communication is about moving information around and processing it in various ways. Some of the information may be in the form of ideas or expressions of feelings, but it still affects organisational performance. Because communication is the lifeblood of an organisation, managers now recognise that creating effective systems for managing information is crucial to their success. Information technology (IT), with its associated fields of microelectronics and telecommunications, has revolutionised information management (and therefore communication) in several ways, in particular by:

- speeding up enormously the processing of information (collection, collation, analysis, synthesis, presentation and transfer);
- making available to organisations much more information about their own performance, knowledge of their competitors, and data about other external bodies, events and trends;
- improving management information systems through computer-based systems, giving managers faster access to better information, leading to more effective planning, decision-making and control.

It is easy to decry IT as merely a tool of management, but it is much more than that. IT does not simply improve communication, it performs work for the organisation. For example, computer programs can simulate dozens of project management decisions the manager might make, and present and compare the outcomes. Such a task, performed in minutes or even seconds using a PC, can produce results which might have taken the manager weeks or months to achieve (if at all). Database technology can be used to manage the large quantities of data generated on projects. Flowers (1996) describes the operation of relational databases and shows how data can be structured to give maximum benefit to the manager on a construction project.

Expert systems already exist, programs which perform tasks using artificial intelligence to simulate human expertise. These systems can make diagnoses and judgements, cope with unreliable and unclear information and handle probabilities ('it seems as if...') and possibilities. Developments in IT are so far-reaching, they will require managers to rethink words like information and system, and perhaps even the concept of management itself (Harry, 1995).

The implementation of computer-based management information systems can create problems, typically:

- *Negative attitudes to change*. Many employees resent having their tried and tested routines overturned.
- *Lack of employee commitment*. Employees have not been consulted or involved in the design of the new system.
- *Disruption of organisation structure*. The system disrupts established departmental boundaries.
- *Disruption of informal communications*. New systems alter communication patterns and destroy the informal networks which existed.

In addition, some communications, at a more personal level, depend for their effectiveness on face-to-face contact and body language, vital to the richness and success of interaction. Here, electronic communication remains inadequate.

Management information systems create new posts, including the chief information officer (or MIS manager), whose roles include change agent, overseeing the design, introduction and monitoring of MIS and its surrounding technologies; and 'human link' with senior management. Unlike conventional data processing managers, who concentrate on the day-to-day tasks of their departments, MIS managers focus on planning and developing creative solutions to the organisation's changing information needs.

In the future, it seems that self-managing computers and robots will learn about the organisation and its activities, teach themselves to perform tasks, repair and update themselves as situations change and, of course, communicate with and learn from one another.

The manager's behaviour: communication and influence

One of the most influential works on this subject is Dale Carnegie's highly readable book, the title of which has become a catch phrase: *How to Win Friends and Influence People*. The book has sold more than ten million copies in dozens of languages.

Carnegie's underlying message is simple enough – how you behave towards others must be based on what you hope to achieve and how people will react to you. If your behaviour makes other people feel upset, this will more often than not limit your chances of achieving what you want to achieve in working with them. On the other hand, if your behaviour makes other people feel good, they tend to feel positive towards you and are more likely to be co-operative – and this improves your chances of achieving your goals. In the context of managing yourself, the important point here is that managers who learn to control their own behaviour understand the impact they are having on others and adapt their behaviour to get the results they want.

Such managers learn how to make other people feel good, so that they are more likely to be motivated. Achieving this is not simple, but some of the following suggestions can help to get the best from people:

- Make people feel important.
- Show that you value them and recognise their abilities.
- Be a good listener and show an interest in them.
- Show that you can see people's points of view.
- Be sympathetic to their ideas and needs.
- Give plenty of praise and encouragement.
- Be sincere and fair with everyone.

Recognition

A special reason for wanting to make people feel important and for recognising their capabilities and achievements is that it often helps in getting the most out of them – spurring them on to greater success. To achieve this, the manager must behave in such a way that the individual's confidence is built up and this means seeking opportunities for giving the person praise and recognition. Many managers are quick to criticise, but slow to congratulate people on a job well done. Yet the praise – or positive reinforcement – can produce an improvement in the individual's performance.

People will, of course, see through false praise – or flattery – but the manager should be able to find some basis, however small, for complimenting people on their work. Many employees want to be seen to be competent and want to maintain their self-esteem, so even a word of praise for a minor job can have a beneficial effect on their future performance and motivation.

