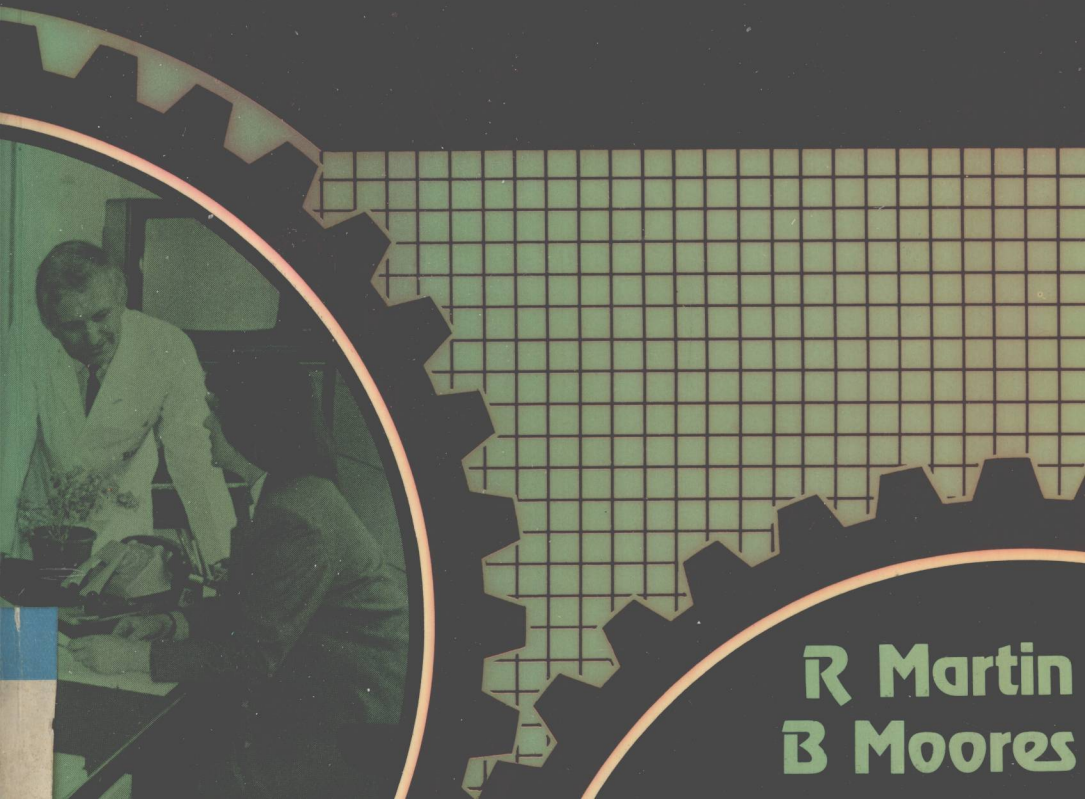


Industrial Studies Series



MANAGEMENT STRUCTURES AND TECHNIQUES



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Industrial Studies Series

MANAGEMENT STRUCTURES AND TECHNIQUES

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Preface

This book originated as a teaching resource for teachers preparing pupils for the Oxford 'A' Level in Industrial Studies. It is intended for people who wish to obtain a basic understanding of management structures and techniques, without necessarily having any management experience themselves. The book presents a comprehensive view of management in its social context, written, we hope, in relatively jargon-free prose.

We are grateful to the Editor of the Series, Professor John Pickering, for his very helpful comments on the early draft of the manuscript.

Roderick Martin
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January 1985

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Introduction

Industrial organisations are institutions for the transformation of inputs (capital and labour) into outputs (goods and services). The task of management is to plan, organise, direct and control this process of transformation to achieve given objectives. The task is not straightforward, and the best means of achieving objectives depend upon a variety of factors (in current jargon ‘contingencies’), including the environment within which the organisation operates, capital, labour, product markets and technology. There is no universal best management structure or technique: there are varying degrees of appropriateness.

The purpose of this text is to outline some of the factors relevant to deciding upon the appropriate structure and technique in relation to the resources available for achieving the goals stated. The approach adopted is a ‘sociological’ one in that it attempts to place the specific economic and technological factors discussed into a comprehensive framework, bearing in mind the social context within which business operates. This inevitably involves sacrificing detail to breadth: detailed applications can be worked out in the teaching context.

