

THE MARKETING-MANUFACTURING INTERFACE

by

Ronald C. Coleman

B.S. Virginia Military Institute
(1955)

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF
SCIENCE

at the

MASSACHUSETTS INSTITUTE OF
TECHNOLOGY

June, 1972

Signature redacted

Signature of Author.....
Alfred P. Sloan School of Management, May 15, 1972

Signature redacted

Certified by.....
Thesis Supervisor

Signature redacted

Accepted by.....
Chairman, Departmental Committee on Graduate Students



ABSTRACT

THE MARKETING-MANUFACTURING INTERFACE

by

RONALD C. COLEMAN

Submitted to the Alfred P. Sloan School of Management on May 15, 1972 in partial fulfillment of the requirements for the degree of Master of Science.

One of the major responsibilities of the management of a modern industrial enterprise is to create effective interaction and integration of effort among the various functional groups that make up its organization. The achievement of effective collaboration toward overall company objectives, however, is hampered by the forces which motivate people to devote their primary efforts to the objectives of their individual disciplines. Increasing needs for differentiation, specialization and functional proficiency have created significant conflicts among the various functional groups which must be resolved if a company is to realize its true potential.

The purpose of this thesis was to single out the interfunctional conflict that exists between marketing and manufacturing and investigate it in the form of a subjective overview or staff study. The research methodology consisted of a review of the published literature on the subject coupled with a series of personal interviews with high level managers from sixteen industrial firms. The research was designed primarily to determine: (a) the relative significance of the marketing-manufacturing conflict, (b) the root causes of the conflict, and (c) what policies, techniques, and actions have proven to be useful in the management of the interface.

The study revealed that the marketing-manufacturing conflict was the most significant of all the interfunctional conflicts among the companies interviewed. The study also revealed that there are a number of approaches being followed by modern management as they grapple with the problem. Strategies to achieve effective interaction and integration at the marketing-manufacturing interface will involve a combination of modifications to a company's systems, its organization, and its psychological approach. While some generalization was necessary in relating the findings of this study it is obvious that corporations must design their own strategies for integration in relation to the demands of their markets, environments, personnel and objectives.

While the study revealed a wide range of opinion as to how the marketing-manufacturing interface should be managed, there was consensus that it should be approached aggressively and with great care and effort. Effective interaction and integration of effort at the marketing-manufacturing interface is now and will continue to be one of the prime requisites for the success of the industrial enterprise.

Thesis Supervisor: Gordon F. Bloom
Title: Senior Lecturer

ACKNOWLEDGEMENT

The author is indebted to a number of people for their help with this study. Professor Gordon F. Bloom, thesis supervisor, provided much encouragement and guidance as did Professor Jay R. Galbraith. The author is grateful to the companies and company representatives who gave their time for the interviews and offered so many candid opinions. Debt is also due my company, Aluminum Company of America, who provided the opportunity and financial support. I am also grateful to my wife, Gail, who provided understanding, patience, and typing skill to the effort.

TABLE OF CONTENTS

Chapter 1	Introduction & Purpose	7
	Introduction	7
	Purpose	8
Chapter 2	The Problem-Definition and Scope	11
	The Problem	11
	Definitions	12
	Marketing View of Manufacturing	14
	Manufacturing View of Marketing	17
	Effect on Overall Performance	20
	Effects of Changing Industrial Environment	23
Chapter 3	Research Methodology	25
	Interview Procedure	26
Chapter 4	Corporate Attitudes and Philosophies	30
	How Significant is the Problem?	30
	Role of Top Management	34
	Approaches to Managing the Conflict	35
	Systems Approach	36
	Organizational Approach	37
	Psychological Approach	38
Chapter 5	Systems Approach	40
	General Characteristics of Systems	40
	Information Systems	43
	Control Systems	48
	Planning Systems	52
Chapter 6	Organizational Approach	57
	Objectives of Organization	57
	Need for Differentiation and Integration	58
	Decentralization	62
	The Integrators	66
	Product Managers	70
	The Task Force	73

	The Matrix Concept	76
Chapter 7	Psychological Approach	79
	Psychological Aspects	79
	Organizational Development	82
	Mutual Problem Solving	85
	Communications	90
	Leadership	93
	Interfunctional Transfer of Personnel	94
Chapter 8	Synthesis and Conclusions	99
	Major Findings and Observations	100
	Conclusions	104
Appendix	Bibliography	111
	List of Participating Companies	113
	Sample of Letter sent to Participating Companies	114

Chapter 1

INTRODUCTION & PURPOSE

Introduction

A business enterprise exists because there is a market for the goods and/or the services that the enterprise can provide. In order to survive and prosper the primary objective of the enterprise must be the production and marketing of the goods and/or services which are demanded by its customers.

From the moment that an enterprise expands beyond a one man operation it begins to create a division of responsibility and function among its members. From the very outset these different functions and responsibilities are in a very natural conflict. The members of each function of a business, be it sales, engineering, production, finance, research and development, personnel or marketing become dedicated to the objectives and goals of their particular area of responsibility. To be sure, these same people are dedicated to the overall objectives of the enterprise, but the historical reward systems are such that the functional objectives are those which receive the most attention and effort. Furthermore, many of the functions are so designed as to exercise certain checks and balances on other functions as well as a degree of influence and control.

This interfunctional conflict is a natural and entirely expected phenomenon which can, through its resolution, create a more viable, prosperous business. If, however, the conflict is not recognized

and managed properly, it can become a divisive and destructive force which may sap a company of a significant part of its strength and deter it from reaching its objectives.

Purpose

The purpose of this thesis will be to single out one such interfunctional conflict, between marketing and manufacturing, and to explore it in the form of a subjective overview or staff study. The thesis will be directed toward the industrial as opposed to consumer segment of business. Within the industrial sector this study will attempt to concentrate on those features of the conflict which are evident at the operating or plant level within the manufacturing arm of business.

Specifically, it will be the purpose of this thesis to test the following hypothesis:

1. That the growth of technology and the complexities of present day marketing have aggravated the natural conflict.
2. That the emergence and acceptance of the marketing concept has had a profound effect on the historical relationship between marketing and manufacturing.
3. That the lack of effective interaction between marketing and manufacturing can be a serious problem which may deter a company from reaching its objectives. Each group

may have clearly defined objectives and excellent execution and yet be at cross purposes with the overall objectives of the company.

4. That there are policies and actions which may be employed to create a more effective interaction between the two functions which will enhance the overall company performance.

With this hypothesis in mind, the structure of this study will be arranged in the following manner. In the second chapter the basic problem of conflict between marketing and manufacturing will be defined, some common terminology established, and the overall effect on company performance will be explored. Chapter 3 will describe the research methodology which was basically a combination of personal interviews and a review of published work in the subject area. Since the central idea of this study was the prevailing attitudes of managers in industry, Chapter 4 will relate some of the current opinions as expressed in the research interviews. How significant is the problem in the eyes of top management and what is their role in its resolution?

Chapters 5, 6, and 7 will then focus on three closely related approaches which management may employ to bring about a more effective interaction between their marketing and manufacturing forces. The first of these approaches has to do with the various systems that exist in the modern industrial enterprise. This chapter will discuss how a company's systems for management control, information flow, budgets, strategic and tactical planning, and scheduling can be modified to

enhance the interaction at the marketing-manufacturing interface. Chapter 6 will then discuss how various organizational structures may be employed to improve the relationship. Finally, the psychological aspects of the problem will be discussed in Chapter 7. What are some of the more effective techniques that management may bring to the people side of the problem?

Throughout these chapters the attempt will be to relate the opinions from the research interviews to the findings of the writers and researchers who have discussed the problem. The scope of the subject matter and the research methods employed for this study have precluded any meaningful quantitative correlation of the data obtained. The attempt, therefore, will be to draw some qualitative conclusions from the research and present the findings in as pragmatic a fashion as possible.

The final chapter will serve to summarize the more pertinent conclusions that the author was able to draw from the study.

Chapter 2

THE PROBLEM-DEFINITION AND SCOPE

Introduction

In any discussion of a topic such as this, it is quite apparent that the facets are almost endless. The variety of circumstances, organizational structures, market conditions, and personalities encountered in the research interviews reveal that the basic conflict between marketing and manufacturing can and does manifest itself in a myriad of ways with an assortment of resulting influences on the enterprise. Therefore, this chapter will attempt to set the stage for later discussion by presenting some generalized statements of the basic problem. Also, since terminology is quite often a problem from one company to the next an attempt will be made to define some of the terms to be used throughout the remaining chapters.

In addition, some of the views which are held by manufacturing about marketing and the other way around will be presented as well as some of the adverse effects of the conflict on overall company performance. The chapter will conclude with a discussion of how the basic marketing-manufacturing conflict has been aggravated by changes in the general industrial environment in recent years.

The Problem

The classic conflict between marketing and manufacturing has been correctly and simply stated by Blake, Shepard and Mouton.⁴ Manufacturing takes the position that "Its our job to produce it

and that's where it ends. They have the responsibility for marketing the product." Marketing says: "Its our job to market it and therefore, they should produce it according to our specification. We know the customers."

While it is possible to operate a successful enterprise with these attitudes in existence, as many firms have proven, it is a safe assertion to claim that these firms fall short of their true potential. The attainment of superordinate or in this case corporate goals must be achieved through a unified effort and this unified effort can only be achieved through a genuine coordination of effort. The problem of management becomes one of converting these polarized attitudes into a joint effort toward the superordinate goals. Realization of these goals becomes significantly enhanced when the attitudes are converted to manufacturing saying "Indeed it is our job to produce it, but in production we need to make products which are consistent with market opportunities in the distribution system" and marketing saying "We need to make it possible for the production arm to know market requirements. This will permit them to adjust their production effort to the sales opportunity."

Definitions

Since many organizations have developed their own nomenclature for the various functions within their operations and since many writers use different terminology to describe a range of organizational phenomenon, it will be useful for the purposes of this study to define some common terms.

The Market-May be perceived as a need which generates potentially effective demand. A market must have identifiable customers with purchasing power to buy products and/or services which satisfy this need.⁶

Marketing-The American Marketing Association defines marketing as the performance of business activities that direct the flow of goods and services from producer to consumer or user. However, for the purposes of this study the definition of Philip Kotler¹¹ is preferred. He defines marketing as the analyzing, organizing, planning, and controlling of a firm's customer impinging resources, policies, and activities with a view to satisfying the needs and wants of chosen customer groups at a profit. The term marketing will include the selling function in this study.

The Marketing Concept-This relatively new concept has been defined in many ways. For the purposes of this study the definition of Clive Barwell in Wilson's book²⁴ will suffice. He says that the marketing concept is a philosophy, not a system of marketing or an organizational structure. It is founded on the belief that profitable sales and satisfactory returns on investment can only be achieved by identifying, anticipating, and satisfying customer needs and desires-in that order. Kotler¹¹ expands this definition somewhat by stating that "the new concept starts with the firm's existing and poten-

tial customers; it seeks profits thru the creation of customer satisfaction; and it seeks to achieve this thru an integrated, corporate wide marketing program.

Manufacturing-That organization in a business which is responsible for the basic production of the goods which are demanded in the market. In this study the word will refer to the broad management structure. The particular emphasis of the thesis will focus on the manufacturing management at the operating or plant level.

In the following two sections of this chapter some of the more pointed views that the marketing and manufacturing functions hold of each other will be presented. For the most part they represent the most prevalent views which were gathered in the research interviews.

Marketing View of Manufacturing

During the research interviews the author made a conscious attempt to solicit the candid criticisms that marketing people had for their counterparts in manufacturing. Obviously there were many supportive statements but there were enough of the critical nature to support the notion that the basic conflict is real.

One of the most common observations was "They just do not understand the market. We try to make them understand that the demands that seem so unreasonable are forced upon us by conditions

in the market place. If our company does not provide this kind of service we will lose the business to our competition." This observation was usually made in connection with some feature of delivery, price, quality or product modification.

"They are too concerned with utilizing their productive capacity. Yet in our business the demand is seasonal and we know that there will be slack periods." This view was often accompanied by another common view of capacity which said, "They never seem to be on target with their capacity. They always have too much or not enough."

"We cannot rely on the information that they give us. This is most often the case when we inquire as to estimated costs of new products and on questions of status of customer orders and scheduled shipment dates."

"Our manufacturing costs are out of line with those of our competitors. In order for us to secure a proper share of the market these costs must be attacked vigorously and driven down."

"They are overly concerned about profitability of each single item. It's difficult for us to make them see the importance of a full product line and that it is necessary to supply all of the items even though a few of them may not be profitable."

"In our business customer service is the name of the game. Yet we have great difficulty in providing prompt repair and handling of customer complaints by our manufacturing people."

"It never seems to fail that our production facilities are

not ready when the market conditions are ready to receive a new product."

"We cannot rely on the overall quality of product being turned out by our plants, particularly during the current recession. As the economy and our business slowed down we experienced a noticeable drop in quality."

"They always seem reluctant to produce material for my customer and hold it in our plant warehouse for his releases. Our competition is doing it and we must gear our thinking in this direction if we expect to compete."

"They are continually putting the pressure on us to obtain a higher sales price for our product. Don't they realize that the price is set in the market place and that our hands are tied?"

"Their organizational structure is horrible! The only way I can get results at the plant level is to go directly to the plant manager but he is impossible to reach. This forces me to take my complaints to the general manager!"