Of course, there are times when subordinates have been careless or lazy – or for some other reason have done a bad job. How does the manager criticise such people? This depends on the individual – but what the manager must guard against is the negative effect that direct criticism can have on many employees. If criticism damages their self-esteem or creates bad feeling between them and the manager, the net effect of criticism is negative – and some long-term harm can be done to the relationship between manager and subordinate. In extreme cases, the manager may cause bitter resentment or even become hated for handing out criticism.

Empathy

Carnegie emphasises the importance of trying honestly to see things from other people's viewpoints. But most managers are somewhat self-centred. They are mainly interested in their own problems and achievements. The trouble is, everyone else is the same. So the manager who can break out of this mould and show a real interest in others will make a big impact. Such a manager will really try to understand people's aspirations, feelings, ideas and worries – and show that these are as important as his or her own. To show empathy with another person, the manager should pause before starting a conversation and think 'if I were the other person, what would I want to hear now?'. This requires considerable sensitivity on the part of the manager, a quality well worth developing.

Empathy involves not only trying hard to understand what another person is saying or thinking, but responding in a way which *shows* that you understand or are trying to understand. So, the many signals the manager gives to the other person – verbal and non-verbal – can be very important.

Listening

Being a good listener is an important skill, often lacking in managers and non-managers alike. In fact, most people much prefer talking to listening. The manager who can listen not only conveys a message to others that they are *worth* listening to – but also learns a lot from what they have to say. Of course, there are exceptions and managers generally haven't got time to waste on irrelevancies. But there is scope for a lot of useful listening, if the manager has the skill to do it properly and be selective about it.

Among the skills of listening are:

- Interpreting what is being said to understand its meaning (this involves 'decoding' non-verbal as well as verbal signals from the person talking).
- Giving feedback which shows you really understand what the person is saying, but without interrupting.

When the other person is being long-winded and taking up too much of the manager's time, then action is needed to curtail the listening. Here the manager must signal to the other person that the exchange must be brief and to the point.

Encouraging a long encounter	*Signalling a time limit*
'Come in, Joan. How are you? Has Henry recovered from his operation yet? Did you enjoy your trip to France...'	'Joan, I have an appointment at ten but I'm happy to spend ten minutes with you now, if we can solve the problem in that time.'

Assertiveness

Assertiveness has not been given much attention in management, probably because it has rarely been thought of as a problem. But in the last few years, the value of assertive behaviour has been recognised and taken more seriously. Training in assertiveness has become quite common and there are even self-help guides for those who want to assess or improve their assertiveness (see, for example, Lloyd, 1988). An insight into assertiveness shows that many managers are *aggressive* rather than *assertive* – and the two are not the same.

Aggressive managers convey an impression of superiority and often disrespect, their wants and rights being placed above those of others and therefore tending to infringe the freedom and rights of others. Aggressive people tend to stand their ground, are often inflexible and obstinate, belittling others and making them angry or humiliated. They can be sarcastic, accusatory and rude.

Compare this with assertive behaviour. Assertive managers encourage honesty and directness – and do so *by example*; they communicate a feeling of self-respect and respect for others. They try to help others achieve their needs, as well as achieving their own – creating 'win–win' situations that benefit all concerned. Assertive people seek co-operation, show tact, and are genuine, open and enthusiastic.

Less common among managers, although elements of it are often present, is non-assertive behaviour. Non-assertive managers tend to be placid and sometimes vague and obscure, imparting messages of inferiority or lack of self-confidence. Such managers can be hesitant, defensive and subtly dishonest, being at the same time disrespectful to subordinates but deferential to their seniors.

Personal skills and interaction

Construction firms are realising more and more that their managers and other employees need good personal skills to carry out their jobs effectively. This realisation has not only dawned on the construction industry; in recent years, many other industries and professions have started to give much more attention to training in this field.

For instance, the Metropolitan Police Force included in its complete policing skills programme: (1) self-awareness; (2) interpersonal skills; (3) group awareness. This means that along with the training they receive in the more 'glamorous' side of their work – driving, detective work, firearms and so on – police officers learn such

skills as how to assess their own behaviour, how to compare themselves with their peers, positive and negative aspects of verbal and non-verbal communication and how to control and change people's attitudes and behaviour, whether colleagues or the public (Mitchell, 1989).

Even very senior managers often value personal skills very highly. For instance, in a recent UK study of 45 managing directors, most of them mentioned *people skills* in one form or another as 'equally important or a very close second' to decision-making skills (Cox and Cooper, 1988). Managers in UK construction firms often rank their interpersonal skills higher than all other management skills, regardless of whether they are from a trade or technical background and irrespective of their age (Fryer, 1994b).

