Marketing Methods

that Boost Sales

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Marketing Methods that Boost Sales

December 1983

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MARKETING METHODS THAT BOOST SALES

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MARKETING METHODS THAT BOOST SALES

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I INTRODUCTION

A. REPORT SCOPE

- The market for information services has entered a period of rapid change and upheaval. Increased attention to marketing is necessary to take advantage of the resulting new opportunities.

- The purpose of this report is to give information services vendors a snapshot of the state of marketing in the industry and provide examples of effective marketing for them to consider in fashioning their own marketing programs.

- The report includes 27 examples of effective marketing programs drawn from 17 companies. See Exhibit I-I for a list of examples and companies.

- The report also suggests a methodology for developing and implementing an integrated marketing strategy.

- This report deals only with the domestic U.S. market. Another report to be released by INPUT, <u>Marketing Methods That Increase Sales</u>, examines the European market.

- This study was produced by INPUT as part of the Information Services Industry Program (ISIP).

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EXHIBIT I-1

CROSS-INDEX OF EXAMPLES

VENDOR	EXAMPLE TITLE	VENDOR PRODUCT	PRINCIPLE ILLUSTRATED
Bank of America Business Services San Francisco, California	Telemarketing	Payroll and Accounting Services	New Communications Media – Telemarketing
	Data-based Intelligence	Payroll and Accounting Services	Automated Market Information System
	Motivating Employees to Collect Intelligence	Payroll and Accounting Services	Incentives for Intelligence Collection
	Competitive Link	Payroll and Accounting Services	Marketing Intelligence Bulletins
Boeing Computer Services Company Vienna, Virginia	Testing the Communications Mix	Relational Information Management	Testing Communications Mixes on New Products
Comshare, Inc. Ann Arbor, Michigan	Delivery Mode Expansion	System W	Market Redefinition
Cullinet Software Inc. Westwood, Massachusetts	A "Multiple-Product" Policy	Integrated Data Base Management System (IDMS)	Product Policy – Product Proliferation
	Taking High-Level Pulses	Software Products	Tracking Changing Customer Profiles
Execucom Systems Corporation Dallas, Texas	A "Single-Product" Policy	Interactive Financial Planning System (IFPS)	Product Positioning
	A "Partnership Product" Policy	IFPS	Relationships with Complementary Vendors
Hale Systems Palo Alto, California	Innovative Discounting	Bonanza Program (Financial Planning)	Targeted Discounting
	Referent Power	Accounting Products	Leverage Sales through Referrals
Hogan Systems, Inc. Dallas, Texas	The Image is the Message	Banking Systems	Communicating a Corporate Identity
Information Builders, Inc. New York, New York	A FOCUSed Communications Policy	FOCUS	Communications Mix – Seminars
	Pricing Alternatives	FOCUS	Leasing and Other Pricing Alternatives
Information Systems of America Atlanta, Georgia	Marketing Board	Software Products	Marketing Intelligence Bulletins
Management Decision Systems, Inc. Waltham, Massachusetts	Taking the Pulse of the Customer	Express	Tracking Changing Customer Profiles

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EXHIBIT 1-1 (Cont.)

CROSS-INDEX OF EXAMPLES

VENDOR	EXAMPLE TITLE	VENDOR PRODUCT	PRINCIPLE ILLUSTRATED
Management Science America, Inc. Atlanta, Georgia	Rapid Market Response	Executive Peachpak	Decisive New Product Introduction
	Telephone Support	Applications Software	Automation-aided Customer Telephone Service
McCormack & Dodge, Inc. Needham Heights, Massachusetts	Dual Customer Service Teams	Applications Software	Multispecialty Customer Service Teams
	Early Warning Letter	Applications Software	Keeping Customers Informed
SEI Corporation Wayne, Pennsylvania	Banking on Integration	Relationship Banking System	Market Redefinition
Software AG of North America, Inc. Reston, Virginia	The Software Engine	Natural, Adaptable Data Base System (ADABAS)	Channel Policy — Use of OEMs
Sterling Software Marketing Sacramento, California	Communicating to a Niche	OS and DOS Mainframe Software Products	Targeted Communications — by Newsletter
	Mail-Order Mainframe Software	OS and DOS Mainframe Software Products	New Channels — Mainframe Software by Mail Order
Systematics, Inc. Little Rock, Arkansas	Customer Guest Lodge	Banking Facilities Management Processing Services and Applications Software	Communicating a Corporate Identity
TRW Information Services Orange, California	Taking High-Level Pulses	Credit Information Services	Tracking Changing Customer Profiles

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B.   REPORT METHODOLOGY

- Research for this report included a series of in-depth telephone interviews in September and October 1983 with high-level marketing executives in information services firms.

- Almost all respondents agreed to allow their companies to be identified. INPUT wishes to extend its appreciation to these companies for their participation in the study.

- Respondents were asked to provide extensive details about successful marketing tools or techniques they had used in the recent past and to illuminate the reasons they had been successful. The examples of effective marketing in Chapter IV were drawn from these interviews.

- In later interviews respondents were asked about specific marketing organizational structures and tools they used, and what their impacts were. An analysis of the responses to these interviews appears in Chapter V. Appendix D is a copy of the questionnaire used.

C.   REPORT ORGANIZATION

- The remainder of this report is organized as follows:

    - Chapter II is an executive summary formatted as a presentation for group discussion.

    - Chapter III examines the dynamics of the modern information services marketplace.

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- Chapter IV identifies current marketing practices in the information services industry and provides examples of effective marketing tools and techniques drawn from actual company experiences.

- Chapter V presents a methodology for developing and implementing an integrated marketing strategy.

- The appendices provide definitions, a list of automated sales analysis systems and vendors, marketing audit worksheet forms, a sample questionnaire, and a list of related INPUT reports.

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II   EXECUTIVE SUMMARY

- This Executive Summary is designed in a presentation format in order to:

  - Help the busy reader quickly review key research findings.

  - Provide a ready-to-go executive presentation, complete with script, to facilitate group communication.

- The key points of the entire report are summarized in Exhibits II-1 through II-7. On the left-hand page facing each exhibit is a script explaining its contents.

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A. MARKETING METHODS THAT BOOST SALES

- The information services marketplace is complex and rapidly changing. User expenditures, currently at $31 billion a year, will almost triple by 1988 to $81 billion.

- The industrial environments of information services customers are being stirred up by deregulation, heightened foreign and domestic competition, and assimilation of new technologies.

- The information services industry has been unsettled by the unleashing of AT&T and IBM, changing technologies of information delivery and processing, shifts in distribution channels, and the increasing size and maturity of competitors.

- To effectively deal with these complexities, information services vendors must stop emphasizing product- and sales-driven strategies and move aggressively toward market-driven strategies. The question is how to do it.

- INPUT's research report is designed to help by:

  - Describing the nature and scope of the marketing task.

  - Providing examples of how successful vendors are marketing information services in today's highly charged environment.

  - Showing how to recognize and act on new marketing opportunities.

  - Suggesting specific methods, tools, and techniques for improving marketing effectiveness.

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EXHIBIT II-1

MARKETING METHODS
THAT BOOST SALES

- **$81 Billion Opportunity**

- **Complex, Rapidly Changing Marketplace**

- **The Question: How to Shift to Market-driven Strategies**

- **Research Scope**

  - **Characteristics of Good Marketing**

  - **Examples**

  - **How to Recognize and Act on Opportunities**

  - **Suggested Methods, Tools, and Techniques**

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B.   ALL VENDORS CAN BENEFIT FROM IMPROVED MARKETING

- Marketing is not sales. Marketing involves determination of how to sell, what to sell, and whom to sell to. Sales is the process of engaging prospects and closing orders.

- Lack of effective marketing is hampering the sales productivity of most vendors.

    - Most respondents preferred to talk about products rather than markets.

    - Marketing organizations tend to be more product oriented than market oriented.

    - Planning efforts at the market and product level are often less than thorough.

- An integrated marketing strategy is necessary to give marketing efforts direction and focus. It includes eight types of decisions, all of which are interrelated: customer needs, customer groups, product, support, price, channels, promotion, and sales strategy.

- Almost all respondents recognized that they need to increase their marketing resources, and most plan to do so.

- The remainder of this Executive Summary will highlight examples of marketing approaches that can help vendors improve revenues and profits.

EXHIBIT II-2

- II -

ALL VENDORS CAN BENEFIT FROM IMPROVED MARKETING

- Marketing Is Not Sales

- Lack of True Marketing Orientation

  - Excessive Product Emphasis

  - Insufficient Marketing Emphasis

- Most Vendors Are Increasing Marketing Resources

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C. DELIBERATE SALES PROMOTION STRATEGIES PAY OFF

- Making prospects aware of service offerings assumes new importance in today's noisy and crowded information services marketplace. Astute vendors are learning that deliberate, aggressive sales promotion can be rewarding. For example:

  - Hogan Systems contributed to its phenomenal growth by altering its communications messages to meet the needs of the high-level executives now making information services decisions in the banking industry. Its revenue was $17 million in 1983 - a 90% increase over its $9 million 1982 sales.

  - Bank of America Business Services is using a new sales promotion tool - telemarketing - to leverage its salesforce.

  - Boeing Computer Services, by methodically testing and refining its sales promotion mix, closed 70% of the prospects attending seminars or receiving sales calls in its Relational Information Management sales program.

- Effective sales promotion has these characteristics:

  - It is considered a strategic activity, and thus involves the participation of senior level executives.

  - It receives an ongoing commitment of resources.

  - It includes provisions for measuring results.

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EXHIBIT II-3

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DELIBERATE SALES PROMOTION STRATEGIES PAY OFF

- **Today's Noisy Marketplace Demands More Aggressive Sales Promotion**

- **Rewards Abound**

- **Characteristics of Effective Sales Promotion:**

    - **Viewed as a Strategic Activity**

    - **Ongoing Commitment**

    - **Includes Measurement Methods**

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D. EFFECTIVE PRODUCT POSITIONING DEMANDS EARLY DETECTION

- Selecting the market segments to address is the most important marketing strategy decision to be made by a vendor. Product positioning is the outcome of this effort.

- Many of the more successful firms in the industry have exhibited a careful, thoughtful, yet aggressive approach to this challenge:

  - By monitoring and anticipating trends in the banking industry, SEI was able to perceive needs for integration and flexibility and enter the new market for integrated banking systems a step ahead of its competitors.

  - By limiting itself to one basic product but providing that product in depth - across several vendors' operating systems and integrated up and down mainframes and personal computers - Execucom has maintained strong product and identity focus and received a $50 million ICP award this year for its Integrated Financial Planning System (the first DSS software product to be so honored.

- Characteristics of effective product positioning include:

  - Early detection of market changes. This is fundamental to success.

  - Explicit definition and communication of which markets are and are not to be addressed.

  - Development of integrated product lines that share common interfaces and linkages.

  - Courage to move early with product launch.

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EXHIBIT II-4

EFFECTIVE PRODUCT POSITIONING DEMANDS EARLY DETECTION

- **Market Selection Decisions Are #1**

- **Strategies Vary but Results Are Dramatic**

- **Characteristics of Effective Product Positioning:**

    - **Early Detection**

    - **Explicitly Defined Strategies**

    - **Integrated Products**

    - **Early Launch**

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E.   MARKETING INTELLIGENCE IS THE ULTIMATE COMPETITIVE EDGE

- Gut-feel decision making is out of date. The complexities of the information services marketplace in the 1980s will increasingly make this kind of decision making obsolete - even though it has accounted for many vendors' successes to date.

- The marketplace of the future will be dominated by firms that improve the identification, collection, and processing of marketing intelligence so that it becomes an integral part of the decision-making process.

- Examples of aggressive marketing intelligence activities include:

  - Bank of America Business Services, which is automatically combining commercial data bases and internally generated sales data to increase its knowledge of potential markets and better track and manage its sales forces. It is also using regular market intelligence bulletins to aid dissemination of competitive information and give sales representatives additional ammunition to use in their sales efforts.

  - Management Decision Systems, Inc., which is responding to competitive threats by forming "SWAT Teams" to evaluate challenges and respond to them.

- Characteristics of good marketing intelligence systems include:

  - Top management commitment.

  - Use of multiple data sources.

  - Formalized approaches to competitive analysis.

  - Establishment of automated data collection/analysis systems rather than use of opportunistic approaches.