"If the plant in Chicago had not let us down on the Acme account last year, we would not have missed our market quota by 15%!"

"Its impossible for us to get a decent delivery time on small orders. They are reluctant to interrupt their scheduled runs for a small order, no matter who the customer happens to be! They just don't seem to understand the importance of prompt and realiable delivery!"

"When we get together with them to resolve some of these prob-

lems, all we get is the sweetheart treatment. A lot of nice promises but the performance remains the same!"

Manufacturing View of Marketing

The views and statements reported in this section were drawn from the research interviews, from other members of the Sloan Class and in part from the author's own personal experience. While the statements are not presented in a comparative fashion with those in the previous section the reader will no doubt recognize a marked similarity as to points of conflict. By and large this was true throughout the study, that everyone wanted to comment on the same general list of issues.

Manufacturing people took the following positions with regard to their compatriots in the marketing function:

"They don't understand the conditions that we face at the plant. They seem to overlook the fact that equipment can break down, that we can face labor difficulties, and that production today is a difficult, complex task."

"They seem to think that we can turn the flow on or off at a moment's notice. They do not comprehend that for us to minimize our costs we must have a steady flow of business through the operation."

"In our business we must produce to a forecast because of the lead times involved. Our problem is that the forecasts supplied by our marketing people are rarely accurate enough for us to use.

We are forced to interpret them the best we can and then set our own production schedules."

"There is not enough profit motive in the minds of our marketing people. They seem to be more concerned with volume quotas and targets based on the dollar volume concept."

"Our marketing organization is supposed to be in touch with reality in the market so they can provide us with the guidance and direction for future planning for facilities and product lines. However, the information we receive is often inadequate and in many cases totally wrong."

"They are often misled by our customers as to the true quality level required. We find in direct contact with our customers that we are incurring unnecessary costs to provide a quality level in excess of that needed by the customer. But the information received from our sales people had called for the higher level."

"We must be on the alert to try to prevent our sales and marketing people making promises that we can not meet. This applies to product performance and delivery."

"They seem to have little regard for order quantity. When we try to group similar items in our production schedules to minimize setups and reduce costs, they crawl all over us insisting that the orders be run in the order that they are received."

"They often ask us to produce material for a customer in the event that he might need it. In some cases without an order!" This requires the approval of our general manager but we often experience

losses due to damage in the warehouse and stocks which become obsolete. Also, the cost of warehousing is a significant one that our marketing people overlook."

"Cost reduction is a major part of our responsibility, but our cost reduction efforts have not been able to offset all of the recent cost increases due to labor contract settlements. A part of these increased costs must be passed on to our customers, but our marketing people have been unable to secure the price increases for us."

"They seem to push the items that are most difficult for us and the least profitable while our competition walks off with the gravy!"

"There is entirely too much turnover in our marketing and sales ranks. As soon as we become accustomed to working with a particular man on a given account he has to move and we are faced with a new man in his place."

"Many of our sales people do not have the technical expertise necessary to handle an account. It often becomes necessary for us to provide this expertise from our plant personnel. This can reduce our effectiveness by drawing people away from their primary tasks."

"Whenever we get together to resolve some of our mutual problems they seem to dwell on things that happened in the past, say ten years ago, rather than concentrate on where we should go from here!"

Effect On Overall Performance

While the comments and statements presented in the previous two sections are by no means all inclusive they are perhaps sufficient to describe the major points of conflict that exist between the manufacturing and marketing forces. In general this conflict manifests itself in an ongoing power struggle which becomes a part of the daily routine of most managers. The resolution of these conflicts and the way in which the balance of power shifts can and does have an effect on the overall performance of the enterprise.

Corey and Star⁶ discuss the basic balance of power as the relation between resources (manufacturing) and programs (marketing). They point out that if the resource management functions dominate, the direction of the business growth may be constrained by an emphasis on fully utilizing and developing existing resources although market opportunities may lead in other, more profitable directions. If program management dominates, long run strategic effort may be more dispersed, less restricted by a sense of need for using and preserving existing plants and financial, manufacturing, engineering, and research skills. These extremes are usually undesirable. The manager's task is an optimizing one: to make the most of the existing resources in the short run, while pursuing new and promising market opportunities which may call for new kinds of skills and resources.

This philosophy was confirmed in the research interviews by those managers who had responsibility for both marketing and man-

ufacturing. The feeling expressed was one of great concern to keep the balance of power distributed as evenly as possible. The purpose of this philosophy was aimed in part at being able to capitalize on the positive gains to be made by the effective use of conflict. To have the balance of power heavily in favor of either marketing or manufacturing, much of the open conflict becomes lost to the manager. More will be said of this in later chapters.

The attitudes presented in the previous sections can have other adverse effects on the overall performance of a company. The common thread of opinion found in most of the interviews was that these points of conflict inevitably lead to tensions among the people who must interact on the issues. These tensions may detract from effective interaction and prevent the achievement of the overall goals.

One company described a situation in which the lack of effective interaction created a significant problem in the area of pricing. A plant manager was criticized by a marketing manager for taking three days to supply a cost estimate for a new part when all he needed was a ball park figure to use in evaluating some marketing strategies. A few weeks later the same marketing manager requested another cost estimate and this time was supplied with an answer in two hours. The problem arose when the rough cost estimate was used to quote a price to a customer for a large order. The overall result was that the company lost thousands of dollars on the order due to the inaccuracy of the rough estimate.

The lack of credibility on delivery promises and order status

information can create dramatic difficulties for a company. If production control at a plant becomes known for its optimistic and unreliable promises, the salesman will simply learn to adjust his demands by the amount of time that the plant is usually late. This leads to even more unrealistic optimism from production control until, if taken to extremes, the whole interchange of information becomes meaningless.

The same principle can apply to the area of quality requirements. If the salesman or marketing contact becomes known as one who will characteristically exaggerate the real needs of the customer, the manufacturing people may take the order but scale down the quality to a level that they feel will satisfy the customer. Again, this can become a game which may lead to the loss of business through customer dissatisfaction with the product or loss of profit by a higher manufacturing cost to meet a quality level not really required by the customer.

Perhaps the most significant area in which a lack of effective interaction can create disaster is in the general area of product and facilities planning for the future. One classic case involved a company whose sales were down, and in the effort to boost sales one of the new products recommended by marketing was put into production. It was only after the product had been promoted and on the market that the company discovered that the existing equipment required to produce the product was obsolete and would not be able to provide a competitive cost for existing conditions in the market.

This was an extreme case, to be sure, but surely one which makes the argument for effective interaction between marketing and manufacturing at an early date in product planning.

Effects of the Changing Industrial Environment

From the foregoing discussion of the opposing views and their effects on performance, the basic problem may be seen as one which can exist to some degree in any industrial enterprise. As will be shown in later chapters, the problem is one that has long been recognized by most managements and many have devoted considerable effort toward its resolution. In recent years, however, many changes in the industrial environment have tended to highlight the importance of the problem and make it more difficult to manage.

The first of these changes has been the rapid growth of technology and the increasing complexity of modern business. This dramatic increase has made it increasingly difficult for marketers to stay abreast of technical developments in the manufacturing area. To a similar degree the manufacturing people have found it increasingly difficult to follow the rapid changes not only in the market but in marketing techniques as well. At the same time the demands of most markets have placed an increasing premium on a wider line of more sophisticated products of higher quality and often at lower prices. At a time when the complexities are creating a more difficult barrier between marketing and manufacturing, the market is demanding more effective collaboration and interaction between the

two.

Another significant change in the business environment has been the rapid rise of consumerism. This word has been used to define the widening range of activities in government, business, and independent organizations that are aimed at protecting individuals from the practices of both business and government that infringe upon their rights as consumers. This phenomenon has forced many managers, who had previously doubted the validity of the marketing concept, to adopt it and be guided by customer satisfaction with his products and/or services. Previously acceptable degrees of interaction between marketing and manufacturing have simply not been adequate for the demands brought on by the growing trends toward the marketing concept and the demands of consumerism.

Summary

In this chapter the basic problem that exists at the marketing-manufacturing interface was defined. Opposing points of view of the marketing and manufacturing functions, gathered from the research interviews, were shown to support the notion that the problem can and does create serious problems for the modern enterprise. This study also revealed that the problem has been aggravated in recent years by the rapid growth of technology and the rise of consumerism.

Chapter 3

RESEARCH METHODOLOGY

The basic research plan for this thesis was to conduct a search of the published literature on the subject and to couple these findings with a series of personal interviews with management personnel from a number of industrial corporations. In addition, a series of interviews was conducted with management personnel at Cresap, McCormick and Paget Inc., management consultants in New York, N.Y.

The search of the literature provided a valuable base of published material which is listed in the bibliography. The personal interviews then provided the opportunity of testing some of the published theories against conditions that exist in industry today. The corporations selected represent an attempt to obtain a cross section of enterprises in the industrial sector.

Letters were directed to marketing or manufacturing management at the Executive Vice President or Vice President level. In most cases these men were kind enough to grant the interviews themselves, and in other cases the request was referred to such positions as Director of Marketing Services or members of Product Supply or Product Sales groups for the interview. Whenever possible an attempt was made to interview representatives of both the marketing and manufacturing functions from the same corporation. In addition, information relative to the subject was obtained from other members of the Sloan Fellows Class of 1972. A list of participating companies

is included in the appendix.

Throughout the research phase of this study the investigation was designed to provide answers to the following general questions.

1. To what degree does the interfunctional conflict between marketing and manufacturing exist and is recognized in a cross sectional group of industrial enterprises?
2. What are the root causes that create the conflict?
(Organizational, psychological and/or technical)
3. What are the major policies and actions being used to manage the conflict?
4. What has been the relative success of these attempts to provide effective management of the conflict?

Interview Procedure

In order to gain answers to the general questions enumerated above as well as to expedite and facilitate the interview process, a question outline was used as follows:

1. In general, do you see the conflict between marketing and manufacturing as a significant problem in your organization?
At what levels in the organization is it recognized?
2. If so, in what ways does poor interaction between marketing and manufacturing deter you from reaching your overall objectives?

- a. Missed business opportunities?
 - b. Poor customer service?
 - c. Improper allocation of resources?
3. How important is the relationship between manufacturing and marketing as compared with other interactions, such as marketing and R&D etc?
 4. What is the philosophy of your top management? Do they feel that the conflict should be suppressed or managed out in the open?
 5. Do you have specific personnel in your organization whose duty it is to achieve a co-ordinated effort from marketing and manufacturing?
 - a. At what level?
 - b. Do you maintain marketing or sales representatives at your plants? In what capacity? How does it work?
 6. At what point does your plant management become involved in marketing plans?
 7. In what form does this involvement occur?
 - a. Active participation in the early development of marketing strategy? or
 - b. Review of marketing plans after they are formalized?
 - c. Personnel resources required at plant level.

8. Does joint participation in marketing strategy create a greater commitment by all concerned?
9. Where do ideas for new products, product revisions or new ventures in general originate?
10. What factors of technological growth are pertinent to the problem? How do they create barriers to effective interaction?
11. As technology advances, how have you reacted in the area of personnel selection and training?
 - a. At plant level?
 - b. Field sales?
12. With the variety of organizational structures that are in use and being proposed, what form have you adopted?
 - a. How often does it change?
 - b. Do you fit people to the organization structure or will you modify the structure to fit the particular strengths and weaknesses of specific people?
13. In academic circles, a lot is being said and written about the growing role of marketing as a force in corporate organizations. Do you see this happening in your organization? How?
14. Does your organization use the exchange of personnel between marketing and manufacturing as a technique of creating a

greater degree of interaction?

- a. How is this accomplished? At what levels?
- b. Do the results indicate it to be a viable policy?

15. Organizational development effort.

- a. Do you use professional behavioral scientists?
- b. Joint problem solving meetings between marketing and manufacturing personnel?
- c. At what levels?
- d. How long have you been doing this?
- e. With what success?

16. Do you care to speculate about future developments in this area?

- a. Do you see the problem becoming greater or less?
- b. Can it be managed effectively?

Chapter 4

CORPORATE ATTITUDES & PHILOSOPHIES

Introduction

It has been long recognized by managers that different conditions in industrial environments call for unique competitive strategies. Policies, organizational structures, and market approaches which work well in the aircraft industry will be quite different from those employed in the lumber industry. Obviously then, when one attempts to discuss the management of the basic marketing-manufacturing conflict, it would be folly to suggest that there is one best way. It is even a bit risky to generalize in too broad a fashion on such a topic. Someone has said that all generalizations are false, including this one. However, the scope of this study demands some generalization as to the conclusions that the author was able to draw from the literature and research interviews.

This chapter will serve to define the relative importance of the marketing-manufacturing conflict as seen by the managers who were interviewed. It will then discuss the role of top management in managing the conflict. Finally, the chapter will outline some of the approaches and techniques which are currently being employed to attack the problem.

How Significant is the Conflict?

One measure of the relative significance of a management problem is to determine just how it is perceived by top management.

The interview technique was designed, therefore, to draw out opinions on the problem of managing the conflict between marketing and manufacturing in relation to other interfunctional conflicts within the respective companies. Despite the diversity of the companies represented in the survey, the opinion was almost unanimous. The problem of managing the marketing-manufacturing conflict emerged as the most significant of the interfunctional conflicts. To be sure, there were observations on the difficulties between manufacturing and engineering, marketing and R&D, and others but these were viewed as being minor management problems compared to the marketing-manufacturing conflict. As will be seen later these views of top management were reinforced dramatically when they described the programs, techniques, and organizational structures that were being employed specifically to bring about effective collaboration between the two groups.