One reason why such skills are rated so highly is that managers realise that to get things done and to elicit co-operation from people, they have to establish rapport with them, persuade them to accept goals and motivate them. This involves creating feelings of satisfaction, approval and respect in a range of situations, such as when discussing a work problem, interviewing someone, explaining a new method, counselling or bargaining.

Establishing a good rapport is an important starting point in exercising personal skills and is achieved in a number of ways. Argyle (1983) summed up the ways in which rapport can be created:

- Adopting a warm, friendly manner; smiling; using eye-contact.
- Treating the other person as an equal.
- Creating a smooth and easy pattern of interaction.
- Finding a common interest or experience.
- Showing a keen interest in the other; listening carefully.
- Meeting the other person on his or her own ground.

Clearly, establishing good rapport with people requires skill. It involves good communication, trust and acceptance, and creating relationships in which people feel comfortable with one another. It brings into play a number of human skills which have not been taken seriously enough by most managers in the past. And these skills must mostly be practised face-to-face; not through memos and telephone calls, but through personal communication.

Effective personal communication

Even though most managers and professionals *appear* to understand the value of good communications, somehow the message often fails to get through. Managers seem clear enough that an important purpose of communication is to involve employees, so that they are committed to the business and therefore contribute effectively to its work, but little seems to be done to apply communication to make this happen.

Drennan (1989) gives an interesting case study of a large firm which wanted to

'beef up' its internal communications. This is how it did it. First, senior management redefined the firm's key goals so that they would be simple and understandable to all employees, relatively stable over the next five years and couched in such a way that every department and employee could do something to contribute to them.

Next, senior managers were asked to consider what, in practical terms, they were going to do to achieve these goals. A series of conferences were held at various levels, so that ideas and proposals about how the goals could be achieved and how to measure and communicate progress flowed back and forth among employees throughout the organisation. Each working team put together its practical programme and presented it to the next level of management for approval. The work teams set new performance targets for themselves and soon charts and graphs started to appear showing how well teams were doing.

The message is clear – if people know what they are striving for, they will largely manage themselves. But they cannot find out what they are striving for without good two-way communication and this will only happen if people – managers and other employees – want to talk to one another and know how to do so effectively.

Summary

Communication breaks down in organisations because people's interests, perceptions and viewpoints differ. People fail to see how their work affects others and their communication skills are often weak. Senior managers have the job of developing a communication network to suit the size of the firm, the projects it undertakes and the people involved.

Managers must help employees to improve their communication skills and encourage two-way communication within their groups, making time to listen to, and understand, what people say. The time will be well spent.

Informal communication channels are important but are sometimes suppressed. They must be encouraged. They supplement rather than replace formal channels, which can be inadequate on their own. However, managers must use judgement where channels are contractually prescribed.

Communication should be as direct as possible, without too many links in between the sender and the person who must act on the message. This is especially important in large organisations, where neglect of lateral relationships between people of similar rank creates problems. In construction, the site manager is largely isolated from other site managers who have similar problems and from the specialists who provide expertise. Opportunities for the exchange of ideas and information are restricted.

Good communication and willing co-operation are inseparable. Managers who stress the technical side of their jobs often fail to recognise that people may be suspicious of their motives and may misunderstand or distort what they say. Sensitivity and positive attitudes to people are vital to successful communication.

Revolutionary changes have taken place in organisational communication, with the development of the technologies associated with microelectronics and telecommunications. Information is now available to managers and other employees faster, more reliably and in larger quantities than ever before. Information now has to be systematically managed and information networks carefully designed and monitored. Communications can pass at lightning speed around and among organisations and between individuals anywhere in the world.

Group communication exercise

Attempt to observe, study, record and analyse group interaction using the quantitative analysis distribution technique. The technique records each communication act and the direction (person it was aimed at).

The communication QuAD (Quantitative Analysis and Direction) tick sheet shown in Figure 5.4 can be used in two ways. One way is to sit and observe the group, simply ticking the sheet as people speak and address others in the group, another way is to use a video camera and video record the group and complete the sheet by watching the recording. As long as the video camera is positioned so that all of the participants can be seen, the recording is much more accurate as it can be watched and reviewed to complete the sheet. Some observers may use more than one video camera, although this is not necessary if participants are seated in a horseshoe arrangement. When using a video, the validity of the observation is easy to check as more than one person can observe the interaction, allowing observations to be cross-checked between observers.