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EXHIBIT II-5

MARKETING INTELLIGENCE IS
THE ULTIMATE COMPETITIVE EDGE

- **Gut-Feel Decision Making Is Increasingly Obsolete**

- **Marketing Intelligence Is Essential**

- **Characteristics of Good Systems:**

  - **Top Management Commitment**

  - **Multiple Data Sources**

  - **Formalized Competitive Analysis**

  - **Computer Support**

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F.   CUSTOMER SERVICE IS A MAJOR MARKETING OPPORTUNITY

- Although it is often underrated, customer service actually represents a major revenue-enhancing marketing opportunity for many information services vendors. Software maintenance revenue, for example, can account for 25% or more of the total software products revenue for established firms.

- Vendors are urged to take advantage of customer demand for support services by expanding the scope of their activities. In addition to traditional support services such as installation, training, and telephone support, vendors should consider other activities such as supplies, environment planning, site audits, and system consulting.

- In addition to implementing new types of customer services, vendors can take a number of other actions to fulfill the potential revenue growth offered by customer service opportunities, such as:

    - Organizing software maintenance as a profit-and-loss center in order to focus both marketing and management attention on its potential.

    - Assessing user requirements and new service opportunities via problem report analyses, hotlines, support staff feedback, user groups, field visits, and surveys.

    - Pricing customer service at customer value. This may be determined by surveys and pricing tests and will leave less money on the table, further enhancing revenue.

    - Leveraging customer service resources by applying innovative training methodologies, integrated software development, and maintenance tools.

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EXHIBIT II-6

CUSTOMER SERVICE IS A MAJOR MARKETING OPPORTUNITY

- **Full Revenue Potential Often Overlooked**

- **Expand Scope of Services:**

  - **Supplies**

  - **Environment Planning**

  - **Site Audits**

  - **System Consulting**

- **Other Actions to Consider:**

  - **P&L Center**

  - **Reevaluate Pricing**

  - **Apply Latest Technologies**

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G. RECOMMENDATIONS

- Marketing is a widely misunderstood function. Actively promote its role, methods, and payoffs throughout the organization.

- Avoid treating marketing projects in a casual or opportunistic way. Learn from others: incorporate common successful marketing methods.

    - Get top management support. Without it, an organization is doomed to mediocrity.

    - Recognize that effective marketing usually requires large amounts of time and money. There is still no free lunch.

    - Take time to establish a systematic marketing intelligence-gathering system. Develop good systems and encourage employees to use them.

    - Provide ways to measure results. Many people are skeptical of marketing. Use every opportunity to show direct or indirect payoffs.

- Recognize that successful marketing involves multiple tasks, many of which may be new to an organization. Use marketing audits, such as those outlined in the main report, to uncover often overlooked opportunities.

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EXHIBIT II-7

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RECOMMENDATIONS

- **Sell Marketing**

- **Incorporate Characteristics of Successful Marketing Methods:**

  - **Top Management Support**

  - **Major Resource Commitments**

  - **Systematic Market Intelligence Gathering**

  - **Measurement of Results**

- **Use Marketing Audits to Uncover Opportunities**

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III   MARKETING OPPORTUNITIES IN A CHANGING ENVIRONMENT

A.   THE DYNAMIC INFORMATION SERVICES MARKETPLACE

- The information services marketplace is much more dynamic now than it has ever been. A number of often interrelated factors are driving this dynamism, as shown in Exhibit III-I.

  - Served industries are dealing with:

    - Deregulation.

    - Increased foreign and domestic competition.

    - Assimilation of new information services products.

  - Within the information services industry, the competitive environment has been volatile because of:

    - The unleashing of AT&T and IBM.

    - Major shifts in channels of distribution.

    - The increasing size and maturity of competitors.

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EXHIBIT III-1

INFORMATION SERVICES INDUSTRY DYNAMICS

CUSTOMER SECTOR
DYNAMICS

- Deregulation

- Competition

- New Technologies

INFORMATION SERVICES
INDUSTRY DYNAMICS

- Antitrust Settlements

- New Distribution Channels

- Decreasing Hardware Costs
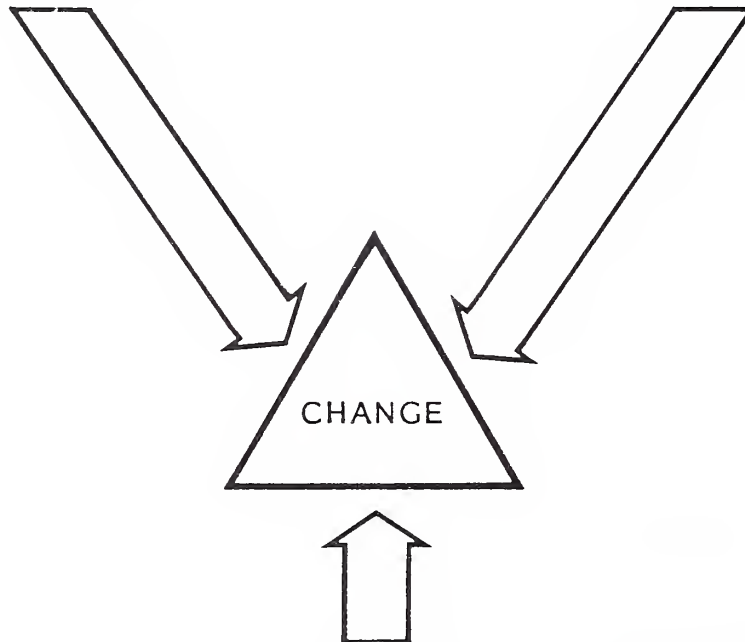
CHANGE

INTERNAL COMPANY CHANGES

- Organizational Structure

- Personnel Shortages

- Entrepreneurship

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- Accelerating technological change.

- Even within information services firms themselves, change is pervasive:

  - Growing firms are trying to manage larger operations.

  - Personnel shortages are causing high turnover.

  - Large firms are attempting to change their corporate cultures in order to become more responsive and innovative.

B.   SCOPE OF MARKETING STRATEGY

- Effective marketing in today's highly charged, rapidly changing environment requires a sharply focused strategy.

- This strategy integrates eight dimensions supporting decisions on whom, what, and how to sell, as shown in Exhibit III-2.

1. WHOM TO SELL TO

   a.   Customer Needs

- The starting point of marketing strategy is to define customer needs.

- Understanding these needs will require analysis of the customer's industry; consideration of the customer's own position, strategy, and corporate structure; and knowledge of the customer's buying behavior.

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EXHIBIT III-2

MARKET STRATEGY IS A SET OF EIGHT DECISIONS

MARKET STRATEGY "X"

WHOM TO SELL TO
- CUSTOMER NEEDS
- CUSTOMER GROUPS

WHAT TO SELL
- PRODUCT
- SUPPORT
- PRICE

HOW TO SELL
- CHANNELS
- PROMOTION
- SALES STRATEGY

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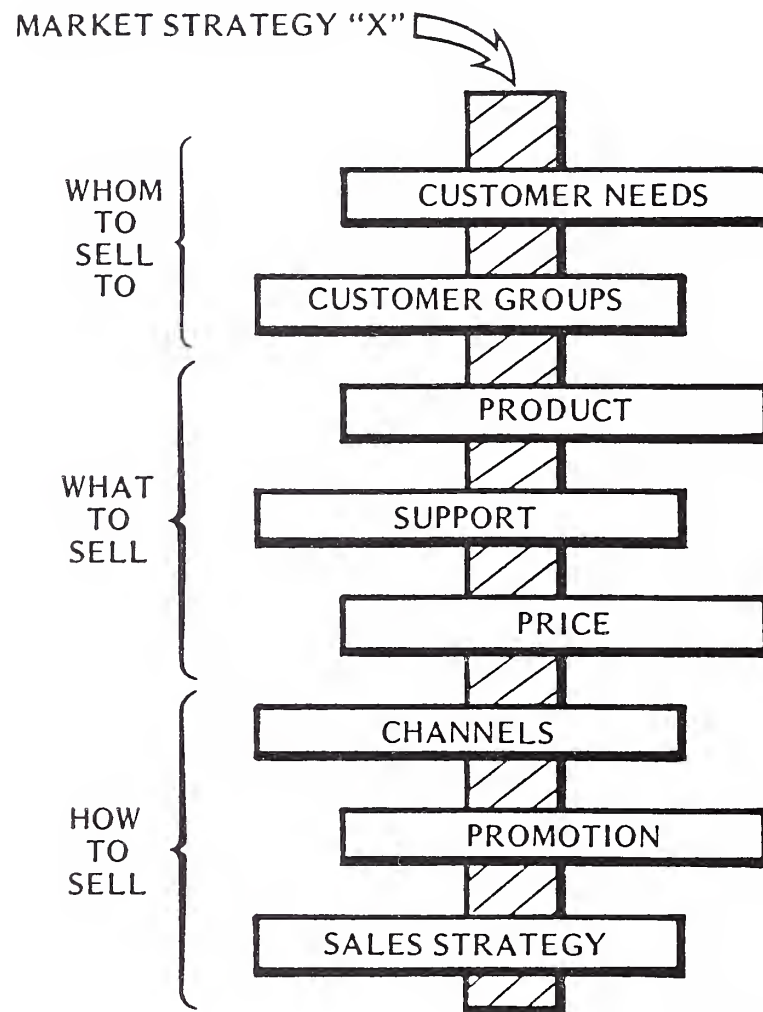
b.   Customer Groups

- Because of specialization, various customers' needs are becoming increasingly diverse. It is no longer possible in many segments of the information services industry to package a single system solution and market it in a standardized fashion.

- But complete customization can be avoided by separating customers into groups and creating market programs for segments with common interests and behaviors.

2.   WHAT TO SELL

a.   Product

- As the information services industry grows more mature and sophisticated, its products are evolving from strictly limited functional applications to what may be called "augmented" products, which have added values such as financing, services, maintenance, customer advice, delivery, and other things people value. Vendors must define how their products meet customer needs and ensure that they maintain their competitive advantage.

b.   Support

- Shortages of qualified personnel and exponential increases in demand have made customer support tough and expensive - but no less important in information services marketing mixes.

c.   Price

- The multiplicity of offerings and delivery modes in today's information services marketplace adds to the inherent complexity of pricing in this industry. Reliance on mechanistic pricing models tends to leave money on the table and the door open to competitors.

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- Customer value pricing, innovative discounting, and use of alternative pricing methods will help maintain customer support and enhance revenues.

3. HOW TO SELL

   a. Channels

- As demand for information increases, channels of distribution proliferate. There are many opportunities to leverage existing channels through aggressive use of new ones.

   b. Promotion

- Because masses of information are now reaching customers, the marketplace requires better communications. The emergence of market niches with distinct needs and commonalities is enabling more cost-effective promotion to specific target groups.

   c. Sales Strategy

- Sales strategy involves those activites related to contact and interaction with a prospect until a sale is made or refused. The methods and tools that improve the productivity of this interaction have an especially high payoff in the information services industry.

C. KEY MARKETING CHALLENGES

- The changing information services marketplace presents vendors with several salient marketing challenges.

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1.   MIGRATION OF REMOTE COMPUTING SERVICES VENDORS TO OTHER
     SERVICES

•   The phenomenal increase in personal computer capabilities and user accep-
     tance over the last few years has seriously threatened the traditional proces-
     sing business base of many RCS vendors. Survival requires a fundamental
     reexamination of the business strategy of these firms and consideration of
     alternative delivery modes and businesses. Major alternative sources of
     revenue include:

     -    On-line data bases.

     -    Mainframe application and systems software.

     -    Software maintenance services.

     -    Personal computer hardware and software.

•   The business potentials of these alternatives need to be examined, competi-
     tive moves forecast, and the firm's capabilities audited before selection of an
     alternative can be made intelligently.

2.   DEVELOPMENT OF NEW DISTRIBUTION CHANNELS

•   Information services distribution channels have proliferated wildly in the last
     few years. Only two years ago, over 90% of information services sales were
     direct from manufacturers; manufacturer's reps, OEMs, and software pub-
     lishers distributed the other 10%. Since then, there has been a marked in-
     crease in third-party distribution.

     -    Systems software vendors are licensing their products through OEM
          applications suppliers.

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- RCS vendors are distributing data bases and other services through third parties.

- Computer systems, particularly those valued at $25,000 and below, are increasingly being marketed by value-added resellers.

• Several factors account for this distribution channel proliferation.

- Lower system prices have led the pressures to reduce sales costs, which have actually increased due to inflation.