The text is divided into two sections: Part One covers Management Structures; Part Two covers Management Techniques. In *Chapter 1* we examine the links between the industrial organisation and its environment (social, political and cultural) and the more closely and obviously relevant factor markets (capital and labour), product markets, and the state of technological development. Each is examined separately, although in reality the environment is a whole whose parts are interconnected. *Chapter 2* is concerned with managerial objectives: what do managers want for themselves, for their groups, and for their organisations? In *Chapter 3* we examine organisational structure and the major characteristics of different types of organisation, drawing a particular contrast between ‘mechanistic’ and ‘organic’ structures.

Different structures are appropriate to different environments and to different objectives. *Chapter 4* concentrates upon the specific issue

of the role of technology. In *Chapter 5* we briefly discuss models of management decision making. Part Two then goes on to outline some of the major quantitative management techniques used.

The book has been written explicitly from a 'unitary' perspective on the assumption that management and other employees share common interests: there is no discussion of the problems which arise out of the conflicting interests between managers and employees. Our belief is that managers and other employees share common interests in the efficient management of the industrial enterprise, and that management structures and techniques can be considered on 'technical' grounds in so far as they are concerned with the firm as a production unit. However, management and other employees have conflicting interests in the allocation of rewards from the process of production, and such conflicts of interest are relevant when considering the industrial organisation as a whole. To avoid overlap, and to keep this volume short enough to act as a text for the option in the Industrial Studies Syllabus, such issues are not examined in the present volume. Management-worker relations are examined in Professor J.F.B. Goodman's parallel volume, *Employee Relations in Industrial Society*.

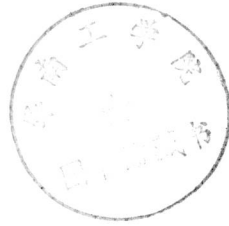
The logical structure of the book is as follows. Management operates in a complex environment from which it draws the resources of capital, labour and raw materials required by the company. We therefore begin with the environment (Chapter 1). Managements have several objectives which they are required to reconcile with each other, at least to a minimum extent (Chapter 2). To achieve these objectives, senior management develops different types of organisation structures based upon the principles of the division of labour; and to prevent the division of labour leading to fragmentation, it develops methods of coordination and control (Chapter 3). A major factor influencing the appropriateness of different organisation structures and methods of coordination and control is technology (Chapter 4). The major responsibility of management is to decide upon the allocation of the firm's resources to achieve its objectives. This process of decision making operates according to a number of different basic models and techniques (Chapter 5). The techniques used for dealing with a range of management decisions are described, and examples given, in Part Two. Finally, a case study of technological change is included to provide the basis for class discussion. The case study of the Caterpillar Tractor Factory indicates how many of the issues analysed separately and in general terms come together in a particular situation.