When observing the interaction in real time (without the aid of a video camera), it is very difficult to record consistently every communication act observed. However, it is still possible to catch most of the interaction in a reliable way. General rules for recording the interaction include:

- *Record the most obvious acts of interaction.* If a communication act has caught your attention as an observer, other members of the group are likely to be aware of the communication act.
- *You can only record one act at a time.* If two acts overlap, record the most obvious and influential (the one that won the floor).
- *Record systematically.* To make the observation reliable, the speed of recording must be constant. As a rule, assuming interaction is constantly taking place, give one tick per communication act at a rate of one tick per second.
- *When communication acts are coming too fast, stick to the one second rule.* This will mean that you miss some of the interaction, however, if people are active in the group other comments will be observed and the percentage distribution should, over the course of the observation, be representative of the interaction that took place.

	Date	Communication – Quantitative Analysis and Direction (QuAD) Tick Sheet												Sheet No. ___
	No speaker	Sender						Receiver						Group
		a	b	c	d	e	f	a	b	c	d	e	f	
1														
2														
3														
4														
5														
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Figure 5.4 QuAD – Quantitative Analysis and Direction tick sheet.

- *If nobody speaks tick the 'No speaker' box at a rate of one tick per two seconds.* (This allows for the two ticks that are normally required in each row.)
- *Record the most obvious direction.* When people speak in a group, all members of the group have the opportunity to receive the message (in most cases). However, communication is often aimed at one of the members more than the others. This can be observed by eye contact or use of a name. If it is not clear who the message is aimed at then record the direction of the communication act as 'the group'.

A considerable amount of data can be collected in a very short time when using the QuAD sheet, so a short observation can provide a quick indication of some interaction trends that are taking place within the group.

Once the data are collected, the following information can be produced:

- Total number of group communication acts observed.
- Number of communication acts sent by each participant.
- Number of communication acts overtly directed at participant.
- Number of communication acts directed at the group.

A more detailed analysis of individuals can reveal:

- The number of times a person addresses each individual member.
- The number of times a person received a message from each individual member.
- The number of times an individual sends messages to the group or directs their communication acts towards individuals.

Through the use of the QuAD sheet the following issues can be investigated:

Group participation and:

- leadership
- friendships and alliances
- non participation or reluctant participation
- communication dominance.

Often observation sheets are criticised because they do not capture the experiences, feelings or perceptions of the group members. To make the whole exercise more interesting, members who participated in the group can be asked the following questions immediately after the discussion.

Who in the discussion do you think was most influential?
Who in the group do you think was the leader?
Which group member was least active in the group?
Whose contributions did you prefer the most?
Whose contributions did you disagree with the most?

Can you identify the members of the group who you have strong alliances with or close friendships (these can be listed in order of strongest to weakest alliance)?

Select the questions you wish to investigate and present them to the group members in a questionnaire format. Be careful, some of the questions can be sensitive if not handled correctly.

Chapter 6
Conflict and Conflict Management

Avoiding negative emotional encounters is often more comfortable than engaging in conflict (Belbin, 1993). Unfortunately both engaging in conflict and avoiding it can put a strain on professional relationships and induce stressful experiences for the individual. Conflict within organisations is to be expected, construction is no exception, and managers must develop strategies for dealing with it, not avoiding it.

Construction projects have an inherent level of technological complexity that requires co-operation and interdependence between participants from all disciplines. However, conflicts often emerge as the stakeholders in the process have different organisational objectives and conflicting interests. All of the specialists need to collaborate to realise the construction project. As problems develop, the key members of the client organisation, design team and contracting parties need to use effective communication to co-ordinate information and maintain relationships. Conflict between the professionals must be managed so that their relationships do not become volatile and adversarial. Relationships between group members are often very fragile and slight incidents during bargaining can result in members being excluded from group interaction (Ostmann, 1992).

The following model (Figure 6.1) shows how different perspectives can emerge as conflict, resulting in tension that can threaten relationships. If disagreements are not managed they can develop into a full blown dispute. In order to prevent the dispute, interaction between parties should be managed. The key professionals in construction must be aware of situations in which conflict is likely to occur, recognise when conflict emerges and develop strategies that help parties manage conflict and sustain effective working relationships.

Definition: functional and dysfunctional conflict

Conflict within construction is not only inevitable, it is often desirable. Gardiner and Simons (1992, p. 460) define conflict as:

> any divergence of interest, objectives or priorities between individuals, groups or organisations, or non-conformance to requirements of a task, activity or process.