- Demand for information services is permeating smaller organizations. Selling directly to these customers is prohibitively expensive and strains limited personnel resources.

- Increased capabilities and user programmability have eliminated much of the need for highly trained, specialist salespeople, at least for simpler applications.

- Many companies have been unable to build up direct sales forces quickly enough to meet the full market potential of their products and have been forced into alternative channels.

• Distribution channels are a particularly dynamic factor in the information services marketplace, providing magnificent opportunities for sales force leverage and fast growth.

3. PRICING TO REFLECT THE NEW COMPETITIVE ENVIRONMENT

• Innovative pricing schemes are already being used, as shown in the Hale Systems example in the pricing section of Chapter IV, to help stem customer migration. Pricing assaults on established, heretofore lucrative businesses can take several forms:

- Technological advances can change the economics of traditional businesses overnight. Witness the impact of personal computers on RCS pricing.

- Discounts and free or extended trial periods are being used both to capture new customers and to safeguard the loyalty of old ones.

- Pricing is a particularly sensitive issue for customers and requires constant competitive monitoring and quick reactions.

4. SELLING AND MARKETING TO INDUSTRIES AND MARKETS RATHER THAN SELLING AND MARKETING PRODUCTS

- The increased sophistication of competitors, greater application specialization, and turbulence in traditional customer industries are forcing a fundamental realignment of marketing in most information services firms - from product to market orientations. This change is at the foundation of the marketing organization and requires in-depth senior management attention over a long period of time for any reasonable chance of success.

5. ADJUSTING TO THE NEW STRATEGIC IMPORTANCE OF INFORMATION SERVICES TO CUSTOMERS

- In most industries, the information systems resource was traditionally a management stepchild gratefully left in the hands of lower level managers by uninterested senior executives. It was confined to mundane accounting functions and was of minor strategic importance.

- Today it is more often than not a critical strategic asset and is given corresponding attention by corporate management. This shift in strategic importance is due to:

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- Technological advances in telecommunications, personal computers, computer-aided manufacturing, design systems, and other areas.

- Accelerating assimilation of these technologies by industries.

- Competitive pressures in many industrial and service environments making computer-aided production and management indispensible.

- Greater management awareness of information services.

- Information services now have strategic importance at two levels: the industry a firm competes in and within the firm's operations.

  - At the industry level, information systems are changing many sectors' products, services, market, and production economics. This is particularly true in the banking and manufacturing industries.

  - At the firm level, information systems affect product offerings, market and product concentration, costs, and business responsiveness.

- Corporate information systems resources are now recognized as strategic weapons. This shift in corporate focus has a profound impact on how information services firms should market to their customers.

  - Since information systems are now considered strategically important, decision-making authority on them has shifted from lower management levels to boardrooms.

  - At the same time, information systems managers within many industries have gained enhanced power and importance and can no longer be ignored or bypassed.

- Information services suppliers need to anticipate and respond to these shifts in order to be certain they are targeting the correct corporate decision makers.

D.   MODERN INFORMATION SERVICES MARKETING ORGANIZATIONS

- Marketing managers in modern information services firms face formidable tasks.

    - They must keep track of all the above market dynamics: they must continually evaluate the industry their companies market to, their companies' competition, and their companies' capabilities and adjust their marketing plans and operations accordingly.

    - They must deal with old organizations that have become inert, ponderous, and unwieldy.

    - They must manage marketing programs that have grown out of all proportion from their organization's free-wheeling early days.

- Marketing managers cannot do all this themselves. They must create organizations to do it for them and then monitor these organizations to ensure their responsive functioning.

I.   THE EVOLUTION OF INFORMATION SERVICES MARKETING ORGANIZATIONS

- Young, small information services ventures - typically those under $2 million in sales - have little need for formal marketing organizations.

    - The founders can normally rely on a network of personal relationships built during previous employment for their initial sales. Often, they

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will have started their ventures with products designed for one specific customer or a small group of customers - perhaps even at the encouragement of these customers.

- The company is quite small, and the entrepreneurs are in very close contact with their first customers. No sophistication is needed to track customer needs or satisfaction.

- Even if a formal organization is needed, the resources to support it are lacking.

• As information services companies grow, they begin to require greater attention to marketing.

- More standardized products appealing to wider markets are developed from the initial custom products. This shift brings the firm into direct competition with established companies.

- Continued growth requires contacting potential customers outside of the professional circles of the venture's founders.

• These developments are normally dealt with by creating a marketing department staffed largely by salespeople. This department is mostly concerned with selling; product planning and pricing remain under senior management purview.

• Continued growth will make senior management's direct control of even product planning and pricing untenable.

- Continued growth will require product and market proliferation; market segmentation and product policies must be implemented to maintain control. Informal direction from the top will not be able to keep up. As shown in Exhibit III-3, large firms place almost twice as

EXHIBIT III-3

IMPORTANCE OF MARKET SEGMENTATION AND
PRODUCT POLICY IN INFORMATION SERVICES FIRMS
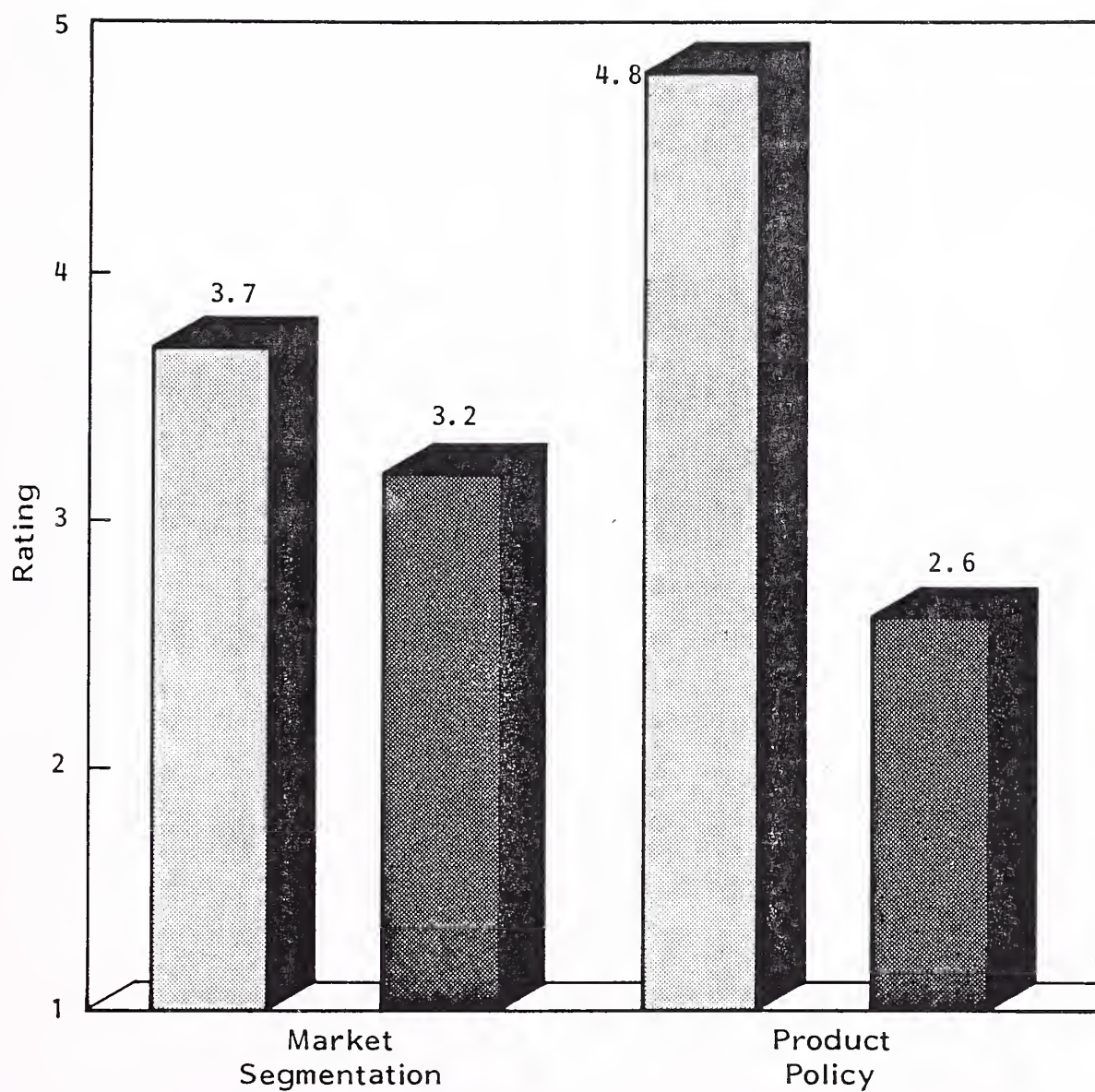
Rating: 1 = Low Importance, 5 = High Importance

1982 Company Sales Greater than $40 Million

1982 Company Sales Less than $40 Million

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much importance on product policy as small firms, and somewhat more importance on market segmentation.

- The gap between customers and senior management will grow wider, decreasing communication and requiring formal systems to keep management in tune with customer demands and competition.

• Eventually, most maturing information services firms develop classic product management marketing organization structures. Their product managers can be focused on either specific products or markets, or even both, depending on the nature of the business.

2. MODERN INFORMATION SERVICES MARKETING

• INPUT's survey reveals that successful information services firms have sophisticated marketing methods.

- Almost all companies indicated they have formal intelligence-gathering systems, although larger companies tend to rely on these systems more than smaller ones. Most disseminate competitive information through some sort of market intelligence bulletin.

- Most companies also conduct customer and lost-business surveys and develop customer profile models. They also purchase outside market studies, as shown in Exhibit III-4.

- Almost all companies rely heavily on formal market planning.

• Most companies are not yet truly marketing oriented, however.

- In our survey, product policy was rated higher than market segmentation and product-oriented product managers higher than market-oriented product managers in importance, as shown in Exhibit III-5.

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EXHIBIT III-4

IMPACT OF MARKET RESEARCH TOOLS
IN INFORMATION SERVICES FIRMS
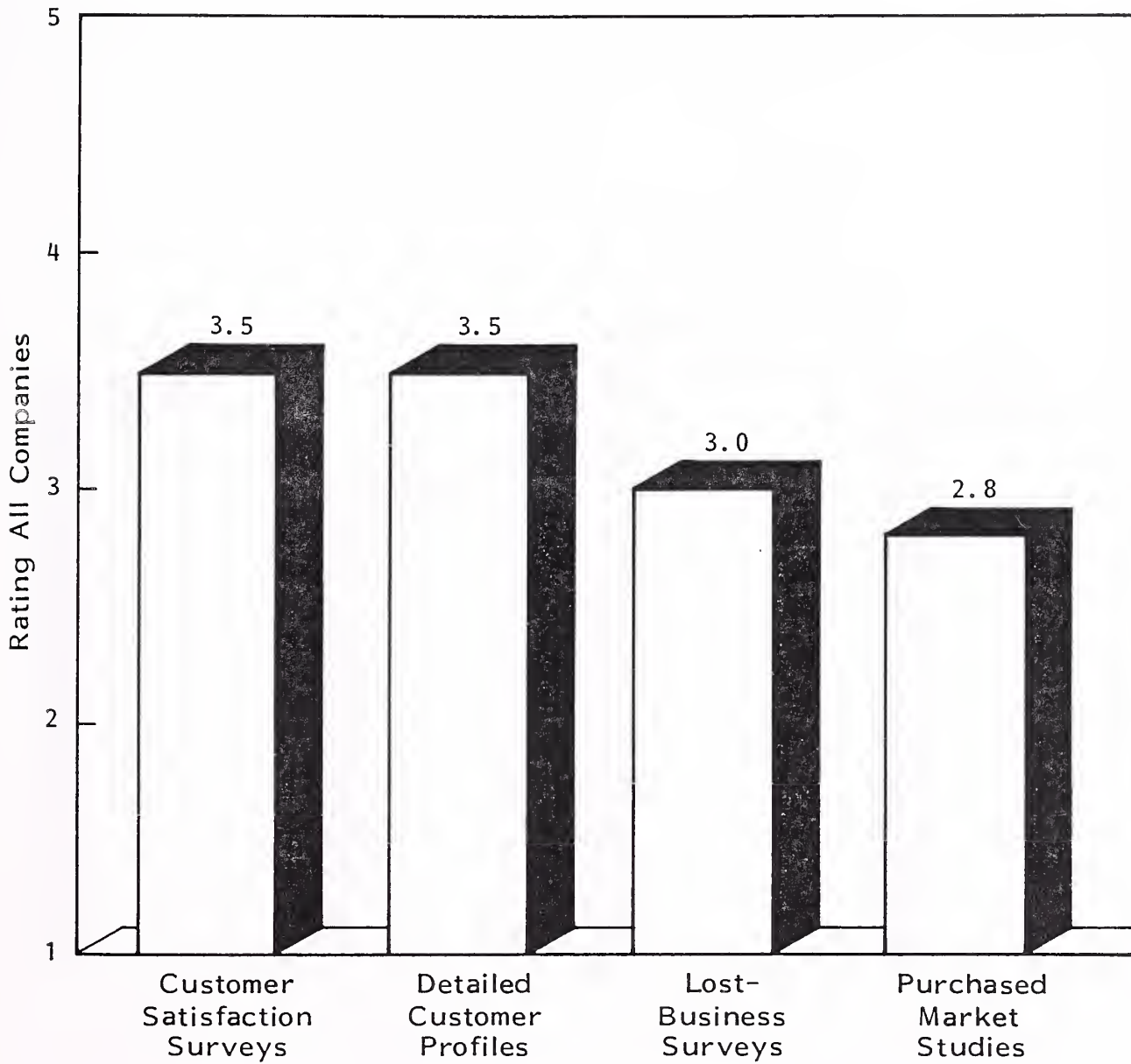
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EXHIBIT III-5