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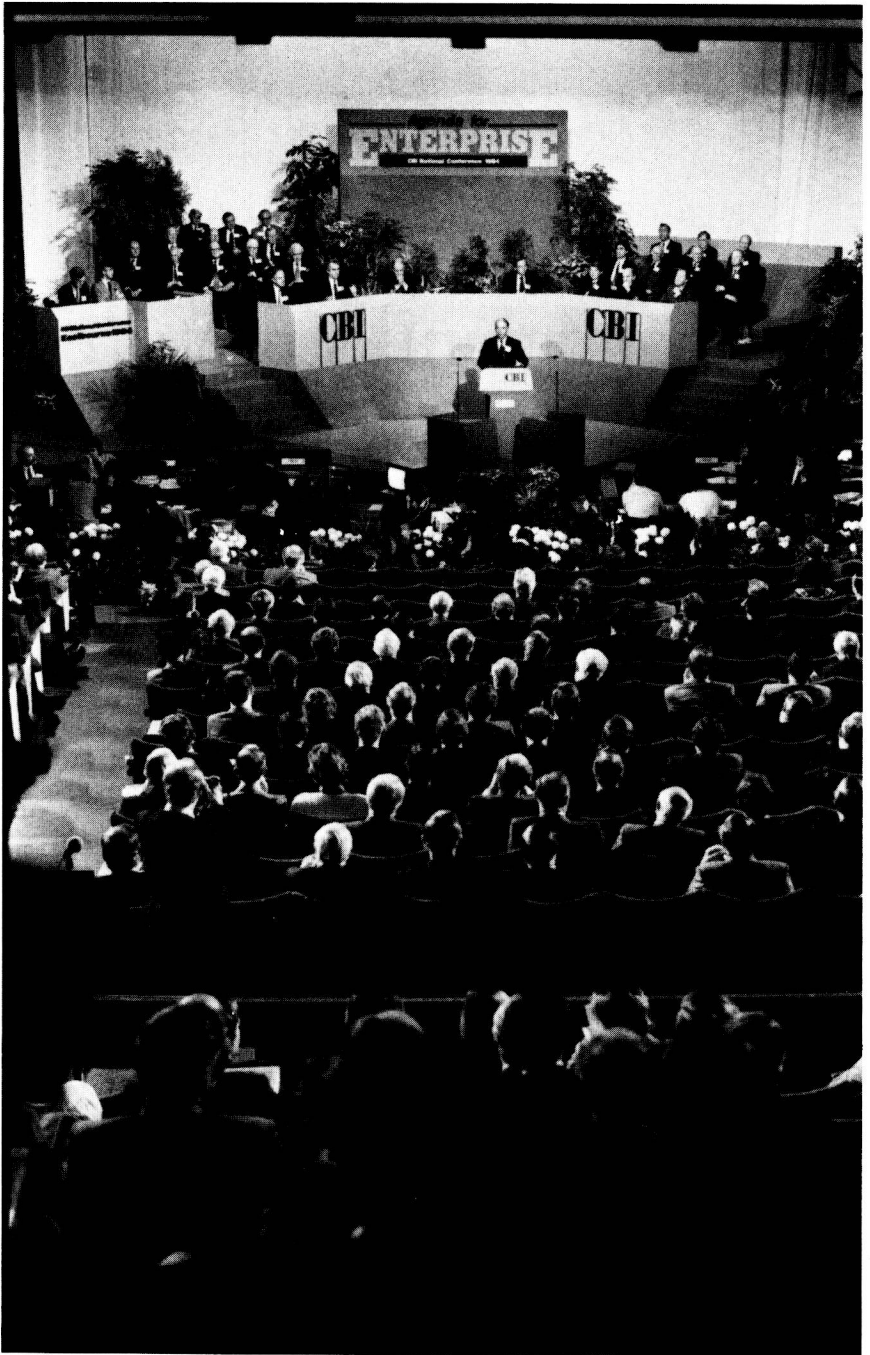
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Part One

Management Structures



The Confederation of British Industry plays a key role in influencing the business environment

1

Management and the Environment of the Business Enterprise

Management is responsible for organising the transformation of materials into goods and services through the use of capital and labour. In fulfilling this task, it is influenced (or constrained) by the environment within which the firm operates. In this chapter we examine the external influences or constraints upon management, before dealing in subsequent chapters with the structures and techniques management adopts to perform the role of coordination and control of the production process. We deal first with the cultural and political environment, and then go on to examine the factors of production, capital and labour, and the state of technical knowledge.

In this chapter we have assumed that management is responding to influences from the environment. However, it is not simply passive – it also exercises an influence on the environment in which it operates. For example, the Confederation of British Industry urges governments to follow policies favourable to industry, and sometimes succeeds in securing acceptance of its policies (for instance, the UK government's policy of reducing public expenditure in the early 1980s was partly influenced by the views of the CBI). The managements of large firms are especially able to influence their environment, for example when they are the major employers in an area (as in the coal-mining areas in the North East in the late nineteenth century). Nevertheless, it is most useful to present management as reacting to constraints from the external environment, whilst remembering that the constraints are often not fixed but 'negotiable' by interested groups.