It was also significant to perceive how the managers looked at the problem. The general view was that the conflict was a very practical, here and now problem which required careful and thoughtful attention but not a problem that they wished would somehow disappear. Most of these men were quick to point out that the overall objectives of their companies could best be achieved if the opposing points of view could be maintained as an active and open conflict. As one manager put it, "We make some of our best progress when we hammer at each other!" While most of the managers recognized the hazards of having the conflict get out of control most of them preferred the

conflict to the option of a state of harmony in which honest differences were suppressed. Indeed, one general manager with responsibility for both marketing and manufacturing expressed great concern that he did not have enough conflict within his organization. He went on to describe a situation in which the marketing and manufacturing people had reached a state of peaceful coexistence. So much effort was being put forward to achieve harmony that many critical issues were being suppressed. This suppression of issues, in turn, was creating a condition in which many vital decisions were being delayed and some were not being made at all. The manager had therefore mounted a personal campaign to bring the basic conflict into the open. His particular strategy involved not only a redefinition of objectives but revision of the formal and informal reward system designed to reward openness and the mutual resolution of difficult problems by his marketing and manufacturing people.

Most of the companies in the survey reported that the problem was not a new phenomenon but had been with them for some time. There was a measure of consensus that most of the companies recognized the problem as being worthy of serious attention in the late 1950s and early 1960s. This timing would be consistent with the general trends in American industry at that time. Lazo and Corbin¹⁴ describe the period as one in which American industry shifted from being production oriented to a posture of market orientation with a strong shift toward the marketing concept.

In the first half of the twentieth century America was a rapidly expanding national market. This fact, coupled with three major wars in thirty years created a demand that was satisfied to a large degree by the manufacturing and engineering genius of industry. Under the circumstances it was quite natural for engineering and manufacturing to visualize themselves as the indispensable nerve centers of business. However, as early as the 1920's and 1930's, this productivity had created an ability to produce which often exceeded the demand. The marketing experts began to come into their own as their techniques for product design, promotion, advertising, pricing and so forth proved that they could provide a predictable and controllable distribution for the fruits of the production effort. In the 1950's it became apparent to many managers that no one segment of their management was more important than the others and that all are interdependent. To quote Iazo and Corbin,¹⁴ "There can be no quality; there can be no business if the finance department does not obtain the necessary capital to operate with; and there can be no profits-in fact, there can be no income-unless the sales department produces profitable volume."

Perhaps the conflict between marketing and manufacturing was always there, but it was not until the marketing forces emerged as a significant factor that the problem became serious enough for action by top management. The following section will discuss the involvement of top management in the issue.

Role of Top Management

Over and over again during the course of the interviews, references were made to the role of top management in the resolution of the conflict between marketing and manufacturing. In those companies who seemed to be having the greatest success in managing the conflict, much of the credit was given to top management, specifically the President and/or Chairman of the Board. The explanations all contained a similarity of logic. To begin with it is the role of top management to determine the overall company objectives. Obviously, there can be different degrees of participation by lower levels of management, but it is ultimately up to top management to decide; among other things:

- a. What are we all about?
- b. What are our objectives?
- c. What are our ground rules for decision making going to be?
- d. What will be our formal and informal reward systems?
- e. How shall we be organized?

From the answers to these and other questions, top management is able to define the corporate strategy. This strategy may include specific guidelines for the interaction of its marketing and manufacturing forces, or it may be silent on such matters. The strategy may demand a more active interaction between marketing and manufacturing than some of the earlier concepts of production oriented companies. For example, if a company adopts the marketing concept it ceases saying that "we make excellent products, why do not all the users buy

them?" and starts saying "what do our customers need which we can profitably make and sell?"

Beyond the role of top management in strategy formulation, however, is a more pertinent role that applies to a discussion of the marketing-manufacturing conflict. This role has to do with the basic leadership style or managerial style which is shown by top management and to a large degree is imitated throughout the entire organization. The managers interviewed for this study were practically unanimous in their opinion that the degree of effective interaction at the marketing-manufacturing interface would be no better or worse than that which is generally practiced by top management and, in turn, demanded by them. If the top management of a company demonstrates that it can collaborate effectively toward the achievement of company goals, chances are strong that this attitude will prevail throughout the organization. While there are obviously many examples in any organization which do not fit this model, this research revealed that top management, by the conduct that it displays and the standards that it imposes, has the single most important influence on the degree of interaction between the company's marketing and manufacturing forces.

Approaches to Managing the Conflict

In the preceding sections it has been shown that the conflict between marketing and manufacturing is a significant problem which warrants the careful attention of top management. It was also noted that the philosophies, policies, and objectives of top management are vital to the effective resolution and management of the conflict.

If these two premises are sound, what then are the options, techniques, and approaches that top management can take to attack the problem?

Obviously, there are a wide variety of approaches which may be employed. Unfortunately there is no magic formula or linear programming model available which would permit top management to select the ideal approach or mix of approaches to fit the needs of any given set of circumstances. This is clearly one of the management problems which requires a great deal of individual judgment about people, markets, systems, and organizational structures. It is also a problem that requires a liberal amount of basic leadership if it is to be managed effectively.

The purpose of the following chapters of this study will be to describe and discuss some of the various approaches being used in industry today. In one form or the other all of the techniques to be described were found in the companies which were interviewed. As a means of organizing the material the approaches will be described under three basic headings:

Systems Approach

Organizational Approach

Psychological Approach

Systems Approach

The modern industrial enterprise is made up of a number of complex and interrelated systems which support the conduct of the business. There are systems for control, information flow, budgets,

scheduling, planning and many others. Under the systems approach to the management of the marketing-manufacturing interface, the idea is to structure these systems in such a way as to support effective interaction and collaboration of the two functions.

The basic purpose of most systems is to provide a routine set of rules, procedures, and techniques to handle the decision making process as efficiently as possible. Consequently, systems are often characterized by impersonal and formalized communications. They often become inflexible and unresponsive to the demands imposed by a dynamic environment. In short, the basic nature of many systems is to create an environment where decisions are to be made rapidly and efficiently and negotiations are conducted at arm's length.

The discussion of the systems approach will relate how some systems create barriers to effective interaction between the marketing and manufacturing functions. It will also relate some of the systems techniques which may be employed to deal with the marketing-manufacturing conflict.

Organizational Approach

While it might be said of the organizational approach that it too is a formalistic way of creating an effective interaction between marketing and manufacturing, it does enable management to structure the functions in such a way as to force interaction to occur. It is also the most readily apparent approach for management to employ in the resolution of interfunctional conflicts.

The discussion of the organizational approach will cover areas such as decentralization and the profit center concept. The product manager concept will be covered along with other types of integrating positions which may be built into the organization. The relative merits of the task force is included as is a discussion of the potential that the matrix organization holds for the resolution of conflict.

Psychological Approach

The research interviews confirmed the fundamental notion that few strategies based solely on systems or organizational techniques can succeed if they do not take into account the people problems. Companies are, after all, a collection of individuals of widely different talents, energies, ambitions, emotions and personalities. Some people respond better in a democratic environment while others perform at their best in a truly autocratic system. It might be argued then that the behavioral side of this problem should be the major concern of management as they seek to formulate their strategy.

It would appear that the human side of the question is the most significant, particularly if one were to judge on the volume of written material being published currently and the degree to which some companies are devoting their time, energies and money to the effort. In any event, the chapter on this approach will discuss some of the things that are happening in the organization development (O.D.) area. The question of interfunctional transfer of personnel will be included as will other forms of cross training techniques.

Summary

This chapter has attempted to show how one sample of industrial managers view the significance of the marketing-manufacturing conflict. There was strong consensus that the conflict is the most significant of all the interfunctional conflicts that exist. These managers saw the conflict as a necessary force which should not be suppressed but managed in as open a fashion as possible.

These managers were also in strong agreement that their top management, through its conduct, style and demanded standards of performance, could have the most important influence on the degree of effective interaction between the marketing and manufacturing functions.

The chapter also provided a brief description of three general approaches that management may consider in its strategy to manage the conflict. The systems approach, the organizational approach, and the psychological approach will each be discussed in greater detail in the following chapters.

Chapter 5

SYSTEMS APPROACH

Introduction

In the modern industrial enterprise there exists a network of systems which support the ongoing conduct of the business. These systems are often complex entities with apparent sharp boundaries to distinguish one from the other. There are management control systems, information systems, budget and accounting systems, strategic and tactical planning systems, scheduling systems and rewards systems to name just a few. While each may be designed to achieve some specific set of objectives they must be interrelated and interdependent if they are to be supportive and useful to the overall management functions of the company.

The purpose of this chapter will be to discuss some of these systems which influence the interaction of marketing and manufacturing. The discussion will include those features of the various systems which deter effective interaction as well as those which help. Specific emphasis will be placed on those approaches and techniques which emerged from the research interviews as overt actions being taken by companies to manage the marketing-manufacturing conflict.

General Characteristics of Systems

Systems exist and are designed to provide a means of handling the mass of information that relates to each phase of a company's operation. Without a routine and predetermined set of rules,

practices and procedures it would be impossible to manage an enterprise larger than the small owner-manager operation. Normally these systems evolve and become further subdivided as a company expands. They serve to process information in a way which will lead to accurate and prompt decisions by the proper levels of management.

As the pace of modern business has quickened and with many businesses feeling the profit squeeze, management has looked to its systems as one area in which modifications can lead to reduced production and administrative costs and to improved revenues. They have also found that some of their existing systems contain built in characteristics which prevent the desired level of collaboration between their marketing and manufacturing organizations.

They have found, for example, that the highly specialized nature of many of their systems creates an environment where there is insufficient personal contact among the key managers involved. Information is collected and processed, reports are generated and circulated, recommendations made and approved, and programs launched, all in a perfunctory and routine manner and often lacking any significant degree of personal interaction throughout the entire process. This characteristic of depersonalization evokes support from those managers who insist that the systems offer the most expedient and efficient means of decision making. The foreman who used to schedule his customer orders through his equipment personally now has this function performed by the computer. Obviously this offers the advantage of freeing the foreman from a time-consuming task

but what does it do for his personal knowledge and understanding of the individual customer accounts?

Managers are finding that the absence of personal involvement inherent in many of their systems creates a noticeable lack of commitment and a sense of shared responsibility for the outcome of various courses of action. The system which routinely accepts a trial order from a potential customer and converts it into an order number to be processed along with hundreds of other orders fails to provide the necessary personal attention which the important volume potential of the prospective customer might dictate. The order which might have been the most significant of the salesman's career could be delayed or produced off specification because the system was too inflexible to provide the required degree of extra personal effort at the plant.

As a company expands in size and scope its systems tend to proliferate and become highly specialized. The people involved in the systems often take on the same characteristics. The number of people becomes so large as to prevent any significant personal contact with the people in other systems. Job descriptions become quite specific and narrow with the result that many individuals fail to appreciate how their own function fits into the overall objectives of the enterprise. This understanding is vital if they are to be able to coordinate their own activities with others when coordination is required. Another feature of this specialization is that it fails to generate broad based candidates for positions of higher management.

In general, systems may be viewed as vital functions within the operation of a business. As these systems become more complex and specialized they may set up barriers to effective collaboration between marketing and manufacturing. The following sections of this study will look at some of these systems in greater detail.

Information Systems

With the dramatic development of electronic data processing equipment and techniques, modern management has been inundated with information in recent years. Data which was previously not available or inaccessible for use in decision making is now presented to the manager in reams due to the wonders of the computer. Indeed, the amount of information presently available has led many companies to set up specialized departments whose purpose it is to analyze and interpret relevant business information. Yet, in spite of this remarkable progress, a common complaint of many marketing and manufacturing managers is that they do not have adequate and accurate information to help guide their decisions. The general manager who has joint responsibility for both marketing and manufacturing often finds it extremely difficult to answer questions such as:

"Which of our products is yielding the highest return on investment?"

"Why are we still in that unprofitable market?"

"Why is our net profit down despite increased sales?"

"Why are our net profits down despite the lower unit production costs that have been reported?"

In many cases the difficulty in answering these basic questions stems from the basic design of the information system itself. In spite of the fact that the basic data is the same for everyone, the individual functions within the enterprise often interpret and massage the data to suit their own particular needs and often to the complete exclusion of any central unified system. The manufacturing manager, unable to use the historical accounting techniques, develops his own specialized system of standard costs as a means of assessing operating efficiencies and for the valuation of inventories. His counterpart in marketing finds it necessary to develop his own system to analyze sales statistics and to evaluate volume and profit performance by district. These systems, developed separately and for different purposes, are often difficult if not impossible to correlate. They frequently are incomplete and contain arbitrary overhead cost allocations. The result is essentially three systems: a marketing information system, a manufacturing information system and the official accounting system which normally includes only the overall production and sales information.

Aside from the costs associated with this approach to information systems, the company is likely to suffer in the area of communications. There will be confusion at the decision points due to conflicting information and there will be a waste of talent as managers in both marketing and manufacturing devote a greater proportion of their energies to resolving arguments that occur because of conflicting data.