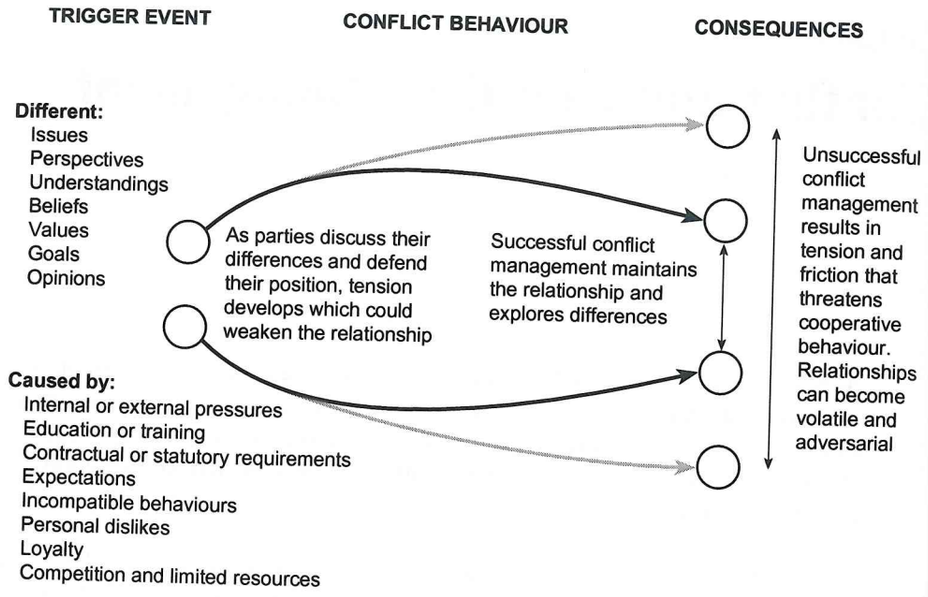

Figure 6.1 Model of conflict development (adapted from Emmitt and Gorse, 2003, p. 166).

Conflict can be natural, functional and constructive or unnatural, dysfunctional, destructive and unproductive (Gorse, 2003). Functional conflict results from challenges, disagreements and arguments relating to tasks, roles, processes and functions. This type of conflict often involves detailed discussion of key issues.

Functional conflict is often beneficial, helping to:

- expose problems
- reduce risks
- integrate ideas
- produce a wider range of solutions
- develop better understanding
- evaluate alternatives
- make improvements
- develop better solutions
- improve relationships.

If functional conflict is amicably resolved, the success achieved from working through the conflict can strengthen relationships. Although conflict is often functional, with some episodes of conflict it is difficult to identify a rational purpose. Unnatural conflict is where a participant enters into an encounter intending the destruction or disablement of the other. Personal insults and criticisms that boost

self-ego and put others down is often described as dysfunctional conflict. Such conflict is not aimed at improving task performance. However, the occurrence of functional conflict also results in tension, and if this tension is not defused it can build up and threaten relationships (Gorse, 2002).

Indicators that conflict has become unproductive include (O'Neil, 2002):

- Conflict deteriorates into personal conflict.
- Conflict increases with each meeting rather than reduces.
- Communications become one way.
- Parties become entrenched and will not accommodate alternative views.
- The conflict becomes a major issue – incurs costs and delays activities.

Ultimately, the completion of construction projects relies on co-operation between multidisciplinary teams and, as conflict is to be expected, managers must attempt to identify where conflict is most likely to occur and develop strategies for managing the conflict.

Conflict emergence and development

Conflict has been found to develop in multidisciplinary building design teams as the group members discover their team objectives and then attempt to enforce them on others (Wallace 1987). Conflict often emerges as people attempt to change other people's ideas, beliefs or actions.

Handy (1993) proposed five different situations in which conflict can emerge:

- *Overlap in formal objectives*. Although each party has a contractual obligation for delivering the project, they have different responsibilities resulting in different priorities when considering the same works. For example, architects concentrate on design and contractors insist on practical building methods. Each person or group has a formal goal; clashes occur when others interfere with process and activities used to achieve the goal.
- *Conflicting objectives resulting from overlap in role definition*. Two parties may both have responsibility for providing parts of the same service. Each party makes assumptions on work that is theirs and the work that is the other party's work. Where the work package is not clearly specified, gaps occur where neither party believes it is their responsibility to undertake certain works. This often occurs between subcontractors where the boundaries of two or more subcontractors meet at an interface. Alternatively, both parties may assume work is within their remit, but have very different ideas about how to do the work.
- *Unclear contractual relationship*. Contracts are unable to identify duties, responsibilities and lines of authority for every situation, thus such situations are common. When entering into a contract, the briefing process is important to help identify the full scope of the contract and clarify responsibilities.