Cultural Environment

By **culture** we mean the norms and values which govern everyday life. In the words of Beattie (1966), 'In its broadest sense, "culture" refers to the whole range of human activities which are learned and not instinctive, and which are transmitted from generation to generation

through various learning processes' – it does not refer simply to the theatre or television! Culture provides the basic assumptions which we take for granted and do not think about. Some of its aspects are formalised in rules of proper or good behaviour, whilst others remain informal. Failure to obey some norms and values incurs formal sanctions, whilst other failures only incur the sanction of gossip. Amongst the formalised norms is that of honesty in performing contractual obligations, failure to comply resulting in liability for breach of contract, or, in less clear-cut circumstances, criticism for 'sailing close to the wind'. Amongst the informal everyday norms which underpin business life is the norm that 'one good turn deserves another' – what sociologists call the 'norm of reciprocity' (Heath 1976). If one manager goes out of his way to help another (for example in making special efforts to meet a tight delivery date), he expects to be helped in turn when the occasion arises: if the second manager fails to repay the obligation, there is little the first manager can do – except remember! The assumptions about honesty and reciprocity are so commonplace and universal as to be taken for granted, but they have a profound effect upon the way in which management operates – business life would be impossible without them.

Some norms and values are almost universal, like those of honesty and reciprocity; others are shared only by members of certain groups, which develop their own **subcultures**. For example, the norms and values of an 'adolescent subculture' are often very different from those put forward by teachers. In industrial life there are also 'subcultures', sometimes based upon beliefs acquired before going to work – for example as members of the Asian community – and sometimes learned during employment – for example 'the IBM way'. A particularly important industrial subculture is that of scientists, whose values are often different from those of other managers. Many scientists feel their primary commitment is to the advance of science, through publishing results of research in learned journals, and seek recognition from other scientists in other companies and universities. They see their future careers in science, not in a particular company – they are 'cosmopolitans'. In contrast, other scientists are 'locals', who see their primary commitment as being to the particular firm: they are less interested in the publication of the results of their research, and are more likely to see their future career with the specific firm, possibly in a general management role.

The individual's culture or basic norms and values are acquired through the process of 'primary' and 'secondary socialisation'. **Primary socialisation** occurs within the family, and it is mainly informal. It involves acquiring basic, general orientations towards others, including parents: the orientations acquired in childhood remain throughout life. Among the most important for future

employment are attitudes towards authority. Parents differ in the orientations they encourage, for example American middle-class parents attach much less importance to obedience than American working-class parents, especially working-class parents from Irish and Italian backgrounds. English studies have shown similar differences, middle-class parents attaching less importance to obedience than working-class parents (Kohn 1969; Klein 1965).

Secondary socialisation occurs within the school and the peer group. It refers to the acquisition of beliefs and values related to more specific roles than those of 'child', 'son' or 'daughter'. The secondary socialisation may be 'formal' or 'informal': formal refers to the values explicitly taught by the schools (the need for academic achievement, the importance of loyalty to the institution, etc.); informal refers to the values acquired simply through the experience of belonging to the institution, values which are not necessarily transmitted by the teachers. For example, Willis (1977) showed how schools reconcile pupils who fail in terms of educational achievement to the fact of failure, although teachers do not set out to do so. Children are encouraged to seek the explanation for failure in their own abilities rather than in the failure of the institution itself. Other values are acquired from the peer group (other children of the same age): the importance of athletic achievement, the need to avoid telling tales, the need to maintain a distance from 'the system'. In some schools formal and informal socialisation may reinforce each other; in other institutions they may pull in different directions. The most intense experience of socialisation is in 'total institutions', where the individual is enclosed in the same institution for 24 hours, as in boarding schools. Religious and other organisations also play a major role in secondary socialisation.

Cultural assumptions acquired through primary and secondary socialisation are directly important to the operation of the business enterprise. They influence the readiness of individuals to undertake industrial careers in the first place. Wiener (1980), for example, has argued that there is an anti-industrial bias in British culture which reduces the willingness of British children to think about careers in industry rather than careers in the independent professions or in the civil service. He sees evidence for this in the low proportion of Oxbridge graduates undertaking careers in industry, and in the low prestige accorded to educational institutions whose primary role is explicitly concerned with education and training for industrial life. By tradition, relatively few Oxbridge graduates have undertaken careers in industry. The education system reflects, and reinforces, values current in society. Whether British culture is anti-industrial is a contentious question; but there is general agreement that the question of whether British culture is anti-industrial or not is of utmost significance.