Confronted with this type of problem at the marketing-manufacturing interface, the general manager is often hard pressed to find an easy solution. On the one hand he is told that information processing should be centralized in order to gain the economies of scale. He is also told that the processing of data is itself a specialized function which should not be shared with the users of the information. On the other hand he realizes that he must have input from his marketing and manufacturing functions if the organization is to make effective use of the advanced methods of sales forecasting, inventory planning, marginal or direct costing, integrated profit planning and many others.

In response to questions about this problem, the managers interviewed for this study reported a wide variety of attempted solutions. Most were willing to acknowledge the problem but few were satisfied with the present state of the art. A majority of the companies had some form of centralized information processing system which relied heavily on advanced mechanization to handle basic and routine information flow. They also reported that their information systems have undergone extensive redesign and modification in recent years in an attempt to satisfy most of the justifiable information requirements. In general, the author was able to conclude that the managers who were the most satisfied with their information systems were those who recognized the relative importance and were willing to devote the effort required to maintain their systems in a dynamic environment. Some of the key principles toward this objective might be sum-

marized as follows:

1. Managers and key personnel in the accounting and data processing functions must be educated to the needs of the information users and be willing to adapt their systems to meet these needs.
2. The users of information must be made aware of the advanced techniques of data processing and analysis as they become available.
3. The principal users of information must be involved in the re-design and maintenance of information systems to the extent that the information provided meets their real needs and can be justified from a cost standpoint. Some companies use the task force method to provide this input when changes are in order.

In the rapidly changing environment in which most companies exist, the modern management must strive to achieve a reliable and efficient information system. However, such a system is one of those elusive objectives that always seems to be just out of reach as the mechanized rabbit is never caught by the greyhound. Moreover, it must be recognized as a practical matter that no one information system will ever satisfy all of the users. Managers have historically found it necessary to conduct their own private analyses and interpretations of the data and it is very likely that they will continue to do so, no matter how sophisticated the central system becomes.

Any modern discussion of management information systems would not be complete, however, without some reference to the emergence of the marketing information system as a vital contributing factor in many large corporations. During the research phase of this thesis the author was reminded of its importance time after time, in the literature as well as in the personal interviews. The truth is that marketing information systems have shown a remarkable development in the last fifteen to twenty years. The relatively new tools of model building, linear programming and simulation have been harnessed to the emerging technology of the computer to provide dramatic sophistication and greatly improved accuracy to the classic marketing functions such as:

1. Order cycle-entry, scheduling and billing.
2. Inventory and distribution systems.
3. Market analysis.
4. Sales forecasting and sales performance.
5. Pricing strategy and price building.
6. Evaluations of product and customer profitability.

Admittedly, much of the information generated in these areas is still open to criticism for its accuracy and reliability. Nevertheless it is clear that more and more companies are finding the data to be increasingly important in their strategic and tactical decision making.

Control Systems

Lawrence and Lorsch¹³ have defined a control system as "the conventional practice of accumulating data on actual events and comparing them with planned objectives." Other writers as well as most managers expand this definition to include the taking of corrective action when the actual events do not measure up to the planned objectives. In any event the subject of control systems strikes a responsive and emotional chord when discussed in relation to the marketing-manufacturing conflict.

Marketing-manufacturing difficulties are often aggravated by control systems because some of the primary objectives of each function are in opposition. As noted in Chapter 2, the marketing objectives most often are heavily weighted in the direction of capitalizing on market opportunities with secondary emphasis on fully utilizing and developing existing resources such as plant and equipment. Manufacturing objectives, on the other hand, are directed more at the effective use of the existing resources with secondary emphasis on new market opportunities if these new market opportunities involve new and different resources or processes.

This conflict quite often comes to a head in the area of new product development. Manufacturing managers have been known to view some marketing demands for new products as entirely unreasonable if the specifications of these products fall outside the capabilities of the existing resources and technology. "Why don't they get out there and sell what we can make instead of wasting everyone's time

with these 'pie in the sky' ideas?" Marketers, on the other hand, are frequently frustrated by the unresponsiveness of manufacturing to these same ideas.

Control systems are also responsible for some of the friction in the area of customer service and more specifically in the area of product delivery. Manufacturing managers usually set their delivery objectives as the accomplishment of some percentage of planned shipments. "We must deliver 95% of our orders to our customers on or before the promised delivery date." This then becomes one of the controls by which the producing plants are measured. A common occurrence under this system is for a manufacturing facility to sacrifice or delay a few customer orders in order to maximize the number of shipments made on time. When this happens the response often heard from the marketing manager is "I don't care about your numbers game, what really counts is customer satisfaction. The one shipment that you missed was far more important than those which were made in the effort to show a higher percentage of shipments made on time!"

The same principle occurs in regard to quality of product. The marketing objectives place a premium on customer satisfaction with the product in order to maximize the opportunity for continued sales in increasing quantities. While there are similar manufacturing objectives aimed at the same goal, the plants are also constrained by cost objectives which prevent the shipment of letter perfect products. These trade offs between cost and quality are a constant source of irritation between the marketing and manufacturing groups.

Another very basic point of disagreement has to do with the amount and type of business obtained. Once again the control systems are often designed to reward the manufacturing facility which is provided with a steady flow of profitable items in sufficient quantity to fully utilize its capacity. The marketing objectives, while similar, are more responsive to the conditions in the market place and consequently the measurement often stresses the dollar volume of sales. If the total dollar volume objectives can be met it is often of secondary importance that the volume was achieved through the sale of less profitable items with widely fluctuating order quantities from month to month.

These and other points of conflict arise because of the fundamental way in which most control systems are designed. Of necessity these systems are numerical in nature and lend themselves most readily to those functions which may be reviewed in a quantitative fashion. While many organizations have stated objectives which deal with the manner in which they should interact, cooperate, and collaborate with other organizations, it is quite difficult to measure the performance in quantitative terms. It might be argued then that people will quite naturally place more effort toward the pursuit of those objectives for which there will be a quantitative evaluation. As one manager stated during the interviews, "Its always nice if we can achieve a good working relationship with our counterparts in sales but you must realize that our first responsibility is to make our numbers come out on target!"

Recognizing that control systems are a necessary part of the management function in any industrial enterprise, how can they be designed and used in order to minimize some of these undesirable features which have been discussed? Once again, there is no clear solution that will fit all circumstances. However, the research interviews revealed that many managements have come to grips with the basic problem and have made significant progress through the use of the profit motive. These companies have found that by designing their control systems to measure both marketing and manufacturing against a common profit objective, many of the common conflicts become less significant. Trade offs between cost and quality, utilization of resources and new product development, and others become easier to manage if the marketing and manufacturing people share a common profit objective. More will be said of this in a later chapter when the profit center is discussed, but it is of significance to note the importance of the profit motive as it relates to control systems. Control systems which place a high premium on joint marketing-manufacturing responsibility for profits can play an important role in the decision-making process. Under such control systems a manager is more likely to ask "what is good for the company?" than "what is good for our function, plant, or department?"

Along these same lines one company revealed that while their basic structure and business was not conducive to the profit center approach they were able to place profit responsibility on both marketing and manufacturing. The official accounting techniques assessed

profit or loss at each manufacturing facility, but another control system was then used to distribute this profit among the geographic marketing regions. The regional marketing organization was then evaluated on the basis of how well it has performed against its profit objectives which were established jointly with the management of the manufacturing organization.

Planning Systems

Planning is a word which tends to be overworked in the modern industrial enterprise. There are market plans, facilities plans, short range plans, long range plans, profit plans, contingency plans and plans ad infinitum. It would seem that an increasing proportion of the industrial manager's time is involved in one way or the other in planning. To do otherwise, however, is to risk the fortunes of the enterprise to unplanned happenstance. The necessity for a continuing and detailed planning process has led most companies to some type of formalized planning system. These planning systems turn out to have a number of characteristics which create further difficulties at the marketing-manufacturing interface.

At the outset it should be noted that the historical and common approach to planning has been for each function to generate its own set of plans and to pass them up the chain of command in rote fashion with combinations taking place at every level in the hierarchy. Marketing plans are generally put together in this manner starting with the individual salesman and continuing to be reviewed and modified

until an overall marketing plan emerges. In a similar procedure the manufacturing plans often are initiated in the manufacturing departments of the production plants and follow the same route until they too are consolidated into one overall plan. The research for this study revealed that in most cases the marketing plans and the manufacturing plans do not come together until they reach the general management level or that level in the hierarchy where there is common responsibility for both functions. At this point the respective plans are quite often reviewed by the counterparts in marketing and/or manufacturing and the process of consolidation takes place. It is at this point that many of the conflicts take place. Inevitably each set of plans must undergo significant modification in order for each of them to be compatible with the other.

Perhaps this is the only reasonable way for managements to generate a joint marketing-manufacturing plan at this stage of the management art. However, the planning procedures outlined by some of the companies in the survey indicate that there are a few techniques being tried which tend not only to expedite the process but to enhance the interaction of marketing and manufacturing at the same time.

The most significant of these ideas is that the joint responsibility for marketing and manufacturing should be pushed as far down into the organizational hierarchy as possible. This feature will be discussed in a later chapter. However, it bears close resemblance to the other tactic being used to enhance the planning system. For the lack of a more innovative word we shall call it communications.

It seems that under the historical system of planning described earlier, many managers realized that much of their own effort could be saved if they had some knowledge of what information was contained in the plans in other functional areas. This led to the opening of some informal communication links with regard to planning. This informal interaction proved so successful in some companies that it was built into their formal planning system on a permanent basis and expanded to those members of management who had not stumbled onto it themselves. This communication took many forms from the exchange of the rough outlines of plans and data to the actual participation of marketing and manufacturing people in the generation of a joint set of plans from the start. Common examples of joint participation in the planning process are the planning task forces or planning committees which include representatives from both marketing and manufacturing.

In addition there was general consensus among the managers interviewed that each level of management should have definite planning responsibilities as part of its function. To be sure, the scope of top management planning should be broad whereas that of low level management should be relatively narrow, but the point is that all levels should be involved in the planning system. Welsch²⁵ has described why this should be by giving three basic reasons. "First, the active participation of all managerial levels in shaping the desired goals and the plans for achieving them has a decidedly healthful effect on interest, enthusiasm, and morale. Second, active partic-

ipation by all members of management makes them aware of how their particular responsibilities fit into the total operation of the enterprise and of the necessity for interdepartmental cooperation. Members of middle management, for example, can appreciate how arbitrary decisions based on narrow consideration of single departments may create crucial problems in other departments. Such decisions, within the narrow departmental scope, may appear to be the most logical, but their overall effect may actually be detrimental. Third, junior members of management, having participated in the planning functions are more fully informed of the future with respect to objectives, problems, and other considerations. Thus, we note a very positive approach to enhancing communication in the enterprise. It is quite discouraging and damaging to the morale of a lower-level supervisor to be "in the dark" about what is expected in the future and the goals of his particular function. Under such circumstances, which are not uncommon, lower supervisory personnel find it almost impossible to make day-to-day decisions with confidence. These conditions can best be corrected by bringing all management levels into the planning process in a continuing and meaningful way."

Summary

In this chapter the author has attempted to show how some of the systems of the modern enterprise may influence the interaction between marketing and manufacturing. The basic purpose and design of many systems were shown to be often at odds with the principles of effective interaction.

While there are many systems which support the conduct of the modern enterprise, the primary emphasis of this study focused on information, planning, and control systems. The research interviews revealed that these three systems are the most critical to the relations at the marketing-manufacturing interface.

The significant conclusion to be drawn from this discussion is that the management who seeks to achieve a more effective interaction between marketing and manufacturing must not overlook the design and operation of its systems. While the complexities of modern business demand an increasing level of sophistication in these systems, the management must be alert to the barriers to effective interaction that they can impose. With an awareness of these obstacles and a willingness to redesign and modify existing systems, the company may be able to create a systems network which supports the interaction of marketing and manufacturing instead of hindering it.

Chapter 6

ORGANIZATIONAL APPROACH

Introduction

As noted earlier, most business leaders will agree that organizational structure should be determined after a company has defined its objectives and mapped out its strategy. As market and environment conditions change, companies must revise their strategies to meet the new demands. Correspondingly, most companies are faced with the task of modifying their organizational structure to support new strategies.

This chapter will discuss some of the organizational concepts and modifications which may be employed to enhance the interaction and collaboration between the marketing and manufacturing functions. The research for this study revealed that while individual manufacturing-marketing problems may be approached by other techniques, most managers attempt to solve recurring problems by changes to their organizational structure. Most of the companies interviewed reported that they had undergone major revisions to their organizational approach in the last ten to fifteen years in search of a way to correct some of the difficulties between marketing and manufacturing.

Objectives of Organization

Organizations should be designed to achieve three basic purposes.²⁶ First, the different tasks should be divided in an orderly

fashion so as to provide for their effective performance. Secondly, the tasks should be divided in such a way that there is the opportunity for co-ordination or the attainment of a consistent standard and proper timing of all the various tasks involved. The third objective of organization is to provide a clear and definite assignment of activity and responsibility. A company's management must design its organizational structure to meet these objectives in light of its own particular strategy and market environment. The overall strategy and market environment will dictate whether a company should have centralized or decentralized control. They will also indicate whether a company should adopt the classical organization by function or the program structure. And finally, the strategy and market conditions will demand that the company provide the proper degree of differentiation and integration among functions.