IMPORTANCE OF PRODUCT AND MARKET ORIENTATIONS
IN INFORMATION SERVICES FIRMS
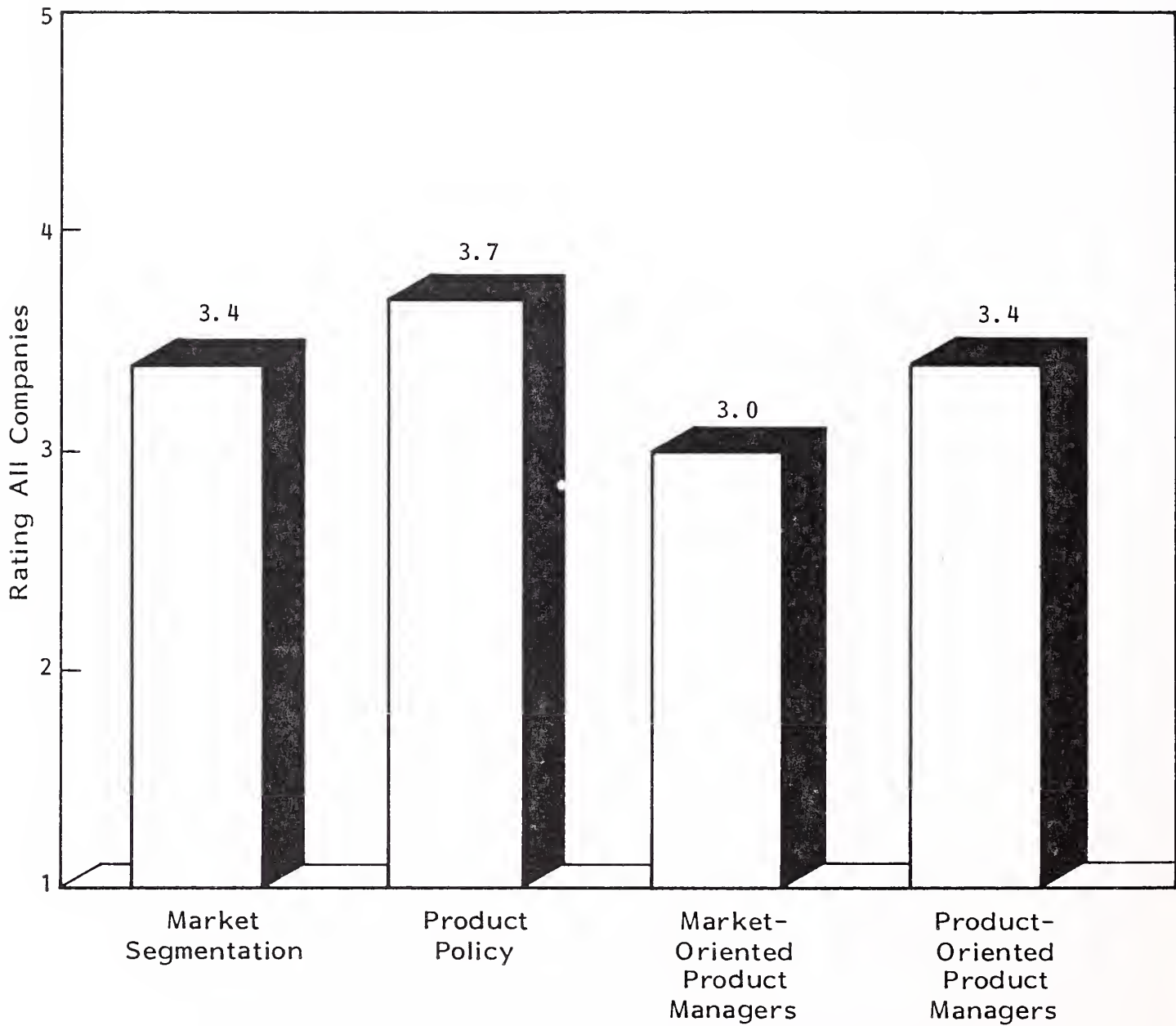
Rating: 1 = Low Importance, 5 = High Importance

- Respondents generally spoke in terms of products rather than markets in the interviews.

- Good products will not guarantee success in today's information services marketplace. Increasing competition and internal pressures to expand will require greater commitment to market orientations than to product orientations.

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IV   EXAMPLES OF EFFECTIVE MARKETING

A.   SALES PROMOTION

- Superior products alone are no longer enough to ensure success in today's crowded information services marketplace.

- As more and more firms enter markets previously served by only one or two companies, the importance of sales promotion will increase.

- Vendors must become adept at communicating differences between product offerings. These differences could entail:

    - Product features.

    - Price.

    - Service.

    - Perceived corporate image.

- Vendors also need to discover effective ways of delivering their messages to customers who are already saturated with information.

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I.   COMMUNICATING A CORPORATE IDENTITY

- Successful companies develop deliberate strategies to project corporate images of technical, economic, or industrial stature appropriate to the market and level of decision makers the companies have targeted. In a sense, the corporate reputation for integrity, technical expertise, or financial soundness is an integral part of the products being sold, and this reputation will gain in importance as the dependence of customers on their information systems vendors increases.

a.   The Image Is the Message - Hogan Systems, Inc.

- The migration of the data processing function from back-room computer operations to executive suite information systems has important effects on the targets and style of information services promotion.

- Decision-making units are increasingly senior corporate officers who are technically unsophisticated and more concerned with how information services affect corporate strategy than with technical features and functions. Information services vendors who recognize this shift in decision making and work it into their promotion efforts will have a competitive edge over their more traditional competitors. An excellent example of this is Hogan Systems, Inc., which just six years after its founding has become one of the leading suppliers of applications software for major financial institutions.

- The financial services industry has been very strongly affected by deregulation and changing information systems technologies, so the elevation of information services decisions to high-level executives has been quick. Hogan realized the magnitude and importance of this change when it started and set out to build a corporate culture and image that would cater to senior financial executives rather than data processing technicians.

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- Hogan Systems was determined from its inception to project a "Big Eight" image. It did not want to be seen as a typical data processing sweatshop peopled with awkward programmers. It wanted to convey to customers that it was selling more substantial products than traditional applications firms and wanted them to feel comfortable about forming a partnership with their information services supplier.

- Prospective employees were screened to find those who exuded qualities of strength, tranquillity, and integrity - in a word, professionalism. The company continually reinforces these qualities through its corporate culture.

- Hogan Systems' advertising stresses conservatism, elegance, commitment, flexibility; technical features are deliberately downplayed. Ballerinas and classic bank safes are pictured in lieu of disk drives and terminals. Brochures are attractive but not flashy, and they feature lots of color and heavyweight paper. The advertising is all matter of fact and very professional. All promotional materials exhibit similar designs. This consistency extends even to training materials.

- News releases, speeches, and other press relations are more often concerned with the banking industry than with IS issues, and the Hogan Systems booth at trade shows, while modest, is classy.

- This attention to image extends even to Hogan Systems' offices in a high-rent complex in Dallas. Its soft colors, wood furnishing, paintings, carpets, and other features are more suggestive of a highly successful financial, legal, or accounting firm than a data processing center.

- Hogan System's FY 1983 revenue was $17 million and net income $3.7 million - just six years after the firm's founding. While the image-building efforts have not been the only factor in the company's success, they certainly have been important.

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b.   Customer Guest Lodge - Systematics, Inc.

- Another example of a company enhancing its image through its headquarters environment is Systematics, Inc.

- Located on a 30-acre site in Little Rock, Arkansas, Systematics' new head-quarters complex already boasts a main building and a guest lodge. The complex will ultimately include 20 buildings.

- Customers are already enamored with the Systematics Guest Lodge, which hosted its first client conference this May. They find it homier and more comfortable than hotels, and it makes their forays into Little Rock much more enjoyable.

- The Systematics Guest Lodge enhances the company's image by demonstrating Systematics' concern for its customers. It also provides Systematics with a captive audience for sales presentations and conferences. It is an unusual illustration of the importance of customer orientation in sales promotion.

2.   COMMUNICATING TO A NICHE - STERLING SOFTWARE MARKETING

- The growing information services market is creating new groups of customers with common interests, in a particular manufacturer's equipment or operating system, for example. These groups form natural market niches at which marketing communications may be directly targeted.

- Sterling Software Marketing (SSM) has specialized in serving one of these niches - users of OS and DOS operating systems. By limiting itself to serving only these customers, SSM is able to focus its communications very effec-tively, increasing the information it can impart to those most interested in its offerings and reducing costs associated with broader media campaigns.

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- The centerpiece of SSM's marketing communications program is its bimonthly Software Times newsletter.

  - The Software Times is mailed to 27,000 OS and DOS users every other month. It features articles on industry issues, developments at SSM, and new SSM products. Its strongest marketing element is the testimonials it contains from users of SSM products.

  - The Software Times is an extremely successful promotional tool; it generates about 1,200 inquiries each month. The reason for its success is its well-targeted audience.

- The mailing list is continually expanded and pruned to find OS and DOS decision makers who are receptive to SSM products. SSM often makes agreements with other organizations to use their mailing lists for one Software Times issue. SSM then adds the names of respondents from this mailing to its own list (by agreement with the original list's owner).

  - This carefully qualified mailing list enables SSM to reach its target market at very low cost. Reaching the same group through trade journals would be more expensive because SSM would have to advertise in many journals to reach the same audience, and its advertisements would attract relatively little attention because of the many offerings of other vendors.

  - SSM is also using this list to send out special product brochures, usually with order forms attached. One of these yielded 90 orders for a $5,000 product in just 90 days.

3. THE MARKETING COMMUNICATIONS MIX

- In communicating a company and its products to customers, a variety of tools are available to the marketer. Viewed broadly, they include pricing, packag-

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ing, and even product design. More narrowly, in the field of information
services, they include:

- Advertising.

- Seminars.

- Publicity.

- Trade shows.

- Product literature.

- Telemarketing.

- Direct sales contacts.

● The appropriate mix of these elements depends upon a variety of factors:
complexity of the product, sophistication of the users, level of decision-
making buyers in their organizations, and a host of others.

● The increasingly complicated product offerings of information services firms
place special burdens on the marketing mix. On the one hand, their sophisti-
cation often requires more direct-sales approaches to close sales, but on the
other hand, the resources to make these calls are restricted. Careful struc-
turing of the sales mix - as in Information Builder's seminar-based marketing
program - can leverage scarce sales resources and effectively boost sales.

a.   A FOCUSed Communications Policy - Information Builders, Inc.

● The primary product of Information Builders, Inc. (IB), is FOCUS, a nonpro-
cedural report preparation, data analysis, and data management system.
Often defined as a fourth-generation language, FOCUS appeals to end users.

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- FOCUS is powerful and moderately difficult to learn; its benefits cannot be easily conveyed through splashy brochures or quick phone calls. Recognizing this, Information Builders has carefully structured its FOCUS pricing and promotion mix to educate prospects and "hook" them early on.