- *Simultaneous roles*. A party may be responsible for overseeing a part of a project, but is also responsible for providing a service. Gardiner and Simmons (1992) suggest that architects are often placed in this position where they are responsible for both the management of the project (client's representative) and designing the building; thus they are often responsible for overseeing their own work.
- *Hidden objectives*. Individuals and organisations may have a reason for performing the works that is not made clear to others, e.g. a professional's performance may be motivated by politics, promotion, competition, status, ego, etc.

Client expectations and conflict

Conflict develops during construction projects for many different reasons. Conflict often occurs due to a failure to develop and manage the client's expectations. Construction clients are either experienced or inexperienced in construction. Their organisations require one-off buildings or, inherent with the nature of their business or strategic expansion programmes, they require a continual supply of buildings and structures. Inexperienced clients do not understand the construction process; they are unfamiliar with the techniques, contracts, processes, legislative requirements and the cost of making changes during the process. The lack of building knowledge means that the construction professionals should take greater care during the briefing stages to ensure that the client develops a greater understanding of the process. Unfortunately, the information offered to clients from different professionals is often inconsistent and confusing. Even though professionals may offer the same service they tend to concentrate on aspects closely associated with their profession, training and experience (Gameson 1992). Such bias would include quantity surveyors concentrating on aspects of cost and contract, architects on design, and construction contractors placing priority on management and construction techniques. Even with their different perspectives, construction professionals need to understand the client's requirements and articulate them into a design that realises the client's building. Considerable emphasis should be placed on developing a common understanding between the professionals and the client. With inexperienced clients there is a need to delve deeply into client issues, ask questions, and check that each party understands what is being discussed. Yet Gameson's (1992) research into client briefing showed that it was the experienced clients who were seeking and obtaining more information from the professionals. When dealing with inexperienced clients' construction, professionals did not provide the same level of explanation. It may be suggested that some construction professionals take advantage of a client's naivety, offering a limited perspective rather than attempting to develop understanding by exploring alternative approaches and different solutions that may benefit the client. Failure to develop a sound understanding of each party's requirements increases the potential for disagreements occurring.

The difference in practice between what should be done and what actually happens during the briefing process means that problems emerge that result in conflict. As the client realises that the services, designs and buildings provided are inconsistent with their expectations, conflict emerges. Considerable emphasis should be placed on the briefing stage to ensure that understanding between parties is developed and the client's expectations are managed through the design development.

Integrating knowledge and resolving conflicts within a fixed duration

The pressure on delivering projects within tight schedules means that the information and activities of the various contracting organisations have to be co-ordinated and integrated. As the specialists work on the development of design information and management of activities concurrently, it is difficult to ensure that conflicting information and clashes in activities do not occur. The project manager must work together with the various parties to ensure that information is developed and integrated so that conflicts are kept to a minimum. Project managers should set up and manage meetings where parties can identify problems and resolve their differences. Where contractors and specialists work in the same space, share plant and equipment where products and components meet and have to function and fit together, conflict is to be expected. Interfaces between packages of work and different work groups are prone to conflict. Designers, e.g. architects, structural and mechanical engineers, often produce their designs simultaneously. Elements of the designs often clash or are incompatible; thus, designers have to work together to minimise wasted design. If such interfaces are not managed, conflict has considerable potential to develop into major disputes.

A level of conflict in construction can be anticipated. Gardiner and Simmons' (1992) research identified a number of reasons for conflict emerging and situations where conflict tended to occur (see Table 6.1)

Conflict and change

Change in construction results in additional work. Conflict may emerge as parties attempt to avoid redesign or take on additional work (Wallace, 1987). As Loosemore (1996) points out, change in the construction process often leads to conflict; however, Gardiner and Simmons' (1992) research found that conflict could also lead to change. Conflict can lead to change and change can lead to conflict, thus often the conflict/change process may become cyclic (Figure 6.2).

In successful conflict management processes it is to be expected that conflict and change cycle will occur a number of times. For the process to be successful, all of the parties need to be sufficiently satisfied with the resulting changes so that the working relationship can continue. With both change and conflict there is a cost; at a bare minimum, conflict incurs a resource cost of those engaged in the disagreement and its resolution. When dealing with change there is almost always a management cost of reallocating activities and resources.

Table 6.1 Reasons for conflict and situations that are prone to conflict (adapted from Gardiner and Simmons, 1992).

