Manufacturing Strategy
Text and Cases
Second edition

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Manufacturing Strategy

TEXT AND CASES

Second edition

Terry Hill

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Preface

Currently in many industrial companies, strategic developments are predominantly based on corporate marketing decisions at the front end of the debate with manufacturing being forced to react to these at the back end of the process. Since manufacturing managers come late into these discussions, it is difficult for them to successfully influence corporate decisions. All too often, the result is the formulation and later development of strategies which manufacturing is unable to successfully support. That is not to say that this happens for lack of trying; the work ethic is strong in the manufacturing culture. However, if the basic link between the manufacturing processes and infrastructure (that is, manufacturing strategy) and the market is not strategically sound, then – by definition – the business will suffer.

The many reasons why this happens are addressed in this book. Significant among them is that typically the attention of manufacturing managers primarily focuses upon the day-to-day part of their task. It concerns operations detail and is output-oriented, while in strategic terms their role is seen as being reactive.

The purpose of this book is twofold. First it is to help manufacturing executives to recognize and undertake the strategic dimension of their task. It is intended to help them think, analyse and discuss corporate issues and to formulate a functional strategy in line with the needs of a firm's markets.

Second, it is to provide the wherewithal for executives in other functions to relate to, understand and discuss manufacturing's strategic role and contribution to supporting a company's agreed markets. The way in which the book fulfils this purpose is to introduce and explain the concepts, ideas and language that underpin the emerging subject area of manufacturing strategy.

In this way it helps provide insights and evaluates manufacturing's corporate contribution through strategic perspectives, rather than just through operational performance. It not only helps manufacturing managers to develop and provide appropriate corporate level inputs, but also enables other executives to recognize and appreciate the strategic perspectives which emanate from manufacturing and which need to be given due consideration within the business debate.

The strategic perspective of manufacturing forms the basis on which the book is written, but the approach places these issues within the rightful context of the corporate whole. Thus, it recognizes that in today's world the majority of companies will be unable to sustain success over a long period of time if their strategy is based upon a single function's view of what is important. The book, therefore, emphasizes the essential requirement to link manufacturing's strategy to those of marketing and other functions in order to determine the best strategies for the business as a whole. In summary, the book is written as an attempt to:

1. Close the gap between manufacturing and marketing in terms of corporate strategy formulation.
2. Provide a set of principles and concepts which are pragmatic in nature and designed to be applied to each different part of a business.
3. Offer an analytical approach to the development of manufacturing strategy rather than advocate a set of prescriptive solutions. Each business and each part of each business is different. The resolution of strategy through prescription, therefore, is by definition inappropriate. Furthermore, the complexity in manufacturing is such that it encourages companies to take strategic short cuts. As a consequence, prescriptive approaches seem doubly attractive. The book argues strongly against such approaches. In suggesting a means of developing a manufacturing strategy and raising essential issues throughout, it provides a way of coping with this complexity. The principles and concepts outlined provide a basis for placing operational detail in an essential strategic framework.

Outlined in the book is a basic approach to developing a manufacturing strategy which has been used successfully in many companies throughout the world. It provides a logical, practical and effective way for manufacturing to interface with marketing in formulating corporate strategy. In so doing, it ensures that the 'front-end' debate concerns not just the outward-looking stance of marketing, but the outward-looking stance of the business as a whole. This thereby reduces the number of situations in which marketing-led strategies may be adopted which – in overall terms – will be harmful to the business. It does this by emphasizing the consequences for the total business of different decisions – a technique which is a prerequisite for developing sound strategic direction.

Many executives shy away from discussions of manufacturing because they see it as an area of technology and/or complex detail. This is because, traditionally, manufacturing is presented in this form. The approach in this book is to group together relevant operational detail into key strategic issues, and to provide an understanding of how these apply in companies. The development of a strategic language also gives the opportunity to move away from what often constitutes current practice – a discussion of operational problems. This is not only an inappropriate manufacturing contribution at the executive level, but also has the effect of dulling the interest of other functions in examining the corporate manufacturing issues involved. Strategic language, on the other hand, helps to orient and maintain the debate at the appropriate level. It stimulates executive interest and enables others to address the complexity by creating a manageable number of manufacturing variables.

The book comprises eleven chapters. Chapter 1 sets the scene by drawing some important international comparisons at national, industry and plant levels. The figures embody a growing awareness of the fact that those countries which clearly emphasize the importance of manufacturing's contribution to business success have consistently outperformed other developed countries with a sound industrial tradition.

The core of the book is in the nine central chapters. The headings highlight some key developments within manufacturing strategy. Together they form the substance of the language development as well as the methodologies to be used in its formulation. Chapters 2, 3 and 4 provide the context and content on the approach to be adopted when developing a manufacturing strategy and detail what needs to be undertaken at each step. They include some illustrations to help with this explanation. Chapter 5 deals exclusively with the choice of manufacturing process, the basis for that choice, and the business implications that follow. Chapter 6 introduces the concept of product profiling which provides companies with a methodology for testing the current or anticipated future level of fit between the characteristics of their markets and those of their manufacturing processes and infrastructure. Chapters 7 and 8 deal with the concept of focus and the need to assign plants or parts of a plant to a defined set of tasks. The latter provides a detailed methodology statement on how to undertake this development. Chapter 9 examines the implications behind supply chain decisions. Companies need to address where they should position themselves on the process spectrum while realizing that both in-house and suppliers' processes fall within the remit of a firm's manufacturing strategy as both will impact how well a company can meet the needs of its markets.

Although at first sight these last three chapters appear to concern solely manufacturing process decisions, it is important to recognize that they are also a critical part of infrastructure formulation, since the size and shape of plants are significant factors in what constitutes an appropriate infrastructure, the subject of Chapter 10. This chapter introduces some important concepts as a way of providing a business with the insights necessary to formulate developments in the wide range of functions within manufacturing. This approach will enable these important, expensive and time-consuming tasks to be designed in order to support the requirements of a business. It will enable them to be given strategic shape and direction rather than emanating from specialized perspectives.

The final chapter concerns the area of accounting and finance, which is important because it provides some of the essential basic data used in the formulation of strategic decisions. As with Chapter 10, it is not intended to be a comprehensive statement of the area, but only to represent some production management views of serious shortcomings in this essential information provision. The professional accountant may find the approach provocative; it is intended, however, to be more constructive than that. The issues raised aim to challenge current practice and ideas as a way to stimulate improvement.

Finally, I trust that all who use the book will find it helpful. It is vital that manufacturing take its full part in strategic formulation if industrial companies are to prosper in the face of increasing world competition.

TERRY HILL