- FOCUS is promoted mainly through seminars, which Information Builders has found to be a particularly effective education medium. It holds about 100 seminars a year, closing an average of one and a half to two sales per seminar, clearing about $200,000 each presentation - more than the cost of the full year-long seminar program.

- Seminars are run out of IB's central office. Centralization of the marketing function makes it possible for IB to automate its marketing functions (using FOCUS, of course).

  - A substantial data base of names has been constructed, with target mailings to IBM medium- and large-scale computer users.

  - Systems are maintained for ad effectiveness tracking, seminar registration, insertion costs/results, cost/lead time analysis, and automated analysis of monthly sales reports.

  - IB has found automation particularly helpful in keeping up with the important details of marketing - returning phone calls, follow-up letters, and other such matters.

- IB's seminar program, pricing policies (see section B), automated marketing, and product have led to excellent revenue growth (about 100% a year from 1978 through 1982). IB makes virtually no cold sales calls.

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b.   Telemarketing - Bank of America Business Services

- In many cases, new marketing technologies such as telemarketing or electronic mailing are appropriate for communicating with customers. Telemarketing in particular is a powerful tool, especially in markets where:

  - Products are relatively simple and widely understood.

  - Competition is high and the market is assuming commodity characteristics.

  - Pressure is high for lower direct sales expenses.

- Bank of America Business Services sells a different type of product (primarily payroll processing services to small businesses) than Information Builders and has adjusted its marketing communications mix accordingly. Bank of America emphasizes a combination of media advertising and telemarketing.

- Early in 1983 Bank of America Business Services set up a six-person telemarketing unit. An 800 number was given in most Bank of America advertising so that initial customer inquiries would come to the telemarketing group.

  - Initially, the program was designed as an experimental, highly organized funnel channeling qualified advertising-generated telephone inquiries to the sales force.

  - The telemarketing unit screens calls and gets the basic information needed to ensure that the sales call, if made, is effective. This frees salespeople by decreasing their visits to unqualified prospects.

  - The organization includes a tight tracking system and word processing for such tasks as following up on leads and sending thank-you notes to lead generators.

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- Bank of America now intends to use its telemarketing function more aggressively, actively generating leads with it.

- Bank of America Business Services' products are relatively simple, and competitive offerings are readily available to customers; the market is taking on appearances of commodity markets. In this environment, keeping sales costs low is crucial. Bank of America has found that its telemarketing function is a cost-effective means of communicating with its prospects.

4.   TESTING THE COMMUNICATIONS MIX - BOEING COMPUTER SERVICES COMPANY

- Ideally, the marketing communications mix should be continually tested, updated, and refined, particularly in today's rapidly changing environment. But testing the mix on existing products is very difficult because channels are already established, sales forces deployed, and the marketing program under way; manipulation for testing purposes can be resented by the sales force and cumbersome.

- Boeing Computer Services Company (BCS) has sidestepped this problem by evaluating its promotion mixes and techniques when introducing new products. BCS recently conducted a sophisticated test of its promotion effectiveness with the recently introduced Relational Information Management (RIM) relational data base product.

- In undertaking these tests, BCS was interested in finding the most effective combination of sales and promotion techniques to qualify and close sales. It also wanted to get an idea of what the ratio of leads to sales might be and get a better feel of the potential market size for RIM so that the marketing plan could be refined.

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- BCS used telemarketing, direct mail, and seminars in different combinations in various cities to find the optimal blend. In some locations, the existing sales force was heavily relied on; in others, telemarketing was used almost exclusively.

- Types and forms of direct mailing varied by city. Magazine advertising was also manipulated in the test.

● BCS reports that the test was very helpful in pinpointing optimal sales mixes. Specifically, it proved the effectiveness of BCS's new four-tiered sales qualification/closing program. These four tiers consist of:

- Direct mailings and advertisements, which solicit a large number of responses.

- Questionnaires sent to direct mail and advertisement respondents, asking for information that will be used for qualification.

- Telephone calls after receipt of questionnaires qualifying further and setting up sales calls or seminar registration.

- Sales calls or seminars.

● The careful defining of items and focused target mailings resulted in closing 70% of the qualified prospects attending seminars or receiving sales calls in the RIM program.

B.   PRICING

● Entry of new competitors - often with different delivery modes - is increasing customers' alternatives while allowing them to buy based on price. At the

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same time, customers are growing more sensitive to price as their own competitive positions are threatened and pressures to reduce costs increase.

- Simple across-the-board discounts or price reductions are seldom the suitable answer to these pricing pressures. Most information services applications are relatively complex and across-the-board pricing changes will not match complicated shifts in customer demand and competitive posturing. Instead, the cause of changes in customer buying behavior must be carefully scrutinized and pricing changes tailored to meet specific opportunities.

- For a comprehensive analysis of pricing of information services, see Volumes I and II of INPUT's 1983 Information Services Pricing Trends and Techniques study.

I. INNOVATIVE DISCOUNTING - HALE SYSTEMS

- A few years ago some of Hale System's Remote Computing Division (formerly Remote Computing Corporation) customers cancelled their financial planning usage.

- Hale Systems polled them to determine the cause of the cancellations and discovered that some thought its services were getting too expensive during their financial planning cycles. Others were not using all of the features of Hale Systems' packages that they could have.

- Hale Systems reacted by introducing an annual two-month flat rate "Bonanza" pricing program for its financial planning systems customers.

- Each fall Hale Systems reviews Bonanza participants' account records for the first nine months of the year and determines the average monthly use by account. It then offers customers a flat fee 50% higher than their average monthly usage fee for any two months between November and February. This period will normally include the customer's annual planning cycle.

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- Bonanza's aims are twofold:

  - Unbound from financial considerations, some users will use the packages more than otherwise and will learn new applications. They will grow used to these new applications and continue using them during regular billing periods, increasing revenue to RCD.

  - Other users will become more satisfied and comfortable with RCD products; while this group will generate little new revenue, they will become stronger customers and will be less inclined to leave RCD, particularly for reasons associated with high information services costs during planning cycles.

- The Bonanza program has been a great success; almost 50% of eligible accounts signed up for it last year. The cancellation rate of Bonanza customers is much lower than that of non-Bonanza clients. RCD is so pleased with its Bonanza bonanza that it has added a new feature to it this year, a GAAP analysis product, in what amounts to a free trial. (Next year, Hale Systems is adopting a new pricing scheme that will not incorporate Bonanza.)

2. PRICING ALTERNATIVES - INFORMATION BUILDERS, INC.

- Imaginative discounting is not the only pricing innovation available to information services vendors. More fundamental pricing issues may also be addressed:

  - Leasing.

  - Financing.

  - Licensing.

  - Terms of payment.

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- Depending on the product, the market, and the individual circumstance, these pricing issues and alternatives can be altered to strengthen a company's competitive advantage or to better meet customer needs and buyer behavior patterns.

- Contrary to prevailing industry practices, Information Builders, Inc., encourages its customers to lease rather than buy FOCUS, its primary product. FOCUS is a nonprocedural fourth-generation language that encompasses report preparation, data analysis, and a comprehensive data management system.

- Information Builders finds leasing attractive for FOCUS for several reasons.

  - Leasing leads to lower risk trial periods for first-time FOCUS users.

    - A 90-day initial lease is available to customers who indicate they intend to continue using FOCUS if the trial proves successful.

    - The fundamental reason the trial period is attractive for FOCUS lies in the nature of the product. It is relatively difficult to make intelligent competitive comparisons with it in a short period of time, and its technical sophistication makes a long trial period mandatory in order to allow customers to appreciate the full power of the system.

  - Leasing customers need not be as concerned with product obsolescence as purchasers and, as Information Builders is confident FOCUS will not be obsolesced, it is not concerned with the shift in risk.

- Information Builders is subjected to less variance in its revenue when customers lease since the "lease deck" helps reduce revenue fluctuations caused by up and down swings in unit sales in any given month.

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C. DISTRIBUTION

- High costs of traditional sales channels, competitive forces, and opportunities for faster growth should cause vendors to seriously consider new distribution alternatives. These can help leverage salesforces and hold down costs while increasing distribution coverage.

1. CHANNEL POLICY

   a. The Software Engine - Software AG of North America, Inc.

- About a year ago, Software AG of North America, Inc. studied how it could increase the number of sites using Natural and ADABAS without adding more sales resources. Natural is an on-line, high-level applications programming language used on installations with the Adaptable Data Base System (ADABAS).

- Software AG determined that sublicensed Natural installations could become "software engines" pulling other Software AG products into new sites if applications OEMs could be convinced to write their applications using Natural. This could be very effective in leveraging Software AG's salesforce.

  - Natural has been sublicensed for some time to applications OEMs who tack it onto their systems as an added feature. But Natural then tended to be used by only a few specialized users in end-user organizations and received limited corporate exposure.

  - If introduced to Natural via applications programs, users would become familiar with Natural's features, capabilities, and functions without any educational investment by Software AG.

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- Ultimately, users would be expected to become comfortable with Natural, desiring it above other systems they hadn't been trained on.

- The OEM applications personnel would become intimately familiar with Natural and better able to recommend it to customers as well as aid in its use.

- Because of these factors, users exposed to Natural via OEMs could be expected to be well-qualified prospects for direct Software AG sales.

- Recognizing these potential gains, Software AG shifted its marketing resources toward convincing applications OEMs to use Natural in writing major applications modules. Software AG works hard to get applications representatives to really like Natural; it gives them extensive training and service support.

- The program appears to be a success, with 12 OEMs signed on to date. Software AG believes it has found an effective way to turn a complex product into an entry-level product. It has been a superb way for Software AG to get its foot in the door, and its salespeople now walk into highly qualified user installations.

- Software AG's intention with this "Software Engine" program is to increase market share with minimal increased costs. It is not intended to be a loss leader; the program is expected to pay its own way and even make some money. Its main purpose is to open new sites; often salesmen need simply to walk onto sites using applications written on Natural and turn the key to give customers full use of Natural.

b.   Referent Power - Hale Systems, Inc.

- In a similar program (now two years old), Hale Systems' Remote Computing Division is leveraging its sales force by working closely with CPA firms, particularly for the savings and loan business.

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- Hale Systems has its salespeople give presentations to CPA consulting divisions at local levels.

    - These presentations inform the CPAs about Hale Systems products they can use as part of their services.

    - But the presentations are also designed to familiarize the CPAs with Hale Systems products their clients can use.

- This program has been successful because it takes advantage of the increased consulting activities of CPAs. This consulting both increases the need for information services by CPAs and makes the CPA an important influence on the information services decision-making process of clients.

2. MAIL-ORDER MAINFRAME SOFTWARE - STERLING SOFTWARE MARKETING

- There is a marketing shift in the software industry toward packaged products. Customers are increasingly reluctant to buy custom software when off-the-shelf equivalents are available that can be tweaked into providing similar capabilities - for substantially less money.

- Packaged products can be sold through many more distribution channels than can custom. The product can sometimes be designed to require no interaction with the vendor: it can be self-installed and self-taught.

- Of course, personal computer software distribution exemplifies the use of new packaged software distribution channels. Indeed, personal computer software has been sold through the mail for years now.

- But mainframe software is another game entirely. It is usually far more complex, requiring extensive hand holding not only during the sale but for

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after-sale support. One would have thought these considerations would have restrained vendors from selling mainframe software by mail.

- Sterling Software Marketing (SSM), however, has been marketing its offerings through the mail with great success. In addition to its Software Times (see Section A), SSM has been sending out direct mailings with tear-out order forms on specific mainframe products from time to time. One of these generated 90 orders for a $5,000 product in 90 days.

- SSM's success with mail-order mainframe software demonstrates the wide range of distribution channels opening up to information services firms. There is often no need to rely on direct sales; alternative channels may be employed.

D.   MARKET SELECTION

1.   MARKET REDEFINITION

- In rapidly changing environments like those in which information services firms find themselves today, the most important marketing decision is market selection. All else follows it. And, once the choice is made, it is a very difficult decision to change - although the turbulence of the environment makes safe market harbors quite rare.

- In information services, market selection is dominated by two dynamics: the changing competitive environments of user industries and technological advances.

    - Many big users of information services are changing rapidly because of deregulation, foreign competition, more effective domestic competition, technical developments, and a host of related factors. They are

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turning to information services to provide the flexibility and control they need to survive in these changing environments and to help provide new products to give them competitive edges.