Need for Differentiation and Integration

Lawrence and Lorsch¹³ have discussed the problem of managing the marketing-manufacturing conflict as one of several conflicts that must be faced in the modern industrial environment. As they see it, the advances of science and technology are increasing the tempo of change in some business situations while the requirements for regularity and standardization remain in others. This condition creates a simultaneous need for greater specialization and tighter coordination. To achieve these two needs at the same time is an extremely difficult task because they are basically in opposition and often one can only be achieved at the expense of the other.

As the operation of an industrial enterprise becomes more complex it is necessary to create more and more subdivisions of the functional tasks so that the people involved can become competent to handle those tasks. The degree of expertise required in each of the tasks requires that these same individuals are inclined to give little thought and effort to affairs other than their own specialty. Lawrence and Lorsch¹³ refer to this phenomenon as the process of differentiation and define it as "the difference in cognitive and emotional orientation among managers in different functional departments."

The increasing need for greater coordination of effort is also quite obvious. As companies expand and their operation becomes increasingly dynamic, it is essential that the efforts of the many functional specialists be coordinated toward the common goals of the company. This need for coordination or integration of effort is required not only for the major decisions facing the company but for the thousands of smaller decisions that must be made daily. Lawrence and Lorsch have defined integration as "the quality of the state of collaboration that exists among departments that are required to achieve unity of effort by the demands of the environment."¹³

With the foregoing principles in mind, the management of a company may decide that some modification in its basic organizational structure is required to improve the performance and interaction of its manufacturing and marketing forces. The management may have re-defined its objectives, reformulated the strategy, and determined

the relative degree of differentiation and integration that they feel will be required by their particular market situation. At this point they are faced with the decision of choosing among the many organizational options and management techniques that are open to them.

These options or techniques are numerous and wide ranging in theory. Over the past forty or fifty years management has been offered a full range of techniques, each promising to provide the answer toward achieving a more effective organization. From the earlier forms of budgeting, production control and accounting techniques we have seen the move toward scientific management, advanced monetary incentives and finally the human relations approach. The list has grown in recent years to include such techniques as decentralization, profit center management, operations research, creativity training, decision theory, human factors engineering, matrix designs, value analysis, critical path, brainstorming and many others. For management to decide which of these techniques or what combination of them is appropriate for its particular set of problems, it must determine a basic thrust for its organizational philosophy. Lawrence and Lorsch¹³ have proposed that all of the techniques available to the modern manager are aimed in one of two directions, either toward greater order, systemization, routinization, and predictability or toward greater openness, sharing, creativity and individual initiative. The first direction tends to tighten up the organization with closer central control while the latter serves to open it up. They further categorize

the managers who lean in one direction or the other by the words that they use in discussing organizational problems. The former group talk in terms of "authority", "responsibility", "line and staff", "functional versus product organization", "chain of command" etc. The second group are prone to talk of "relationships" and describe these as being "cordial" or "strained", "straightforward" or "confused", "open" or "sticky" and "warm" or "distant". The first of these theories has been defined as the "classical theory" while the latter has been designated as the "human relations theory".

While these two basic theories are in fundamental conflict the modern manager should realize that they are both alive and well as viable philosophies of organization. For the past three decades the two approaches have persisted side by side among managers and even in schools of business. Neither has been able to displace the other. This notion was confirmed in the interviews made in connection with this study as both approaches were described by the managers being interviewed. Most of the managers displayed an understanding of the two philosophies and were quick to point out why their particular choice seemed to work well for them. From these interviews it was abundantly clear that the choice of organizational approach depended upon the myriad of factors which defined each company's environment.

The remaining sections of this chapter will be devoted to a discussion of some of the specific techniques which emerged from the research interviews. The scope of this study will confine the techniques presented to those actually discussed in the interviews. They

will include such ideas as decentralization, interface managers, product management, task forces, and matrix organizations.

Decentralization

As companies grow large and diverse they tend to lose some of the flexibility and some of the personal touch that they had when they were small. Some companies have sought to recapture these strengths through the philosophy of decentralization.

Decentralization can mean many things to different companies but the central thrust of the idea is to place the responsibility for making business decisions not with a few top executives but with the individual managers and functional personnel who have the applicable information required to make sound decisions and to take prompt action. Within this framework top management can delegate responsibility for profit and other day-to-day decisions to its divisional managers and concentrate its own effort toward long range planning and overall corporate problems. The essence of the theory is that if all the divisions make a satisfactory return on investment, the overall company return will be satisfactory.

Beyond these broad objectives, however, this study revealed that the concept of the decentralization may have profound and positive influence on the interaction of marketing and manufacturing. To be sure, not all of the companies who were interviewed believed in the concept of decentralization. Those who did, however, were in general agreement that it was the most effective approach toward achieving

the proper level of coordination and collaboration between their marketing and manufacturing forces.

There were several forms and degrees of decentralization encountered in this study. They ranged from the general manager at corporate headquarters with responsibility for both marketing and manufacturing to the extreme of complete decentralization in which the individual plants were managed by a general manager who was responsible for profit and had his own marketing and manufacturing resources under his direction at the plant level.

Those companies who were operating with a decentralized organizational philosophy and structure reported that while the marketing-manufacturing conflict was an important problem, it existed at a level which could be managed effectively. With the profit responsibility pushed down to the lower levels, a number of positive features exist which force a closer relationship between marketing and manufacturing. Some of these features are as follows:

1. The development of profit plans, market plans and operational plans is facilitated through a joint effort of marketing and manufacturing personnel.
2. Communications are enhanced in that the joint responsibility for both marketing and manufacturing occurs at a low level in the hierarchy. Individuals are able to interact on a more personal basis.

3. The joint responsibility and accountability for measured profit results creates a greater sense of commitment toward the goals and objectives of the profit center and the company as a whole.
4. The demands and opportunities of the market place are conveyed to manufacturing faster and with a greater degree of accuracy.
5. The profit responsibility creates a greater understanding by marketing personnel that capital resources must be effectively utilized.
6. Manufacturing-marketing conflicts arising over questions of price, quality and delivery can be resolved quicker by having the manager with joint responsibility at a lower level.
7. Individuals in marketing or manufacturing are able to grasp a better understanding of teamwork as well as who their team members are.

These and other advantages of the decentralization philosophy make it an attractive approach for many companies to pursue. However, there are a wide range of requirements that must be met before a company can effectively embrace the concept. Some of these requirements are:

1. Top management must be assured that the divisional manager with joint responsibility for marketing and manufacturing will make the same decisions, within the limits of his ability, that would be made by top management itself if it were doing his job.
2. Top management must have the technique of evaluating the performance of the division manager in pursuing the profit goals of the company. This may require a vastly different system of information reporting.
3. Top management must be prepared to delegate the required degree of authority to the lower echelons along with responsibility. Decentralization will fail if this authority is withheld or worse, if it extended by lip-service and accompanied by frequent review of detailed work and decisions with a generous degree of "second-guessing."
4. The decentralized profit center must have a market which can be clearly defined and is reasonably homogeneous.
5. The manufacturing facilities must be identifiable and structured to be compatible with the markets.
6. Decentralization requires personnel policies which are based on measured performance, enforced standards, rewards for good performance, and removal for incapacity

or poor performance.

These requirements and constraints often prove to be so strong as to prevent many companies from attempting to decentralize at all. Other companies find it impossible to push the joint marketing-manufacturing responsibility down to a level at which the real advantages of decentralization can be achieved.

In general, the policy can be an effective approach for some companies and completely out of the question for others. This study revealed that those companies, which can meet the criteria mentioned earlier, are employing the philosophy to great advantage in achieving their overall goals.

The Integrators

As noted in previous sections of this thesis, business leaders have become increasingly aware of the need for integration among its marketing and manufacturing functions. Recent literature from the business schools refer to the need and the managers interviewed in the course of this study acknowledge its importance. Lawrence and Lorsch¹² have defined integration as "the achievement of unity of effort among the major functional specialists in a business." Their recent research reveals a close correlation between the effectiveness of integration among functional departments and company growth and profits.

Among the organizational approaches from which a company may choose to solve the marketing-manufacturing management problem is

that of establishing management positions, and even formal departments, whose purpose it is to provide the required degree of integration. While the need for effective integration is not exactly a new development, the ever increasing dynamic nature of many businesses has made the integrating job so important and so complex that it can no longer be handled satisfactorily by the general manager. Among the companies interviewed, several had found the problem to be significant enough to warrant the formation of separate organizations to service and manage the interface between marketing and manufacturing. These organizations had different names such as Product Supply Group in one company and Customer Planning in another, but their function was essentially the same. Their common objective was to coordinate the efforts of marketing and manufacturing toward the overall objectives of the firm. These "integrator" organizations handle a variety of chores ranging from the coordination of long range planning and capital expenditures to the more routine problems of quality standards, production schedules, transfer costing, product specifications, and the resolution of day to day conflicts that arise. In short, these companies have acknowledged that the problem of managing the marketing-manufacturing-interface is important enough in their business to justify a separate management function. These organizations were generally headed by members of top management, ususally a Vice President at the corporate headquarters.

Other companies have found that they can achieve the desired level of integration by establishing specific management positions

in either the marketing or manufacturing organizations. These jobs are designed in such a way that the incumbent can serve to provide a service for one or the other organizations while having as one of his major tasks the responsibility for achieving integration among the two. Again, it was found that these positions have a variety of titles such as product manager, project manager, program coordinator, task force chairman, planning director, and business manager to name a few. The role of the individual integrator is much the same as that of the integrator departments except that it is often more informal and is obviously more narrow in scope. The roles of product manager and task force chairmen were found most often in this research and more will be said of their function later in this chapter.

Here again we find a viable solution to the problem of managing the marketing-manufacturing interface and again we find that there are a number of requirements which must be met. Some of them are:

1. The responsibility and authority of the integrating function, be it a department or an individual, must be clearly and formally identified. If this is not done the role tends not to be seen as a legitimate one by either marketing or manufacturing and becomes only one of passing information back and forth across the interface.
2. Even with the positional authority just mentioned, the integrator jobs must be filled with people who can contribute to the decision process on the basis of their in-

dividual competence and knowledge. These jobs are no place for the young inexperienced manager.

3. The integrator positions must be filled with people who have or can develop a balanced orientation toward both the marketing and the manufacturing functions. The integrator who leans decidedly in one direction or the other soon loses his effectiveness.
4. The personnel selected for integrator positions must be able to resolve interdepartmental conflicts and disputes. Some of the resolution techniques will be discussed in Chapter 7.

A common philosophy of many of the companies in this survey is that the primary emphasis for integration should come from the marketing organization. As a result many of the individual jobs which are designed to achieve integration are marketing based jobs. Iazo and Corbin¹⁴ have explained this by saying "true teamwork between the producing and the selling ends of a business can be acquired only when marketing-the selling end-takes the initiative and accepts primary responsibility for the necessary coordination. It is marketing that knows, or should know, what the market demands are and what they will be in the immediate period ahead. It is marketing that can best translate this demand into units of production, manufacturing and delivery schedules (timing), and the filling of

the pipelines. It is marketing which knows where and when finished goods will be needed, and what finished goods where. Marketing cannot do its job of 'selling volume profitably' unless the plant produces on an optimum basis. And, to produce most effectively and therefore most profitably, people in manufacturing must know the full requirements as established by marketing."

From the reactions of the managers interviewed for this study the author concluded that the foregoing philosophy seems to be one that works particularly well in periods of expansionary economic conditions. However, the crush of the current recession has forced the manufacturing arm of many businesses to assume their share of responsibility for creating effective integration. As the urgency to utilize existing facilities has increased, the integrating roles of manufacturing project manager and production control manager have become more concerned with integration as many companies have sought to maintain adequate profits in spite of falling volume.

In general, the use of integrator departments or positions can be another highly successful means of achieving integration between marketing and manufacturing.

Product Managers

One of the most effective "integrator" roles found in the course of this study was the product manager. Most of the participating companies referred to this function as the one which could provide the basis for effective interaction between the marketing and manufacturing organizations. It was found that the function exists in

many forms and has many different titles. There are product line managers, product specialists, brand managers, product planning managers and product marketing managers to name just a few. Eighty per cent of the companies in this study had some form of product manager in their organizational structure. The basic function is quite similar, however, in that they are all charged with the responsibility of one of the company's products or product lines. Theirs is the fundamental job of providing a product which is demanded by the customer and which can be sold at a profit. To do this, they must perform such duties as recommending sales objectives, planning marketing strategies and promotional programs, and coordinating all the other company functions relating to their product.¹⁹

Perhaps as much or more than any other role in the organizational structure, the product manager must cut across organizational lines to achieve the functional cooperation necessary to meet his product objectives. As such, he is often found to be the most visible to manufacturing of all the marketing jobs. Beyond this visibility is the fact that the type of input to manufacturing that the product manager can provide is vital to effective performance by manufacturing. Most often it is the product manager who provides the forecasts from which manufacturing can plan and schedule its production. It is the product manager who can relate the demands of the market place to the plants with regards to product quality, customer service, new product development, specifications, and cost requirements. The quality of this information and the manner in which it is transmitted may prove

to be one of the most significant reasons for long term successful operation of manufacturing facilities.

In some companies the same products are sold to several markets, each of which is sufficiently different and important enough to justify a market orientation of the marketing effort as opposed to the product orientation. In those cases the functions just described would be provided by a market or industry manager. In other companies the scope and importance of the market is such that the company can justify separate market and product management within its marketing organization. In these companies it is vital that the product managers provide the coordination of the manufacturing effort with that of the various market or industry marketing efforts.