Inception/briefing/tendering
- Problems during briefing procedure
- Difficulty in co-ordinating information
- Client and/or users' lack of experience
- Difficulty arriving at a consensus
- Low recognition of users
- Often end users have a lack of power and authority during the design stage

Construction operations
- Failure of the construction to meet the design requirements
- Quality of work on site less than expected
- Exceeding project budget
- Exceeding scheduled duration
- Functional or operational faults

Design
- Design error
- Design omission
- Design not meeting specification
- Difficulty in obtaining written approval from client or users causes conflict
- Clients have difficulty in interpreting drawings

Project management
- Internal politics, e.g. planning and approval
- Lack of agreement between users and client project manager
- By-passing single point of contact
- Conflict of loyalty (e.g. clerk of works)
- Different levels of change control depending on the nature of change

Summary

Many of the changes resulted from:
- Different emphasis on proposed project.
- Difficulties in maintaining interfaces between various professionals to serve the client's needs.
- The use and misuse of quality systems and modification to standard contract conditions.

Change in construction has an impact on resources resulting in increased expenditure for one or more of the stakeholders. As the construction project progresses from inception to construction the cost of changes increases. Changes made at the design stage will involve redesign, this may be limited to the architect's details, but may also affect structural engineers' and mechanical and electrical engineers' drawings and specifications. However, changes made during the construction stage may result in redesign, modification to, or removal and rebuilding of, completed works. All abortive work results in a cost to one or more of the parties involved.

Gardiner and Simmons' (1992) research showed that a high proportion of conflict led to a change. Conflict was found at all stages in the process studied: briefing, design and construction. Although the occurrence of conflict was highest in the design stage, it was also prominent during construction. Almost half of all conflict episodes uncovered resulted in change. The potential financial impact of change on a project increases as the project progresses from inception to completion (Figure 6.3).

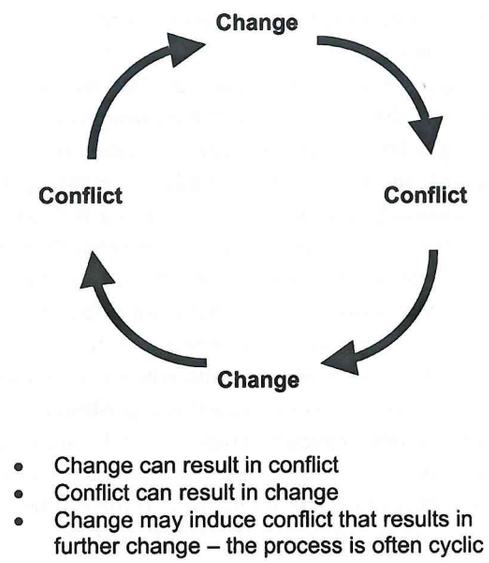

Figure 6.2 Change and conflict cycle.

Managing conflict

Most models of conflict management work on the principle that during management people perform their duties with a level of concern for themselves and a concern for their product, for example, Blake and Moulton's (1964) managerial grid model. The two dimensional approach, first considered by Blake and Moulton has been adapted to concern for self and concern for others (Pruitt and Rubin, 1986).

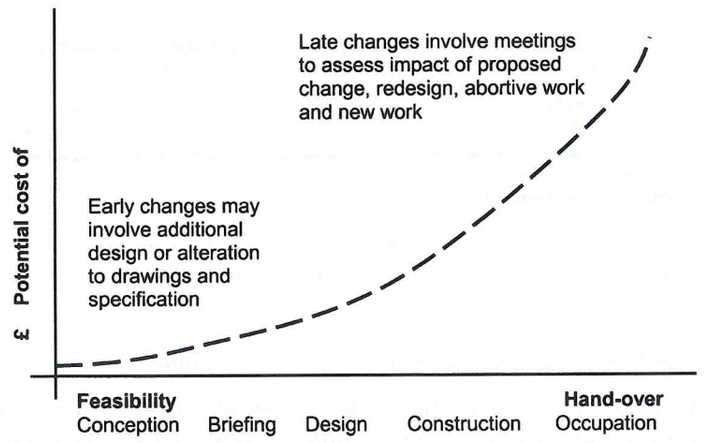

Figure 6.3 Impact of change on cost of project.

Using these two simple dimensions, various approaches to conflict management have been uncovered (Figure 6.4).

There is an argument that each of the conflict management styles has a useful purpose (e.g. O'Neil, 2002), although parties must consider how the outcome will affect the working relationship. In short-term one-off ventures, where the risk of having to work with another person is minimal, the most profitable strategy may be to dominate discussions ensuring that everything falls in an individual's favour. Such strategies may result in obtaining a bad reputation, exclusion from further projects, or legal disputes. The use of the different conflict management strategies with a goal of finding a solution that benefits all offers the optimum strategy. There is a time and place for each of the processes but, to stay in business and maintain relationships with clients and suppliers, managers must balance concern for self and others, pushing negotiations towards the ideal position.