- At the same time, technological advances such as increased personal computing power and storage, networking, and communications hardware developments are making previously uneconomic applications (such as financial planning) very attractive - and outmoding older delivery systems, RCS in particular.

- Anticipation of these dynamics and appreciation of their consequences are crucial elements of market selection and can open up important new opportunities to aggressively managed firms.

a. Banking on Integration - SEI Corporation

- The competitive environment of banking has been especially dynamic, being strongly affected by both deregulation and improving information services technologies.

- SEI Corporation, a leading vendor of trust processing services, anticipated these changes and saw in them an ideal opportunity to enter new markets related to its bread-and-butter trust business.

- SEI recognized that one of the major results of the new banking environment would be that its customers would want to integrate the heretofore separate systems for trust accounting, money market funds, brokerage services, data base services (such as Dun & Bradstreet), and other accounts. Integration is desirable to banks because it:

- Increases bankers' knowledge and control of their customers by simplifying monitoring of customers' banking activities.

- Imposes interdependence on formerly isolated bank departments and forces them to talk to each other, aiding transition to the new, integrated banking environment.

- Is simpler to administrate and potentially cheaper than separate functions.

- SEI also recognized the associated trend of newly deregulated banking toward fee-based services and away from bundling services and the increased flexibility required by bankers' information systems that would result.

- SEI, well established in trust automation systems but with few other banking applications offerings, determined to take advantage of these industry dynamics to enter banking services markets it had theretofore not served.

- The vehicle of SEI's entry into nontrust accounting systems is its new Relational Banking System (RBS).

  - This new, integrated offering will be used by banks in place of (among others) the following incompatible applications offered by various, often unrelated, vendors:

    - Discount brokerage services.

    - Secured/unsecured loans.

    - Debit/credit cards.

    - Money market funds.

  - All these formerly separate packages would now be coordinated by a single bank officer interfacing with an SEI representative.

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- In addition to its integration features, the Relationship Banking System is also designed to flexibly respond to shifts by banks toward fee-based pricing of services.

- Development of the Relationship Banking System product is a particularly important strategic move by SEI because it represents the company's first foray into nontrust banking applications.

- There is only one directly competitive product in advanced development now, and it has not interested the banking community the way RBS has. SEI expects high 1984 revenues from this product.

- SEI was able to get the jump on its competitors and get its product into beta testing by monitoring and evaluating the industry it serves. It not only foresaw deregulation, but also the new information services needs it would create for bankers.

    b.   Delivery Mode Expansion - Comshare, Inc.

- SEI can easily rely upon its strong business base should it decide to be less ambitious. But many remote computing services companies enjoy no such luxury; indeed, the increasing attraction of on-premises information processing poses an extremely serious threat to RCS firms with few value-added products to offer.

- Companies that traditionally deliver their products via remote computing have several options to choose from to meet this threat.

    - They can ignore it. For some this means certain decline; others have enough value-added or unique features in their offerings that they need not fear the immediate future.

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- They can create new value-added products such as on-line proprietary data bases or networks to buttress their traditional products.

- They can yield to industry trends and shift to or support alternative delivery modes.

● Whatever is decided, the sooner it is planned and implemented, the stronger the company will become. If marketing systems are in place to detect new trends and respond to them, danger can be turned into opportunity.

● In 1980 and 1981 Comshare. Inc. recognized the growing attraction of in-house systems and personal computers and made a strategic decision to support the trend.

● Recognition of these dynamics did not result from an ad-hoc process. Comshare's marketing system alerted it to the opportunity and helped fashion Comshare's response.

- Customers were surveyed to find what, as yet unavailable, capabilities they wanted in their 1980s financial and business planning systems.

- Focus groups, made up of customers and potential customers, were asked what new products they would like to see.

- Market studies by outside firms gave objective views of where markets were heading.

● On the basis of these and other inputs and considerations, Comshare decided to adapt its very successful System W remote-accessed decision support system for delivery by in-house mainframes and microcomputers.

● The new component packages - System W for IBM mainframes and Micro W for IBM and Apple microcomputers - support micro, mainframe, and timeshar-

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ing communications and allow modeling and messaging of data in several dimensions simultaneously. Comshare refers to these packages as "distributed decision support" to emphasize their relationship with but added value to traditional decision support systems (DSS).

- Meanwhile, in 1982, extending its commitment to support new delivery modes, Comshare acquired Target Software, a microcomputer software house specializing in financial modeling applications. System W and Micro W are compatible with Target programs.

- Comshare's anticipation of changes in the marketplace enabled it to begin sales of System W in January 1983 - ahead of almost all other micro-to-mainframe software vendors. Profits are up substantially since the System W introduction.

2. PRODUCT POSITIONING

- The enormous demand for new software and services generated by declining hardware costs and environmental change beckons information services firms with incredible opportunities. But meeting this demand is proving very difficult, mainly because of resource limitations.

    - Experienced applications programmers are hard to find.

    - Salespeople who can communicate product capabilities are scarce.

    - Managers to oversee new product development and marketing are also hard to locate.

- Because of these difficulties, companies must ensure that resources are not being wasted on products that do not make money.

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- At the same time, increasing demands by information services customers for integration of systems and compatibility raise important product positioning issues.

  - Vendors without large market shares who try to sell full lines of systems or applications that are incompatible with de facto industry standards face very rough times as system compatibility and integration become more and more important to customers.

  - On the other hand, there will still be opportunities for the one-product vendor who single mindedly works to make his product compatible with systems that have large installed bases.

- In the modern information services environment, vendors must focus their product policy on products and markets in which they have clear competitive strengths and position those products to meet compatibility and integration issues head on.

  a.   "Single-Product" Policy - Execucom Systems Corporation

- Execucom Systems Corporation deliberately limits itself to providing financial planning and decision support software products and related professional services.   Its primary product, the Interactive Financial Planning System (IFPS), is designed to serve as only one component of a complete information center.

- Execucom concentrates on perfecting its financial planning and decision support products and on tying them to the general ledger systems of major systems suppliers such as McCormack & Dodge, Management Sciences of America, and University Computing Company. Execucom does not aim to be all things to all people. Rather, it provides a high-end decision support system to those users who need and can afford it - and these users receive considerable Execucom support.

INPUT

- At the same time, Execucom is offering IFPS on personal computers (IFPS/Personal) to give its offering greater depth and allow vertical integration. It now has a series of products with similar syntaxes, all of which can interface. Execucom built in vertical integration because it realized its customers would want upward mobility when power ran out on their personal computers.

- Execucom's limited product policy makes sense when one considers the nature of its product. It is highly specialized and is sold to a group of people distinctly different from the users of sister accounting applications. This group of buyers requires a different sales and support effort; Execucom specializes in providing these specialized services.

- Execucom is expanding its market, not by creating totally new products, but by offering its existing product on multiple systems and increasing the depth of supported delivery systems.

b.   "Partnership Product" Policy - Execucom Systems Corporation

- When firms determine to service only limited market segments, they can link up with others who serve different segments in order to extend each other's offerings, presenting customers with wider product lines.

- Because of its specialization, Execucom has been able to form both formal and informal arrangements with vendors of complementary products. The purpose of these agreements is to:

    - Ensure that Execucom products remain compatible with complementary offerings from other vendors.

    - Trade marketing information, which the other vendors are willing to do because they are not direct competitors.

- Execucom has refrained from distributing through these other vendors, how-
ever - again, because of the specialized needs of its marketplace, which
Execucom finds can best be met by its own sales force.

- The success of Execucom's strategy is evident from the sales of its products.
Its 1982 revenue of about $20 million was more than 67% above its 1981
revenue, an impressive performance in a recession year. This year IFPS
became the first DSS software product to receive the $50 million ICP award.

c.   "Multiple-Product" Policy - Cullinet Software Inc.

- Cullinet Software Inc. has followed a product policy path quite different from
Execucom's. It has continually broadened its product lines with the aim of
becoming a one-stop software shopping outlet.

- Cullinet's first products were report writers sold to auditors and account-
ants. Cullinet saw in the early 1970s that data storage and retrieval was a
bottleneck and acquired Integrated Data Base Management System (IDMS), a
data base management package, to better serve its customers.

- But IDMS led naturally to further add-ons: communications products, fourth-
generation languages, and, finally, an on-line applications development system
in 1981. This system sold very well and resulted in a number of programs
written for financial and manufacturing applications by Cullinet customers.

- These applications programs were often virtual duplications of similar appli-
cations programs written by other Cullinet customers, so Cullinet made
packages out of the ones for which demand seemed high and added them to its
catalog. In a very short time, applications have become an important part of
Cullinet's line: they were only 6% of 1982 sales but 20% of first quarter 1983
sales (and their share is still growing).

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INPUT

- The driving force behind this natural product proliferation was the information delivery problem: executives want information in a timely fashion, and they also want to see the interplay between variables over time.

- This has led to Cullinet's latest products, its Information Data Base, an integrated decision support system application to support the information center concept.

  - Information Data Base is essentially a personal computer software product that can link personal computers with mainframes.

  - Chase Econometrics and other data bases are integrated into this service, and it serves as a depository for executive level data bases and information.

- Cullinet's strategy has been very successful; it yielded $49 million in revenue in the first half of 1983, 60% greater than the corresponding period in 1982; income, at $7 million, was 59% higher.

- Cullinet is able to succeed in its product proliferation strategy because of the incremental nature of its new products. Each is a natural extension of an earlier product, and so marketing it does not involve major changes in Cullinet's sales force and support.

d.   Rapid Market Response - Management Science America, Inc.

- In today's volatile information services market, timing can be crucial - particularly in personal computer software, where strong products with early leads can become industry standards overnight.

- In early 1983 senior executives of Management Science America, Inc. (MSA), recognized that personal computers, legitimized by the introduction of the IBM PC in August 1981, would soon be found on many executive desks and were going to require linking to mainframes.

- From May to June senior management held a series of meetings on strategies and products for integrating microcomputer and mainframe technologies. MSA had an important asset for this planning in Peachtree, the personal computer accounting software firm they acquired in May 1981.

- By July 1982 the Executive Peachpak product strategy had been formulated.

    - The Peachpak allowed managers to download information from main-frame computers and use it for financial modeling, color graphics, and customized report preparation applications.

    - The Peachpak was primarily intended to boost mainframe software sales. Indeed, its sales are exclusively through MSA's direct sales force. It is essentially an add-on option to MSA's mainframe products.

- In August 1982 MSA rented a hotel suite in New York City to demonstrate a prototype Executive Peachpak. The MSA chief executive officer invited members of the press to see it and gave them one-on-one interviews. The press response was overwhelming.

- The first customer installation of an Executive Peachpak was in December 1982; MSA moved from product inception to first installation in only five months.

- MSA is pleased with the success of the Executive Peachpak.

    - The Peachpak was responsible for about $3 million in mainframe sales the first six months of 1983.

    - But, perhaps more important, MSA received wide press attention as a progressive, action-oriented software company.

INPUT

- The Executive Peachpak's success can be attributed to several factors.

  - MSA recognized relatively early the power and attractions of personal computers. By purchasing and nurturing Peachtree Software, MSA not only hedged its opportunities in the personal computer software market, but it also created the reservoir of talent from which it drew the resources to produce the Peachpak.

  - By moving early and decisively, MSA was able to get a head start on its competitors and establish itself in an infant market.

  - By producing an integrated product line, MSA was able to create a whole package that was greater than the sum of its parts; it enhanced the perceived value of a number of the elements of its product line.

E. CUSTOMER SERVICE

- Customer service represents a significant revenue-producing market opportunity for information services vendors.

  - Software maintenance is growing faster than the total software market.

  - Customer service is relatively immune to the price erosion suffered by most of the other segments of the information services industry.

  - Users are largely dissatisfied with current software maintenance offerings, as shown in Exhibit IV-I.

  - Typically, annual customer service fees run at about 10% to 12% of software products' total purchase prices.