The requirements for successful performance of a product manager in his relations with the manufacturing organization are essentially the same as those described for integrators in general. The product manager must also maintain a balance in his orientation toward marketing or manufacturing even though he is a member of the marketing organization. Several companies in the study reported difficulties with the product manager system where individuals in the role overstepped their responsibility limits.

The unusual coordinating and integrating demands of the product manager role tend to make it a difficult job to fill. However, the concept has been widely accepted by American industry and can provide an effective means of management of the marketing-manufacturing interface.

The Task Force

Another organizational technique which management may employ to achieve integration of its marketing and manufacturing effort is the task force. Here again the concept may appear in a number of forms and may have a number of different labels. There are new product teams, facilities planning committees, market development task groups and many others. The basic concept, however, is one of drawing together a group of people from the various functional groups for the purpose of performing some task or to make some decision. The task force may be put together for one specific assignment and then disbanded upon its completion or it may be a permanent function for problem solving on a continuing basis.

Most of the companies interviewed for this study reported that they use the task force concept in one form or the other as an effective means of expediting the joint marketing-manufacturing decision making process. Many of the companies have cross functional groups who are responsible for decision making on matters of customer service, new product development, product quality and the like. Special task forces with representatives from marketing and manufacturing are often formed for the purpose of investigating some major question and formulating a joint recommendation for top management. The question might involve the entry of the company into a new market or the withdrawal of a product line from the market. It might be a question of major facilities planning or determination of a market strategy. The idea of the task force approach for major decisions such as these is

that management can usually expect better results through the imposed collaboration of a group than it can from recommendations made independently. Furthermore, a properly selected and managed task force will be less likely to operate in a win-lose environment or reach their decisions through the bargaining process if they have a clearly defined problem solving charter.

The managers interviewed in this study generally agreed that there are a number of considerations that must be made by management if they elect to employ the task force technique. Some of the questions and provisions are as follows:

1. Does the purpose justify the establishment of a task force or can the task be accomplished through normal organizational channels? There was some evidence that task forces are often set up to perform certain chores as an alternative to solving some basic organizational or personnel problems that prevented the accomplishment of the task through normal channels.
2. The members of the task force must be selected carefully. Attention should be given to the selection of personnel from the same general levels of authority and responsibility in both marketing and manufacturing. A task force that is out of balance with regard to individual rank or knowledge will soon run into trouble.
3. A chairman should be named who possesses the general char-

acteristics of a good integrator as described earlier. He should also be results oriented.

4. The task of the group should be clearly defined. They should have no doubt as to what is expected from them and when. The authority of the group should be commensurate with the responsibility.
5. Management should demonstrate its continued interest and support of the group by requiring periodic progress reports and counsel where appropriate.
6. Temporary task forces should be disbanded promptly and formally when the task has been completed. Permanent groups should also be discontinued or restaffed when they cease to function effectively. There was some opinion among some managers in this survey that these standing task forces or committees can often become stale and degenerate into debating societies if left unattended by higher management.

In summary, the task force techniques may be an effective device to achieve integration between marketing and manufacturing if used with care and managed properly. The evidence supports the notion that the task force can serve to unify interdependent groups such as marketing and manufacturing rather than to drive them further apart.

The Matrix Concept

Any discussion of organizational techniques would be incomplete if it did not make some reference to the matrix design. In recent years this concept of organizational structure has emerged in various forms in companies which have experienced an increased volume of new products.⁹ During this study none of the participating companies were using the pure matrix design, but several of them were having success with minor modifications of the principle. In those cases the managers reported that the idea had helped to solve some of their problems at the marketing-manufacturing interface.

The essence of the matrix principle is to create an organization which falls somewhere between the pure functional design and the pure product design. It attempts to create an effective balance of power between the product and functional points of view by creating an environment in which there are dual reporting and authority relationships. For example, an individual working in a product or program organization reports not only to the product or program manager but to his functional manager as well.

The most common example of the concept found in this study was the subproduct manager assigned to the operations team. This individual with a background in either marketing or manufacturing served to represent the marketing organization at the plant level and maintained a dual reporting relationship to both the local plant manager and to the product manager. The consensus of the managers interviewed for this study was that this technique could be quite effective in

creating effective integration and resolving conflicts. The sub-product manager can create a greater product orientation at the plant level and represent the manufacturing point of view for marketing decisions to be made at the product manager's level. His role is similar in many respects to the "integrator" roles mentioned earlier but the dual reporting system serves to insure a more balanced orientation in his approach. Indeed, the measure of effectiveness that an individual may attain in this role is primarily dependent upon how well he can balance the two points of view.

Another example of the concept was found in the technical representatives who are often assigned to regional offices in field sales organizations. These positions serve to provide the technical expertise and support for field sales effort. The individual reports to the regional sales manager as well as to the technical director who is a part of the manufacturing organization. Again the balanced orientation serves to provide a valuable input of information to both the marketing and the manufacturing organizations on matters of product design, quality, delivery and customer service.

A common criticism of the matrix system is the difficulty that management has in selecting personnel who can maintain a balanced orientation and cope with the dual reporting relationship. Nevertheless, it can be a viable organizational technique and one which may be used to advantage in resolving the marketing-manufacturing conflict.

Summary

As companies react to changes in market and environment conditions they must adopt new strategies and organizational structures to meet the changing demands. As the need for effective interaction between marketing and manufacturing has become more vital to corporate success, most of the managements in this study have sought to achieve it through changes to their organizational structure.

In this chapter the objectives of organization were outlined and the need for a balance of differentiation and integration was discussed. The research interviews for this study revealed that both the classical theory and the human relations theory of organization are both being followed with success at the present time. While most of the companies in this study were of the classical school, the choice seems to be a function of the myriad of factors which define each company's environment, objectives and strategy.

Specific attention was then drawn to the most prevalent organizational techniques which were found to have a positive effect on the marketing-manufacturing interface. The effects of decentralization, the use of the integrators, product managers, task forces, and the concept of the matrix were all shown to be schemes which could be employed to enhance interaction.

Chapter 7

PSYCHOLOGICAL APPROACH

Introduction

Up to this point this study has attempted to discuss some of the more tangible techniques and approaches that management may employ to achieve an integration of effort between marketing and manufacturing. However, it is not enough merely to improve a company's systems and its organizational structure if meaningful integration of effort is to be achieved. Systems and organizational structures depend upon people to make them succeed. Therefore, the final area of consideration in this study will be the psychological aspects of the problem.

After a brief review of some of the underlying psychological reasons for the marketing-manufacturing conflict, this chapter will discuss some of the more significant ideas for conflict resolution that were revealed by the research. These ideas will include the use of the behavioral sciences through organization development, joint problem solving, communications, leadership, and the inter-functional transfer of personnel.

Psychological Aspects

Before turning to some of the psychological approaches that are currently in use, it is proper to discuss the basic problem in the terms of the modern psychologist or behavioral scientist. Discussion of interfunctional conflict has received considerable attention

in recent years as evidenced by the work of McGregor¹⁷; Leavitt¹⁵; Lawrence and Lorsch¹³; Blake, Shepard, and Mouton⁴; Schein²¹; Likert¹⁶; and many others.

Schein²¹ explains the conflict as one which results from the fundamental notion of the division of labor. This notion says that the goals of any organization can only be met through different people doing different things in a coordinated fashion. The division of effort happens as the various means by which a given end is to be accomplished are divided among groups and subgroups within an organization. As these means become operational, they become the goals of the subgroups and may be further subdivided. This further subdivision creates a situation in which most people in any organization are required to perform only limited activities. However, it is the whole person who comes to work, bringing his own set of attitudes, feelings, and perceptions that are not anticipated by the organization. As the individual works with others, he develops relationships with them, informal agreements, and patterns of coordination, all of which go beyond those specified formally by the organization. These informal relations often reflect a growing loyalty to the subunit to which an individual belongs. As he identifies with the subunit, his self esteem becomes tied to its performance, and it becomes increasingly difficult for him to understand and empathize with the problems of other units and the organization as a whole. Increasingly, he may work for his own unit and become indifferent or even hostile to others. Schein also points out that the formal organization often encourages this

process by rewarding competition between groups and stimulating "esprit de corps." The gains of such activity often justify such competition but, at the same time, create serious intergroup coordination problems.

Blake, Shepard, and Mouton⁴ expand on this basic notion and point out that the behavior of two members of an organization or two groups in relation to each other is a result of three or more sets of forces. First is the formal job description which defines the kinds of responsibilities that each person or group brings to the situation. Secondly, their behavior is determined by their backgrounds of training and experience. And finally, the third factor that governs their behavior is the role they feel themselves to be in as representatives of their particular group.

When representatives of marketing and manufacturing come together to resolve any of their mutual problems they come not only as individuals but as members of their respective groups. Blake, Shepard and Mouton point out that acting as individuals, a man is free to change his mind on the basis of new evidence. But as a group representative, if he changes his thinking or position from that of his group's and capitulates to the opposite point of view, he is likely to be perceived by his own group as a traitor. If, on the other hand, he is able to persuade the other side to capitulate to his point of view, his group will receive him as a hero. In other words, when an individual is acting as a representative of one group in disagreement with another, the problem is more than

a personal conflict.

Another psychological phenomenon that exists at the marketing-manufacturing interface stems from the inevitable comparisons of groups which takes place in all organizations. These comparisons are made in the spirit of competition, and as mentioned earlier, this can be an effective tool to stimulate extra effort. However, the disadvantage of competition among groups is that it tends to spotlight the differences between groups rather than their similarities and commonness of purpose. Furthermore, the objective of competition is more closely related to winning than to problem solving. The result is often that the needs for collaboration and interdependence are not met as well as they might have been.

Obviously, there are many other explanations of the psychological forces which are at work in a basic conflict such as this. Perhaps the foregoing discussion will serve to make the point that the psychological roots of the problem are genuine. The greater the understanding that management has of the underlying psychological factors, the greater its chances become to manage the marketing-manufacturing interface in an effective manner.

Organization Development

McGregor¹⁷ wrote about "the human side of the enterprise" and predicted that it would become the major preoccupation of management. In more recent years the label of "organization development" (or O.D.) has come into general use to represent the effort by companies to

manage all of their resources, including its management style and behavior, in relation to each other. The O.D. approach is a human relations strategy based on the behavioral sciences. As such, the workings of any company's program is usually characterized by the ideas of one or more of the influential behavioral scientists. McGregor (Theory X and Theory Y), Herzberg (Motivation -Hygiene Theory), Likert (System 1 and System 4), Argyris (T Groups), and Blake and Mouton (Managerial Grid) are the acknowledged leaders.

In this study the author attempted to determine if any of the participating companies had applied the O.D. effort in any way to help resolve the conflict between their marketing and manufacturing forces. The survey revealed that only two of the companies were actively involved in a formal O.D. effort. Most of the remaining companies had at one time or the other engaged the services of behavioral scientists from a variety of universities for special training programs or as consultants on specific management problems. However, none of the companies had made any significant use of the O.D. effort in the resolution of its marketing-manufacturing interface problems. While most of the companies had conducted various types of training programs designed to improve the interpersonal skills of some of their managers, there was little evidence of training aimed specifically at improving the interaction of marketing and manufacturing.

In general, however, most of the managers expressed the opinion that they should be doing more in this area with their marketing

and manufacturing people. There was general support for the benefits to be derived from O.D. efforts with the one exception of the T Group technique. Only a very few of the managers were of the opinion that this type of training is worthwhile. Most of them were opposed to it, some in very strong terms, primarily as a result of bad experiences that they had seen in their own companies or as a result of unfavorable reports from sources outside their companies.

The conclusion that the author drew from the interviews was that, in the opinion of these managers, the O.D. concept was too new and unproven to be applied to so critical a management problem as the marketing-manufacturing conflict. This conclusion may be confirmed to some degree by the work of Weisbord²³ who reported that of the "Fortune 500" corporations, only six per cent are represented in the "O.D. Network" a loose association of applied behavioral science professionals. Perhaps a more accurate explanation might be that most companies cannot wait for solutions through the O.D. approach. Most of the O.D. professionals will acknowledge that it often takes three to five years to see the results in the form of a strong, well-integrated, and highly motivated organization. Such a time lag is simply not compatible with the severity of outcome resulting from unsolved problems at the marketing-manufacturing interface. This is particularly true when the manager has at his disposal more expedient techniques.

Mutual Problem Solving

Blake, Shepard and Mouton⁴ have pointed out that intergroup conflicts may be characterized as win-lose, isolationism, peaceful coexistence, bargaining and mutual problem solving. This study revealed that these characteristics of behavior can and do show up at the marketing-manufacturing interface.

- a. Win-lose. As noted earlier in this thesis, the relations between marketing and manufacturing may be carried on in a win-lose atmosphere. Both sides enter into discussions with the basic feeling that disagreement is inevitable. The orientation of thought is polarized at the outset and the objective of each group is to win. The participants usually view their opposing members with distrust and show signs of open aggression in their deliberations. The parties bring to bear whatever power or influence they can to achieve a resolution which favors their own point of view. The result of this kind of interaction is that there is usually one winner and two losers, the losing party and the total organization. Lawrence and Lorsch¹² have described this kind of conflict resolution as the "forcing method" which is simply the straightforward use of power.
- b. Isolationism. In some cases where the win-lose attitude prevails, the parties may fail to achieve resolution and withdraw in the hope that the other side will tire of the

struggle and capitulate. The result is that the mutual problem remains unsolved while each side works to strengthen its own position. Communication often ceases and little effort is made to reconvene for the purpose of reaching some kind of resolution. As time passes, each group proceeds to perform its tasks in the manner prescribed by its own interpretation of the problem even though they may both be at odds with the objectives of the total company objectives.