Secondly, basic norms and values influence the way in which managers, and others, involve themselves in their work. Historical studies have shown the importance of 'the Protestant ethic' in the early development of European capitalism. In *The Protestant Ethic and the Spirit of Capitalism* the German sociologist Max Weber showed how men who believed in Calvinist theology played a major role in developing capitalism in Europe in the sixteenth century: he saw an 'elective affinity' (or compatability) between a willingness to sacrifice present pleasures for future good, and the need to accumulate capital for investment. Although the particular theological beliefs held by Calvinists may no longer be widely held, the importance of a willingness to defer present expenditure for future reward remains an element in capital accumulation. A form of secularised Calvinism is one element in a willingness to make present sacrifices for future gains.

Thirdly, assumptions made as a result of growing up in a family, school, and peer group influence people's views of the nature of business organisation, especially as to how far it is seen as 'unitary' or 'pluralist'. One view of business organisations is that they are **unitary**, with all members of the organisation sharing common interests, and working towards a common goal and the prosperity of the business. A particularly strong unitary conception is to see the firm as a 'family', with senior management as parents. The metaphor is commonplace in Japanese industry, but rare in Britain, although many senior managers have traces of patriarchal attitudes. An alternative view is to see the business enterprise as **pluralist**, consisting of a coalition of groups, sharing some interests in common, but differing in others. In the pluralist conception, senior management authority is based upon competence and function, not upon the traditional authority of the head of the family. Whether a unitary or pluralist view is adopted influences attitudes towards the authority of management and, especially, towards trade unionism.

Finally, basic cultural assumptions influence the approach adopted towards specific industrial issues. For example, consider the issue of how foremen, first-line supervision, should behave towards their subordinates. There are two contrasting approaches to how foremen should work – more or less democratic, and more or less authoritarian. In the United States, especially in the late 1940s, foremen were trained to adopt a 'democratic' style of supervision: the foreman was to advise and persuade rather than to direct, to be part of the work group and not a distant figure of authority. This was seen as appropriate to a democratic society, which emphasised social equality, and corresponded with the expectations workers had of the way they ought to be supervised. For this reason it was likely to be more efficient. In contrast, a more authoritarian approach to the role of foreman is adopted in Indian factories. In Britain there are wide varia-

tions in the way in which foremen carry out their work, although many firms follow a relatively democratic style. Of course, specific issues are approached 'on their merits'; but the way in which the merits of alternative solutions are evaluated is influenced by basic cultural assumptions.

The assumptions acquired at home and at school thus influence management: they condition the ways in which management assumes they – and others – *ought* to act, as well as how they *do* act. Such values differ between countries. For example, the assumptions about loyalty and commitment to the group held by Japanese managers are different from those held by British managers; French managers also have different values from British managers. Firms operating with similar technologies operate in different ways in the three countries. But there are equally differences between firms in the same country, based partly on the environment in which the firm operates and partly on factors internal to the firm. Hence there are differences between 'traditional' firms, operating in small communities, often family owned, which follow 'paternalist' policies, and non-traditional firms which operate a less personal approach. Traditional firms are likely to attract workers who favour a traditional approach, and will thus reinforce the way in which the firm operates. Small firms, where the owner is directly involved in management, often follow traditional policies whilst being unable to pay the higher wages paid by larger firms; they recruit workers who prefer a traditional approach and are willing to work for lower pay because of the more congenial 'atmosphere'.

The way business operates is thus influenced by the norms and values managers and workers acquire before joining the firm. Some of these norms and values are very general in content, and widely shared; others are specific to certain groups, which develop their own sub-cultures. These values are acquired from family, school, and peer group through the process of socialisation. The experience of work may modify the norms and values acquired outside the firm, but it does not totally destroy them.

Political Environment

Government exercises a major influence upon the business enterprise through its overall management of the economy. Political decisions about the best means of stimulating economic growth, or reducing inflation, provide the context within which managements make decisions about investment, wages and prices. Government also influences business through education and training policies, even where such policies are not explicitly directed towards business. Such influences