INPUT

EXHIBIT IV-1

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USER REQUIREMENTS VERSUS SERVICE RECEIVED

(Principal Services)

Software Maintenance

INPUT
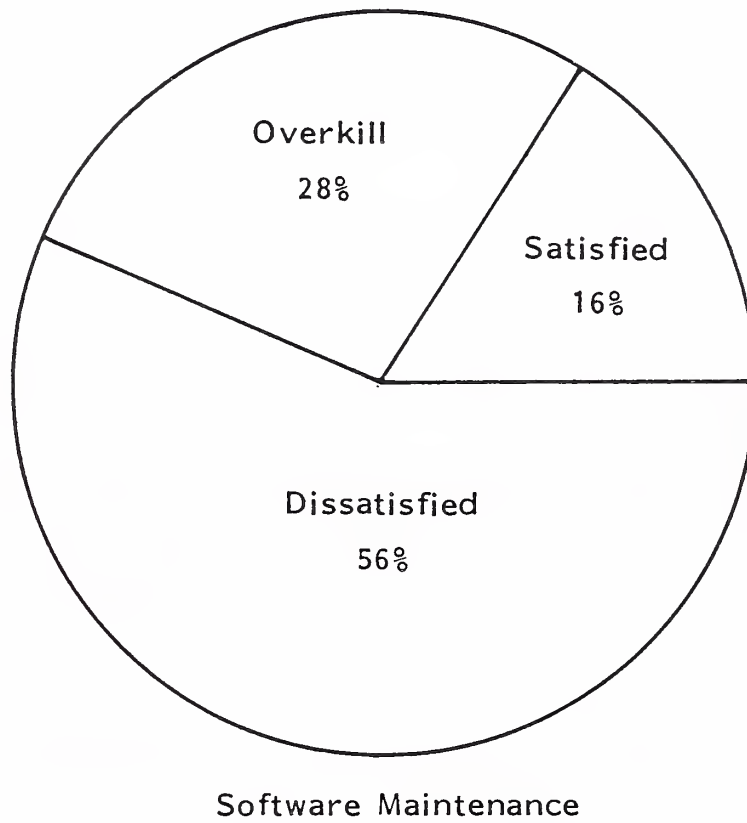
- This source of revenue can increase significantly over time when large customer bases are built up. At MSA customer service revenues were 26% of total revenue in 1982.

- However, the expensive and scarce labor component of customer service makes expansion of customer service staffing difficult. This may be overcome by leveraging the customer service staff with new delivery technologies, such as remote diagnosis and downloading of solutions to software problems (which many vendors are now planning, as shown in Exhibit IV-2), and automation-aided telephone answering support.

- Also, the increasing complexity of information services is making customer service problems much more difficult to solve. Solutions will often require teams rather than individuals, and these teams must often include hardware and software technicians and specialists in the customer's industry.

- Higher levels of customer service produce higher customer satisfaction and, consequently, lead to additional sales. Customer service designed specifically to increase customer satisfaction can have significant, positive effects on revenue.

1. DUAL CUSTOMER SERVICE TEAMS - MCCORMACK AND DODGE, INC.

- Cognizant of the importance attached to customer service by its customers, McCormack & Dodge, Inc. (M&D) reviewed its customer service program in 1980 and noticed the shortcomings of its generalist customer service technicians: most knew neither the fundamentals of the industry using their systems nor their products well enough to provide thorough, well-rounded, customer-oriented support.

- In response, M&D formulated a dual team approach: customer service calls would be made by teams with both applications and technical representatives.

EXHIBIT IV-2

PERCENT OF VENDORS USING AND PLANNING TO USE
TELECOMMUNICATIONS IN SOFTWARE MAINTENANCE

	SOFTWARE VENDORS	HARDWARE VENDORS
Identifying Software Problems:	52% / 8%	40% / 80%
Solving Software Problems:	48% / 4%	30% / 80%
Downloading Software Revisions:	48% / 4%	90% / 20%
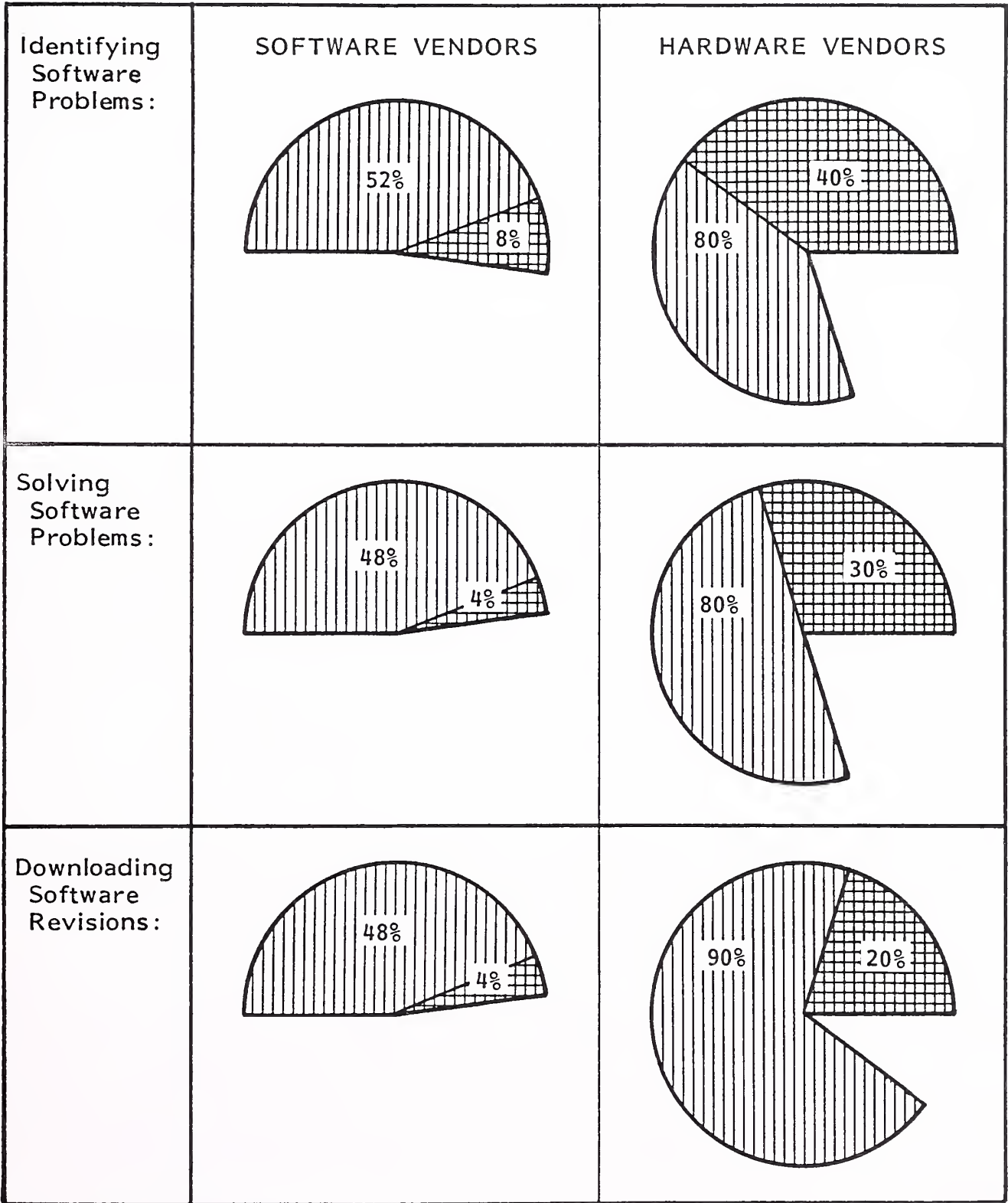
▤ = Now   ▥ = Future   Note: Percents refer to vendor "always" or "usually" using or planning to use

SOURCE: INPUT Survey

INPUT
FPS3

- Applications members would have industry backgrounds; for example, accounting representatives might have CPAs and Big Eight accounting experience. The technical representative would be well grounded in data processing systems.

- McCormack & Dodge customer satisfaction increased significantly because of the dual team service approach, and McCormack & Dodge is continuing the program.

2. THE EARLY WARNING LETTER - MCCORMACK AND DODGE, INC.

- In another effort to increase customer satisfaction, McCormack and Dodge initiated an Early Warning Letter program to alert customers of potential problems with M&D software.

- The program was very successful; some competitors tried to capitalize on it by telling prospects that McCormack & Dodge products were so unreliable that they required a newsletter to keep up with bugs, but customers were apparently very happy with the letter and action line phone calls dropped. M&D met its goal of honesty in communication with its customers, decreased its costs with the program, and increased the satisfaction of its customers.

3. TELEPHONE SUPPORT - MANAGEMENT SCIENCE AMERICA, INC.

- Management Science America, Inc. (MSA) has a strong telephone support program staffed by employees with experience in data processing, business applications, and the use of MSA systems.

- In 1982 this telephone support group implemented the MSA Internal Information system (MII). This on-line system gives telephone support representatives immediate access to customer profiles and support data. The representatives can instantly identify a customer's account manager, hardware, and other

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information that aid in providing comprehensive solutions to customer problems.

- MII can also track specific customer service requests. If a question has been asked before, an answer may be instantly available; if not, it is logged, researched, and answered. The solution is then recorded in the system so it will be available to other customers.

- The responsiveness possible with this system greatly enhances MSA's reputation with its customers, and the telephone support group's efficiency helps keep MSA's customer support costs down.

F. MARKETING INTELLIGENCE SYSTEMS

- Most information services companies have not yet adopted the sophisticated market information systems necessary for effective marketing in a dynamic environment. Several trends are increasing the needs for marketing information.

    - As information services firms grow larger and more sophisticated, they can afford to do more market research, and they are doing it. Competitors must match them to maintain their positions.

    - The complexity of the information services industry is increasing; more information than ever before is needed simply to understand its dynamics.

    - Automation is bringing down the costs of establishing and maintaining effective marketing information systems.

INPUT

- Recognizing these trends, a few information services firms have developed advanced market information systems.

I. TRACKING CHANGING CUSTOMER PROFILES

   a. <u>Data-based Intelligence - Bank of America Business Services</u>

- In 1981 Bank of America Business Services set up a sophisticated data base linking internally generated subscriber information with Dun & Bradstreet's on-line company information services. Bank of America uses this information to get a better idea of what its existing business is. For example:

   - It can track fee growth by company, sector, line of business, division, location, number of employees, length of time on Bank of America services, and a host of other variables.

   - It can compare existing sales with sales territories to evaluate market penetration and sales effectiveness.

- In addition to using this data base for understanding its current business better, Bank of America also uses it actively in its marketing program.

   - It is to be used for setting up new sales territories and for designing more effective compensation packages by better gauging sales territory potential.

   - It is used actively by marketing professionals for getting timely information about accounts.

- Bank of America Business Services is clearly in a much better position to gauge customer's needs than most other firms because of the nature of its business. But its use of external sources, such as the Dun & Bradstreet files, can be done just as well by other vendors.

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b.   Taking the Customer's Pulse - Management Decision Systems, Inc.

- Some more direct market information gathering techniques are now fre-
quently used in the information processing industry. Focus groups, for
example, are popular sounding boards, and users' groups are also routinely
tapped for information.

- It is important to keep in mind the goals of the information gathering when
using these sources. When markets change, new market strategies must be
developed.

- Management Decision Systems, Inc. (MDS) noticed such a change a few years
ago in the market for its Express information analysis and modeling package.

- MDS has traditionally sold its Express product to end users, bypassing IS
executives.   This made sense when Express was an isolated timesharing
product requiring no linkage with in-house systems. But the emergence of
personal computers and the success of IBM's Information Center concept have
forced MDS to package Express for a distributed processing environment
where linkages to in-house systems are now necessary to close sales - and
these links are controlled by IS managers.

- Recognizing the importance of touching base with corporate IS executives,
who orchestrate corporate IS and have grown much stronger in many corpor-
ate hierarchies, MDS recently began organizing focus groups with four to six
IS executives in each.   The participants were both clients and nonclients.
MDS found these groups extremely helpful in finding out what the perception
of MDS' positioning was, and MDS now polls IS executives continuously.

- Two years ago, MDS also began systematically collecting secondary informa-
tion on information centers.   It sent representatives to IBM information

INPUT

center classes and gathered more information from market research firms and published literature.

● As a result of all these efforts, MDS was able to get a better grasp on its position in the market. It found it had not been an effective marketer to IS professionals, and it moved to improve its performance by:

- Investing more resources in marketing directly to data processing departments.

- Hiring salespeople with data processing backgrounds.

- Reorganizing the company, in part to emphasize sales to data processing departments.

● MDS believes that its efforts to include IS executives in its marketing program are a major reason that 80% of its leads are now generated by marketing versus almost 100% resulting from cold calls less than two years ago. Over the same period, involvement of IS departments in customer decision making has increased from 40% of purchases to 90%. MDS's market intelligence program was crucial to foreseeing this opportunity and fashioning the response.

c. Taking High-Level Pulses - TRW Information Services and Cullinet Software Inc.