- c. Peaceful Coexistence. A more common arrangement between the marketing and manufacturing forces is the state of peaceful coexistence. In this condition both parties recognize that disagreement is inevitable but that mutual decisions must be made nonetheless. To do this they tend to stress those areas of commonality and ignore their areas of disagreement. They simply avoid the delicate topics which might be distasteful and strive to achieve harmony. To be sure, this arrangement does lead to the resolution of some problems by smoothing them over, but through the avenue of accommodation many of the more pressing problems may continue to exist, often for years.
- d. Bargaining. Another common situation often arises when the relative power of marketing and manufacturing is more or less equal. Realizing that decisions must be made the

parties seek some intermediate position which will be acceptable to both sides. By splitting the difference or by some compromise on each side the common ground is found. The difficulty with this form of conflict resolution is that it gives up the possibility of achieving the one best solution for the company as a whole. The solution that emerges through bargaining or compromise is often designed more to accommodate the differences of the two parties than it is to resolve the basic issue which is at stake.

- e. Mutual Problem Solving. While the forging characterizations of intergroup behavior can and do exist all too frequently at the marketing-manufacturing interface, it is obvious that there must be a better way. The better way is through the process of mutual problem solving. Admittedly, this mode of behavior is difficult to achieve in the pure sense, but it offers sufficient advantages to make it a goal which should be actively sought by the enlightened modern management.

The basis for mutual problem solving between marketing and manufacturing is the fundamental belief that both groups can reach a better solution to their mutual problems by collaboration than they can by working independently. If this attitude can be achieved, the representatives of

marketing and manufacturing can meet, define the problem, review the facts, develop a range of alternative solutions and arrive at a conclusion that will meet the needs of the organization as a whole. Obviously the scope and severity of the problem will dictate the time required to gather the required facts and to explore the options. The key to effective mutual problem solving is to have both groups be dedicated to the implementation of the joint decision without a feeling that either of the groups has lost its autonomy.

This particular study revealed a number of cogent observations relative to mutual problem solving or the confrontation method as it is sometimes called. As to be expected, most of the managers expressed a basic belief in the method and indicated that their objective had long been to achieve this kind of resolution to conflicts at the marketing-manufacturing interface. However, in spite of their efforts, they had to report that unfortunately some of the other modes still persisted. The significant observation, however, came from a number of the managers who reported recent improvement in problem solving as a result of changes in the external environment. Whereas many of their motivational efforts had shown only slight improvement, recent changes in the environment had created dramatic improvement. These managers reported that the recent economic recession

had imposed severe financial difficulties for their companies and had served to draw their marketing and manufacturing forces closer together in their conflict resolution. This realization of a greater need for interdependence and collaboration in times of difficulty was viewed as a major step forward by these men.

From these and other observations in the interviews the author was able to conclude that management may seek to achieve the mutual problem solving mode in two basic ways. First it may seek to educate the groups by pointing out the advantages, and it may even change the rewards system to punish those who fight and reward those who collaborate. The second approach and the one which appears to be the more effective is to seek to highlight the superordinate goals of the two groups. The outside threat of a competitor, the difficulties brought on by the recession, and the demands of technological growth are examples of objectives which are imposed by the external environment. To unite against a common threat has long been a powerful motivating force and one which should not be overlooked today.

Lawrence and Lorsch¹³ are strong advocates of the problem solving method of conflict resolution. They conclude that the best conflict resolution occurs when management stresses problem solving but is also willing to tolerate some "forcing" when the problem solving technique becomes

bogged down.

Communications

Any discussion about the resolution of interfunctional conflict must obviously include some reference to communications. Industrial managers have known for a long time that the improvement of formal and informal communication channels is a cornerstone of effective interaction among all types of groups in conflict. Indeed, one might suspect that the topic has been worked to the point of diminishing returns. The literature on improving communications is staggering as are the number of communications programs that most companies have sponsored over the years.

Yet, in spite of the tendency to assume that everyone has mastered the techniques of communications, an overwhelming number of the managers in this study saw communications as one of the keys to the marketing-manufacturing problem. While most of these men were in agreement that formal communications training programs were of little value, they were willing to talk about some of their techniques which had been used to enhance communications at the marketing-manufacturing interface. Two of these ideas which appeared most frequently in the interviews are described below:

1. Exchange of representatives at informational meetings.

This technique, although far from revolutionary, was described by many of the managers in this study. The idea is that the marketing or manufacturing management should

invite certain key managers from the other group to attend their staff meetings on a regular basis. The visiting representative can not only gain a valuable insight into developments in the other area but can also contribute information from his own area as the need arises.

Meetings of this type are normally informational and are not designed to resolve specific conflicts. However, the managers in this study report that managers who have experienced this kind of exposure are frequently those who are the most effective at achieving joint resolution to mutual problems when conflicts arise. There are disadvantages to this approach, however, which often restrict its use. To begin with, the visiting manager is drawn away from his primary function and this may require more time than can be afforded. Geographical distances may be involved which would impose time and cost constraints. And finally it was reported by several managers that the presence of the visiting representative could serve to hinder the open expression of problems by the host group.

2. Informal Communications. As mentioned earlier, individuals in both marketing and manufacturing often find that much can be gained through direct and informal contact with their counterparts in the other functional area. This type of contact occurs most frequently and naturally in the de-

centralized structure and can also be used to advantage in the functionally organized companies. Here again, the degree to which informal communications channels are used depends in large part upon the philosophy of top management. Some of the companies in this study felt that this type of communication should be avoided. A few of them had control mechanisms and specific organizations at the interface to insure that communications were handled in a formal manner. Other companies described how they encouraged informal communications through meetings and visits designed to develop personal relationships. These companies believed that the informal contact could lead to the solution of many problems at lower levels in the organization.

The author was able to conclude that the encouragement of the informal communications is a positive step that a management may take to achieve more effective interaction. The decision to do so depends upon the management philosophy, the size of the company, and the organizational structure.

The managers interviewed for this study were in accord in their belief that effective communications was vital to the achievement of the desired interaction between marketing and manufacturing. Their major concern, however, was not the form in which the communications took place but the reliability and accuracy of the information trans-

mitted.

Leadership

In chapter 4 the role of top management was shown to be a vital factor in the achievement of effective interaction at the marketing-manufacturing interface. The importance of leadership from the top cannot be overemphasized. However, it is equally important to realize that leadership is not vested in top management alone but is distributed among the organization as a whole. If the corporate objectives and strategy require effective interaction between its marketing and manufacturing forces, the leadership necessary to achieve it can be demonstrated throughout both functions. The formal and informal leaders at all levels can exert the leadership required to change a win-lose relationship or peaceful coexistence into the mutual problem solving mode. These same leaders can foster a climate in which problems are solved at the proper levels and avoid the spiral effect of sending too many conflicts to the top for resolution.

In business, just as in many other areas of society, the historical leadership role is being challenged today as never before. The traditional "follow me" type of leadership is being replaced by the leadership which can motivate and influence without leaning on the crutch of authority. This type of leadership is of particular importance at the marketing-manufacturing interface where many conflicts must be resolved in an environment where there is no clear authority relationship.

Recognizing this relationship, one manager described how his company uses unstructured task forces to resolve certain problems. With no formal authority of one group over the other it is up to the group to generate its own leadership. This manager also noted that this technique not only provided excellent decisions but that it provided an ideal opportunity to identify managers who possessed the non authority based style of leadership.

Thus one may conclude that leadership is critical to effective interaction at the marketing-manufacturing interface. Effective coordination and collaboration may be achieved through the hierarchy of authority, and they may be achieved through the leadership and self discipline that exists throughout the hierarchy. Both forces must exist in the successful enterprise.

Interfunctional Transfer of Personnel

In the research interviews for this study one discussion topic centered on the idea of interfunctional transfer of personnel between marketing and manufacturing. This question was raised in an effort to determine to what extent this particular technique was being employed by the participating companies as a strategy to achieve integration.

In theory the exchange or rotation of members among functions offers a number of desirable advantages toward the achievement of interaction and collaboration. Some of the more pertinent advantages are:

1. Horizontal communications are enhanced in that the transferred individual brings with him a background of first hand knowledge and experience of the other functional area. Not only can he share this experience and knowledge directly with his new functional area, but he can also provide a valuable source of personal contacts for information in his former department. It is important that the individual maintain and utilize these contacts.
2. As an integrative strategy the exchange of personnel can lead to a greater degree of mutual understanding and empathy for problems that exist in each area. Once the transferred individual has become established in his new function, his description of problems in the former area tend to be received with a relatively higher degree of credibility by his new colleagues.
3. Managers who possess cross functional experience are prone to develop a broad scope orientation toward problems at the interface. They are more likely to view problems in their relation to overall company objectives than their counterparts without this experience. Furthermore, the manager with cross functional experience may be expected to contribute to and support other integrative strategies such as task forces, "integrator" positions, matrix struc-

tures and the like. Indeed, the managers who have achieved the broad based orientation through their multifunctional experience are often those who seize the initiative to encourage mutual problem solving. Their unique perspective allows them to see most clearly the overall losses due to win-lose confrontation, isolationism, peaceful coexistence or bargaining.

While most of the managers interviewed for this study were willing to acknowledge these and other advantages of the cross functional transfer, very few of them had adopted the strategy for their marketing and manufacturing personnel. Only two of the sixteen companies had a significant exchange of personnel between marketing and manufacturing and these two were highly decentralized firms who were primarily concerned with the strategy as a means of developing individuals to serve as general managers of their decentralized operations. As a pure integrative strategy for marketing and manufacturing the cross functional transfer did not emerge from this sample of companies.

There were, however, numerous examples presented by most of the managers to indicate that they had experienced a limited number of transfers across the marketing-manufacturing interface. For example, one company had found it useful to have some of its marketing-sales people spend two to three years in the production control department of their manufacturing division. Another manager described how the nature of his business made it desirable to encourage young engineers

to move from manufacturing into sales and marketing after a few years. He was quick to point out, however, that theirs was a one way transfer, and he could not remember a single case of a transfer from marketing to manufacturing. There were other examples which involved the selection of an individual to fill a particular slot in the opposite function because of a combination of specialized skills of the individual and specialized requirements of the position. In no case, however, did the author find evidence of an overall strategy to exchange personnel as a means of achieving greater integration and interaction between marketing and manufacturing. Perhaps one manager summed up the feelings of most of those who were interviewed when he said, "Oh yes, we recognize the gains that can be achieved by rotating people, and we talk about it quite often, but in the end nothing happens!"

Based on the findings of this particular research, the cross functional transfer of personnel between marketing and manufacturing may be seen as an integrative strategy which has considerable support in theory and opinion but very little support in practice. The author suspects, however, that this particular strategy will become more popular in the future as companies strive to achieve the increasing level of interaction between marketing and manufacturing that will be demanded by their dynamic markets.

Summary

This chapter has sought to view the problems of managing the

marketing-manufacturing interface from the psychological standpoint. Some of the psychological ideas and approaches, though by no means all inclusive, were discussed in relation to their merit and application as seen by a small sample of managers in the real world of business. Organization development (O.D.), mutual problem solving, communications, leadership, and interfunctional transfer of personnel were all shown to be psychological approaches which can and are being used by companies to attack the problem.

This particular study revealed that the psychological approach to the solution of problems at the marketing-manufacturing interface does not enjoy the popularity and support as does the organizational approach described in Chapter 6 or the systems approach as shown in Chapter 5. This may be explained in part by the relative newness of some of the concepts and the inherent distrust that most of us have of new and different things. On the other hand, this reluctance should not be interpreted as an indication of weakness of the psychological approach. This author suspects, and found considerable support among the managers who were interviewed, that the psychological area offers the most fertile field for management consideration in the future.

Chapter 8

SYNTHESIS & CONCLUSIONS

Introduction

The purpose of this thesis has been to conduct a subjective overview of the interface between the marketing and manufacturing functions of the industrial enterprise. The research methodology consisted of a review of the published literature on the subject coupled with a series of personal interviews with high level managers from sixteen industrial firms. The central thrust of the study was to determine why these two functions must interact effectively and the options available to achieve effective interaction.

In the final chapter the author will first relate the major findings and observations that emerged from the research interviews and the search of the published materials. One of the most important findings was that the integration of effort must be achieved concurrently with a high degree of differentiation. To compete successfully in a dynamic market environment a company must seek to achieve a high level of interaction and integration of its marketing and manufacturing functions at the same time that each function must become more specialized and differentiated in its own role. With this idea in mind the general conclusions of this study will be presented in three parts, as follows:

- a. What should marketing expect from manufacturing?
- b. What should manufacturing expect from marketing?
- c. What should the company expect to achieve through the effective interaction and integration of effort at the marketing-manufacturing interface?

Major Findings and Observations

The following list of findings and observations represent the major concepts and ideas that came out of the interviews with managers from the sixteen company sample. No rank order of significance is intended as the list follows the general organization of material in the preceding chapters. Those findings and observations which were of particular significance to the author are as follows:

1. Among the companies interviewed the conflict between marketing and manufacturing was by far the most significant of all the interfunctional conflicts that exist in the modern enterprise.
2. The marketing-manufacturing conflict was seen to have been aggravated in recent years by the growth of technology, the increasing dynamic nature of the market environment, and the complexities of modern industrial enterprise.
3. An overwhelming number of the managers in this study were of the opinion that the conflict should not be viewed with

regret but managed in an open and aggressive manner as a positive means of achieving the objectives of the company.