Studies of contractors' representatives during business negotiations found that those who were most successful within their organisation made greater use of both supportive and confrontational interaction (Gorse, 2002). Although the representatives were not afraid to disagree with others they were also prepared to offer support and praise.

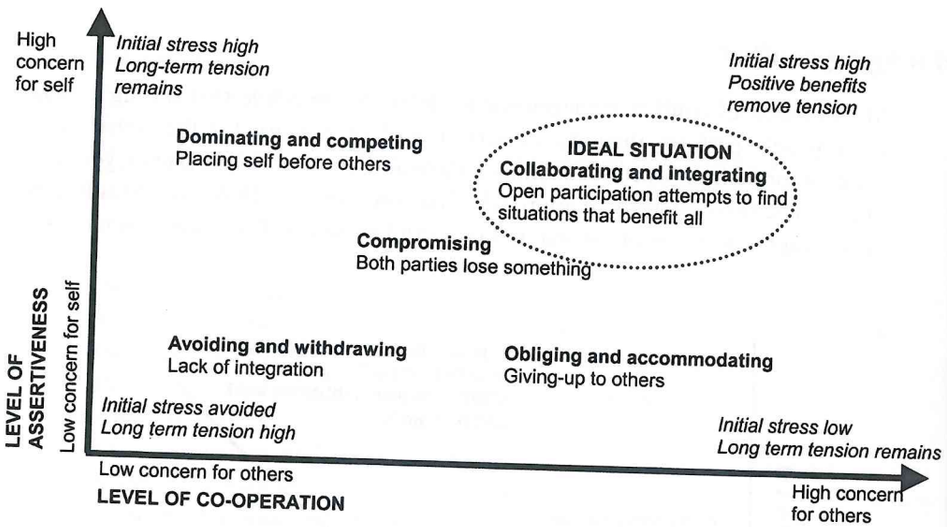

Figure 6.4 Conflict handling styles (adapted from Bales, 1950; Kilmann and Thomas, 1975; Thomas, 1976; Rahim, 1983; Gorse, 2002; and Emmitt and Gorse, 2003).

Dominating and competing (high assertiveness, low co-operation)

Those who use the dominating style are very assertive, uncooperative, have little concern for others, are selfish in attitude, forceful and unwilling to consider other viewpoints, they believe that others cannot be trusted. The style has a competitive

nature; individuals pursue their own objectives at others' expense, little consideration is given to others. When two competing styles engage each other, there is a high probability that the conflict develops into a major dispute. The dominating style results in high levels of tension. During the initial discussion the level of assertive confrontation results in emotional tension for the aggressor and those being dominated. The dominant party knows that most people would rather avoid tense confrontational situations and uses this to his/her advantage. As the dominant party increasingly raises the level of negative emotion others tend to compromise, withdraw or accommodate, enabling the dominant party to win. Even though the initial tension is defused, most parties on the receiving end of the dominant person may worry about the outcome, inducing long term stress that can threaten relations. Even when the dominant style seems the preferred option, it is better to insist on exploring outcomes that will benefit all rather than asserting self gain. In business if outcomes offer little gain to other parties relationships will soon break down.

Avoiding and withdrawing (low assertiveness, low co-operation)

Those who withdraw or suppress conflict often believe that such issues will disappear if ignored; people who use this method do not attempt to co-operate and demonstrate low levels of assertiveness. Beliefs that encourage such behaviour include the belief that the opponent is too powerful or that there are no other alternatives available. Avoiding conflict may reduce tension at the outset, however, the long-term effects of suppression may result in even greater emotional stress as the problems develop and become worse through lack of attention.

If parties become too emotionally engaged in discussions, it may be wise to withdraw temporarily from discussions, but not at the expense of ignoring the issue. As soon as parties calm down, attempts should be made to continue the discussion, possibly using an independent expert, facilitator or mutual friend. A short break can often be productive, allowing parties the opportunity to reflect on the situation. People who avoid situations may have a low level of enthusiasm for the project and are not sufficiently motivated to engage in conflict. In multidisciplinary projects, parties who are not sufficiently motivated to engage in difficult discussions may also have little desire to contribute to other aspects of the project.

Compromise – partial giving-up objective (holds the middle ground on both assertiveness and level of co-operation)

Those who compromise show low to moderate levels of assertiveness and are co-operative in nature. Rather than attempting to find a solution for both parties (a win–win situation), the emphasis is on making sacrifices as one or both parties compromise their initial position. Although this approach can have positive effects on the group, helping to progress matters, it is not as effective as integrating type approaches. In integrative approaches both parties look for mutual gains rather than looking for what they can give up. Compromise has an element of self-sacrifice.