4. While many strategies and conflict resolution techniques were discussed in this study, it is clear that there is no one solutions that would be appropriate as a general rule. Each company must determine its own strategy for effective interaction at the marketing-manufacturing interface, tailoring the plan to its own particular environment, personnel, and objectives.
5. The role of top management (chairman, chief executive officer, and/or president) was seen as one of the most significant influences on the marketing-manufacturing interface. They determine the degree of interaction and integration through the establishment of company objectives, the formulation of overall strategy, and by their own personal conduct, leadership and the standards that they impose for the firm.
6. Most of the companies in this sample seek to manage its marketing-manufacturing interface through the organizational approach as described in Chapter 6.
7. Several of the companies in this study had found it necessary to form separate organizations within their structure whose primary purpose was to coordinate the efforts

of marketing and manufacturing. Most of the other companies had various forms of "integrator" management positions whose role was to achieve the same purpose. The most common "integrator" position found was the product manager.

8. The design and operation of a company's systems often impose constraints that prevent effective integration of marketing and manufacturing effort. While some of the companies in this survey have sought to modify their systems to remove such constraints, it is apparent that the systems approach has received less management attention when compared to their efforts toward the organizational approach.
9. While most of the companies in this survey were advocates of the classical theory of organization, the human relations theory was found to be another viable approach. Both theories now exist and neither seems likely to displace the other.
10. The companies in this survey who have achieved the most effective interaction and integration at the marketing-manufacturing interface were those who have been able to design and implement a management strategy in which the responsibility for profit is shared by marketing and man-

ufacturing managers. Realistic control and rewards systems based on joint profit responsibility are often very difficult to design and implement but are vital to successful interaction and collaboration at the interface.

11. In addition to the role of top management it is apparent that marketing and manufacturing personnel at all levels in the hierarchy can contribute to successful interaction and integration of effort. There is also some evidence that the most effective interaction results when the primary initiative for such interaction is taken by the marketing arm.
12. Most of the managers in this survey believed that the resolution of marketing-manufacturing conflicts could be enhanced if the responsibility for such conflict resolution is pushed down to the level in the structure at which the information most relevant to the conflict exists. While there was a distinct difference of opinion on the overall merits of decentralization, there was consensus that the concept does improve interaction and integration of marketing and manufacturing.
13. Many of the difficulties and conflicts which exist at the marketing-manufacturing interface are psychological in nature. There was considerable evidence in this survey

that company managements are becoming increasingly concerned with the handling of their human resources. In this sample, however, there was relatively little evidence of the extensive use of psychological techniques at the marketing-manufacturing interface.

14. Most of the managers stressed the importance of communications techniques as the basis for effective interaction between marketing and manufacturing. There was also considerable support for the concept of mutual problem solving. On the other hand, only two of the companies had a formal O.D. program and these two companies had made little use of the O.D. concepts in the resolution of conflicts between marketing and manufacturing.
15. The cross functional transfer of personnel between marketing and manufacturing did not appear as a viable integrative strategy among the companies surveyed. Most of the managers were willing to extol the virtues of such a strategy but none had adopted it to any significant degree.

Conclusions

The principal conclusion drawn from this study is that, to optimize its success, the industrial enterprise must include in its overall strategy a plan to achieve interaction and integration of effort between its marketing and manufacturing forces. The ne-

cessity for such a strategy may be forced upon a company by a host of factors such as the demands of a dynamic market environment, the growth of technology, the emergence of the marketing concept, the rise of consumerism, or the adoption of similar strategies by competition. On the other hand, an aggressive company may adopt the strategy as a means of gaining the competitive edge by marketing more than just its basic capability. It may seek to offer a full range of service and attract its customers through exposure to its facilities, its people, and its basic philosophy. The total company package concept can only be achieved through an effective interaction and integration of its marketing and manufacturing efforts.

However, in the pursuit of such a strategy, the company must strike a proper balance between integration of effort on the one hand and the need for differentiation, specialization, and functional proficiency on the other. It must not become so obsessed with the need for integration, interaction and collaboration that it neglects the individual functions that marketing and manufacturing each must perform. Thus a company which opts for an integrative strategy must first seek to insure that marketing and manufacturing are each meeting their basic obligations to the corporation and to each other. The effective performance of individual responsibilities, if it is to serve as the basis for interaction and integration may be summarized as follows:

A. What should marketing expect from manufacturing?

1. Manufacturing must provide adequate production capability in the form of plants, equipment, and personnel to support the demands of the market.
2. Manufacturing must provide the technological progress and cost effectiveness required for the company to maintain or enhance its position in competitive markets.
3. Manufacturing must provide a system of quality control which will insure a product that meets the requirements of the market place.
4. Manufacturing must provide an organization which is capable of responding to the needs of the market. By this is meant the ability to provide prompt and reliable deliveries, cost information, specification capabilities, and communications in general.
5. Manufacturing must provide personnel at the marketing interface who will provide the many forms of support for the marketing effort and who are skilled at resolving the conflicts that develop.

B. What should manufacturing expect from marketing?

1. Marketing must provide responsible and reliable forecasts of what will be required to satisfy the market in terms

of cost, quality, volume and delivery.

2. Marketing must provide the information learned from its research. This will spell out market potential by product, size, location, quality, as well as the strengths and weaknesses of competition.
3. Marketing must provide an overall marketing plan which will include the sales plan required to move the product, the advertising plan, and a product plan which defines changes in the current product mix over time.
4. Marketing also must maintain its technological edge, refine its research methods, and maintain a cost effectiveness in its operations in the same manner as it expected from manufacturing.
5. Marketing must provide skillful people at the manufacturing interface. They must also be willing to assume the initiative in seeking to achieve interaction and integration with manufacturing. This responsibility falls first on the shoulders of marketing because of their proximity to the market and individual customers.

Obviously, the foregoing expectations are quite fundamental and readily understood by most industrial managers. They were included here simply to reinforce the conclusion that these fundament-

als form the basis for effective interaction and integration between a company's marketing and manufacturing groups. The company which seeks to create an integrated effort from marketing and manufacturing cannot expect to succeed if these fundamental functions are not strong and viable.

Once these basic functions have been strengthened the company may seek to bring about a more effective interaction and integration of effort. Its particular integrative strategy may embrace some of the concepts that have been described in this thesis. More than likely the company will find it necessary to modify its systems, its organization and its psychological approach. The company, however, may expect to realize significant dividends from its effort toward the integrative strategy. Some of the major benefits are as follows:

- C. What should the company expect to achieve through the effective interaction and integration of effort at the marketing-manufacturing interface?
 1. First and foremost the company should expect an improvement in the fundamental criterion for decision making throughout the organization. The basic criterion may well become the relevance to the achievement of the organizational purpose and objectives rather than the conformity to the dictates of individual disciplines. In a genuine climate of interaction and integration, the man-

ager of marketing or manufacturing will first ask "what is the best solution for the company?"

2. The company may also expect a greater degree of personal and organizational commitment toward its purpose and objectives. This enhanced commitment is derived from the basic human tendency to try harder to implement plans and meet objectives that have been established jointly and are based in part on personal involvement and participation.
3. The company may expect a more healthy balance of power between its marketing and manufacturing forces. This balance will insure that existing resources will be effectively utilized in the short run while equal attention is placed on pursuing new and promising market opportunities which may call for new skills and resources.
4. And finally, the company may expect to achieve an organization that is more responsive to changes in its environment. Effective interaction and integration at the marketing-manufacturing interface will greatly enhance the company's ability to meet the challenges of an emerging technology, an aggressive competition and the rise of consumerism. Most important of all it will be able to respond to the real needs of the most vital element, its customers.

In general the author was able to conclude that the way in which a company perceives and manages the marketing-manufacturing conflict is as vital to its ultimate success as almost any other problem that faces the modern enterprise. Management should utilize the conflict in a positive and open manner as a means of reaching its objectives. Furthermore, management should strive to retain the conflict rather than suppress it because interfunctional peace is not to be equated with corporate health.

In this study the author encountered a wide difference of opinion as to how the marketing-manufacturing interface should be managed. There was consensus, however, that the interface should be managed with great care and effort. The time is past when a company could risk the marketing-manufacturing interface to happenstance and expect to reach its real potential.

Bibliography

1. Andelson, R.P., "Harnessing Engineers and Scientists to the Sales Effort" in John S. Whrite and Jac. L. Golstucker ed. New Ideas for Successful Marketing, Conference of the American Marketing Association, Chicago.
2. Anthony, R.N., Dearden, J., Vancil, R.F., Management Control Systems, Homewood, Illinois, Richard D. Irwin, Inc., 1965.
3. Bennis, W.G., Schein, E.H., Steele, R.I., Berlow, D.E., Interpersonal Dynamics, Homewood, Illinois, the Dorsey Press, 1968.
4. Blake, R.R. Shepard, H., and Mouton, J.S., Managing Intergroup Conflict in Industry, Houston, Texas Gulf Publishing Co., 1964.
5. Bower, J.L., Managing the Resource Allocation Process, Boston, Division of Research, Graduate School of Business Administration, Harvard University, 1970.
6. Corey, E. Raymond, and Star, Steven H., Organization Strategy A Marketing Approach, Division of Research Graduate School of Business Administration, Harvard University, 1971.
7. Decision Making in Marketing, The Conference Board, Inc., New York, N.Y., 1971.
8. Drucker, Peter F., Managing for Results, New York, N.Y., Harper & Row, 1964.
9. Galbraith, Jay R., Matrix Organization Designs, Business Horizons, Feb. 1971.
10. Jay, Anthony, Corporation Man, New York, Random House, 1971.
11. Kotler, Phillip, Marketing Management, Englewood Cliffs, New Jersey, Prentice-Hall, Inc., 1967.
12. Lawrence, Paul R. and Lorsch, Jay W., "New Management Job; the Integrator," Harvard Business Review, Nov. Dec. 1967.
13. Lawrence, Paul R. and Lorsch, Jay W., Organization and Environment, Homewood, Illinois, Richard D. Irwin, Inc., 1969
14. Lazo, H. and Corbin, A., Management in Marketing: Text and Cases, New York, McGraw-Hill Book Co., 1961.
15. Leavitt, Harold J., Managerial Psychology, Chicago and London, The University of Chicago Press, 1967.

16. Likert, Rensis, The Human Organization, New York, N.Y., McGraw-Hill Book Co., 1967.
17. McGregor, D., The Human Side of Enterprise, McGraw-Hill Co., 1960.
18. Moore, Franklin G. and Jablonski, Ronald, Production Control, Third Edition McGraw-Hill Book Co. Inc., 1969.
19. Product Manager System, National Industrial Conference Board, Inc., New York. N.Y. 1965.
20. Schein, E.H., Management Development as a Process of Influence, Industrial Management Review, Massachusetts Institute of Technology, Cambridge, Mass., 1961.
21. Schein, E.H., Organizational Psychology, Englewood Cliffs, N.J., Prentice-Hall, Inc., 1965.
22. Walker, A.H. and Lorsch, J.W., "Organizational Choice: Product vs. Function," Harvard Business Review, Nov.-Dec. 1968.
23. Weisbord, Marvin R., What Not Again! Manage People Better? Article in Think Magazine, Jan.-Feb. 1970.
24. Weiss, E.B. The Vanishing Salesman, McGraw-Hill Book Co. Inc. 1962.
25. Welsch, G.A., Budgeting: Profit Planning and Control, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1971.
26. Wilson, A., The Marketing of Industrial Products, London: Hutchison & Co. (Publishers) LTD, 1965.

COMPANIES INTERVIEWED

Aluminum Company of America
Avco Corporation
Celanese Corporation
Cresap, McCormick and Paget Inc.
Gulf Oil Corporation
International Business Machines Company
International Paper Company
Kennecott Copper Corporation
Koppers Company
Singer Company
Sun Oil Company
The Timken Company
Union Carbide Corporation
Western Electric Company, Inc.
Westinghouse Air Brake Company
Westinghouse Electric Corporation

Sample Letter Sent To Participants

ABC Corporation
1500 Broadway
New York, N.Y.

Attention Mr. John Doe

Dear Mr. Doe:

I am a Sloan Fellow in the Sloan School of Management at the Massachusetts Institute of Technology. Under the supervision of Professor Gordon F. Bloom and Professor Jay R. Galbraith I am working on a thesis concerning the integration and interaction between the marketing and manufacturing functions within the modern industrial enterprise. Since my own personal experience has been spent in the manufacturing arm of industry I am particularly interested in the marketing perspective of this question.

As part of my research in the preparation of my thesis I would greatly appreciate the opportunity of meeting with you or your representative to discuss how your company involves its plant management in the marketing effort. Since I am an employee of the Aluminum Company of America I am obviously not asking for any private or confidential information that would relate to the details of your company. I will maintain your company's anonymity and will make my findings in the completed study available to you.

I will be in New York early in January and can meet with you at your office. I will contact you by phone in the next week or so to confirm if you will be willing to contribute a brief interview for this study. Thank you for any consideration you may give to this request.

Sincerely,

Ronald C. Coleman