● Of course, the method of information collection will vary according to the segment of the information services industry being examined and other factors. In some sectors, particularly those with large numbers of small, diffuse users, formal customer surveys will be important indications of customer demand. In others, users are more conentrated and more likely to have leaders, so informal meetings with technical and market leaders could be more important.

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- The customers of TRW Information Services tend to fit in the latter category so, while TRW does conduct formal customer surveys at all levels, it devotes special efforts to maintaining informal contacts with leaders in each of the market segments it serves so that it can anticipate trends in customer demand. This makes particularly good sense for TRW because the financial industry it serves is characterized by a few large progressive leaders and many followers.

- Some companies perform the market intelligence function at their highest levels to ensure that senior executives stay abreast of market trends. Cullinet Software Inc., for example, insists that its key managers meet with customers and prospects every day. This not only helps the listening process, it also aids sales because these meetings are effectively high-level sales calls.

d. Motivating Employees to Collect Intelligence - Bank of America Business Services

- Bank of America Business Services is taking advantage of the contacts available through its corporate parent by actively soliciting and rewarding sales leads from sister Bank of America divisions. One recent internal bonus program that was very successful paid Bank of America employees outside of Business Services a modest finders fee for successful referrals.

2. ACTING ON INTELLIGENCE

- Of course, all of the information will have been gathered for naught if it is not used. It needs to be digested, disseminated, and acted on.

a. Marketing Board - Information Systems of America

- Information Systems of America (ISA) circulates the results of its market intelligence efforts on its monthly Marketing Board, an informal publication

INPUT

circulated to marketing and sales personnel. The contents are selected from information received from salespeople, secondary sources, and ISA's tele-marketers, who are trained to make inquiries about competitors when appropriate and report the intelligence.

b.   Competitive Link – Bank of America Business Services

● Bank of America Business Services' Competitive Assessment Unit puts out a monthly/bimonthly marketing intelligence bulletin called Competitive Link. This publication is professionally produced and includes several regular columns and features.

- A competitor's product lines, marketing strategy, personnel changes, and financial condition are analyzed.

- The market for one of Bank of America Business Services' product lines is examined in each issue, with comments on competitors' offerings.

- Acquisitions, joint ventures, and divestitures in the industry are reported.

- Information sources, such as Competitive Assessment's Competitor Library and external market research resources, are summarized.

- Contributors of information to Competitive Assessment are acknowledged.

c.   SWAT Teams – Management Decision Systems, Inc.

● Sometimes the marketing intelligence function will uncover information that cannot wait for a regular intelligence bulletin for dissemination; dramatic, immediate action could be needed.

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-       Contributors of information to Competitive Assessment are acknowledged.

c.   SWAT Teams - Management Decision Systems, Inc.

● Sometimes the marketing intelligence function will uncover information that cannot wait for a regular intelligence bulletin for dissemination; dramatic, immediate action could be needed.

- When Management Decision Systems, Inc. (MDS) learns of important competitive threats, it forms a special SWAT team to find out more and formulate a response.

    - The SWAT team tries out new competitive products, if possible, and identifies strengths and weaknesses.

    - It then formulates a strategy for dealing with the challenge.

    - Finally, it sends information about the challenge and MDS's response into the field.

    d.   Reformulating Products - Anonymous

- Sometimes the information gleaned from market intelligence systems is surprising. One company, which has asked for annonymity, reported that one of its market surveys revealed that customers' perceptions of why they buy particular information services change after they buy them.

    - At the time of purchase, they say the bells and whistles were what convinced them to buy; but after two years or so, they say it was service.

    - This company retuned its marketing to emphasize bells and whistles over service - and reports that its sales increased.

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V   CONCLUSIONS AND RECOMMENDATIONS

A.   THE MARKETING CHALLENGE

- Exceedingly rapid changes in the marketplace are causing alert information services management to intensify efforts to switch their firm's focus from that of a product or sales-driven strategy to a marketing-driven one.

- Market-driven strategies are primarily concerned with understanding and responding to customer needs and competitive realities. This approach requires that management informs the entire organization about the differences between sales and marketing and shows the organization how to incorporate marketing thinking and marketing responsiveness into its day-to-day decision-making process.

1.   SALES THINKING VERSUS MARKETING THINKING

- The first step in increasing the marketing orientation of a firm is to clarify the distinction between marketing thinking and product or sales thinking. Exhibit V-1 summarizes some of the elements of this vast difference.

    - Product and sales thinking puts the product first; the product is designed before any real marketing takes place. The marketing view is that market needs must first be determined; it is after they are known the product is designed and built.

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EXHIBIT V-1

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PRODUCT AND SALES THINKING VERSUS MARKET THINKING

Product First . . . . Market Needs First

Sales Revenues . . . . Profit Planning

Today, This Month . . . . Long-Term Trends

Sell Anyone . . . . Segment Priorities

Individual Effort . . . . Good Systems Planning
and Control

- Product and sales thinking also focuses on sales revenues as the main measure of success. In contrast, marketing thinking targets profit and profit planning as management and staff's primary focus.

- Product and sales thinking will focus on today or this month (with occasional focus on this year). Its orientation is primarily short term. Marketing thinking, however, involves attention to longer term trends (i.e., one to five years in the future). The emphasis is on potential opportunities, challenges, and threats that may be practically invisible at the time.

- Product and sales thinking is the belief that we should sell anybody who is willing to listen to our pitch and send money. Marketing thinking views the world as a series of market segments, some of which are attractive and some of which are not because they are potentially unprofitable. Marketing thinking prioritizes market segments according to how profitable they are to sell.

- Product and sales thinking focuses primarily on individual effort as a means of success, whereas marketing thinking recognizes that good systems must be established for analysis, planning, and control. These systems help individuals work more effectively as a team.

2. IMPORTANT ISSUES TO ADDRESS

- The decision to become more marketing oriented has far-reaching ramifications. Issues such as the following must be addressed quickly and effectively:

  - How can we increase the frequency of marketing thinking throughout our organization?

  - What new tasks must be undertaken?

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- What type of people should be responsible for their successful completion?

- What priorities should be assigned to task completion?

- What data is needed to improve our decisions?

- What policies and systems are needed to promote marketing effectiveness?

- In the pages that follow INPUT offers suggestions and recommendations to assist vendor management in addressing these issues in a cost effective way.

B. COMMON CHARACTERISTICS OF SUCCESSFUL MARKETING METHODS

- This research report has described numerous specific actions that information services vendors have taken to address the issues above. From those cases we can identify a number of common characteristics of successful marketing methods. These characteristics include:

- Top management recognition of an opportunity.

- Reliance upon marketing data.

- Willingness to commit enough money to marketing activities to make them pay off.

- Systematic approach to market intelligence gathering.

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- Willingness to implement new approaches before they become conventional wisdom.

C. RECOMMENDATIONS

- There is no information services vendor that INPUT is aware of that could not benefit from more aggressive marketing.

- The following recommendations incorporate the characteristics of successful marketing methods mentioned above. The recommendations are grouped into these categories:

    - Recognizing opportunities.

    - Establishing marketplace intelligence-gathering systems.

    - Managing customer service as a major profit-enhancing activity.

    - Improving market selection.

1. RECOGNIZING OPPORTUNITIES

a. Quick Audit

- A marketing-oriented firm detects marketplace changes and directions earlier than its competitors. Exhibit V-2 provides a "Quick Audit of Marketplace Sensitivity" worksheet for obtaining a rough measurement of the extent to which this is being done. To use the worksheet:

    - Identify an existing product line for which this quick audit will be applied.

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EXHIBIT V-2

QUICK AUDIT OF MARKETPLACE SENSITIVITY

STRUCTIONS: Marketplace awareness is your ultimate competitive edge. How systematically does your organization monitor changes signaled by your customers, prospects and competition?

You can quickly profile your organization's "marketplace sensitivity" by answering each of the questions below. When you have finished, total up your score and compare it with the Rating Scale.

PRODUCT LINE PROFILED _____

C I R C L E   A N S W E R

Question	MOST OF THE TIME	SOME-TIMES	RARELY	DON'T KNOW
1. We have clearly defined our Top 3 most important market segments and have documented their characteristics in writing to guide our product, market and sales decisions.	3	2	1	0
2. We systematically interview our New Customers to discover the real reasons why they bought from us. We document and communicate the results internally.	3	2	1	0
3. We segment our New Customers at least semi-annually to discover new trends.	3	2	1	0
4. We systematically interview our major Lost Prospects to discover the real reasons why they didn't buy from us. We document and communicate the results internally.	3	2	1	0
5. We segment our Lost Prospects at least semi-annually to discover new trends.	3	2	1	0
6. We can anticipate by at least 60 days the major strategic moves of our main competitors.	3	2	1	0
7. We have identified our Top 3 most important competitors and have carefully analyzed their business strategy.	3	2	1	0
8. Our employees actively collect competitive information and forward it to headquarters.	3	2	1	0
9. Our competitive information is stored in one central place for rapid retrieval and analysis.	3	2	1	0
10. Most of our market strategy decisions are DATA-based rather than OPINION-based.	3	2	1	0

TOTAL THE POINTS FROM EACH COLUMN   _____ + _____ + _____ + _____

ADD ALL FOUR COLUMNS TO GET THE TOTAL SCORE   _____

RATING SCALE: 27-30 — Excellent
23-26 — Needs Some Attention
Under 23 — Needs Much Atten.

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Mountain View, CA 94043
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MMKJ

- Answer the questions as they relate to that product line. (This should take no more than a few minutes if the needed information is at hand.)

- Total the score and compare it to the rating scale at the bottom of the sheet. The scale will indicate how much additional management time is needed to improve marketplace awareness.

b. Full-Scale Product Strategy Audit

- The purpose of a full-scale product strategy audit is to uncover sales- and profit-enhancing opportunities that have previously gone undetected.

- The product strategy audit is designed to:

    - Indentify causes of disappointing product sales.

    - Stimulate creative ideas for more productive market strategies.

    - Uncover new market opportunities.

    - Enhance the success of new products.

- The scope of the product strategy audit is shown in Exhibit V-3. It involves a systematic assessment of:

    - Specific problems now being faced (problem analysis).

    - External factors, such as positioning, customers, and competition (external analysis).

    - Internal factors such as existing market strategy, product management approaches, etc. (internal analysis).

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EXHIBIT V-3
AUDIT SCOPE

PROBLEM ANALYSIS

INTERNAL INFORMATION

GOALS
SALES TRENDS
FINANCIAL DATA
STAFFING LEVELS
PROCEDURES

INTERNAL ANALYSIS

- MARKET STRATEGY
- PRODUCT MANAGEMENT
- FINANCIAL
- PLANNING
- PARENT
- INTELLIGENCE GATHERING

EXTERNAL ANALYSIS

- MARKET POSITION
- CUSTOMERS
- LOST PROSPECTS
- COMPETITIVE
- ENVIRONMENTAL

MARKET STRATEGY DECISION MAKING
NEEDS•GROUPS•PRODUCT•SUPPORT•PROMOTION
CHANNELS•PRICES•SALES STRATEGY

CUSTOMER DATA
LOST SALES DATA
PROSPECT DATA
COMPETITOR DATA
ENVIRONMENT DATA

MARKETPLACE INTELLIGENCE SYSTEM

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INPUT

- The existing system for collecting and reporting marketing information (marketplace intelligence system).

- The availability and use of marketing-related data that is produced inside the firm (internal information).

- The method of making market-related decisions (market strategy decision making).

• The components of an effective product strategy audit are threefold:

- A list of factors indicating items to be audited, as shown in Exhibit V-4 (an example applicable to the customer analysis portion of the audit).

- A rating scale to objectively define how this dimension has scored, as shown in Exhibit V-5.

- A worksheet summary that, as the main output of the audit, recaps the findings along the following four parameters. Exhibit V-6 shows a worksheet completed for the customer analysis portion of a product strategy audit related to a financial accounting software product.

  . Conclusions (expressed in terms of opportunities, threats, strengths, or weaknesses).

  . Evaluation of data availability (defined in terms of quality, quantity, freshness, and usefulness).

  . Issues to resolve/data needed (areas needing additional investigation, clarification, and/or analysis. Also includes a list of important data requirements.)

INPUT

EXHIBIT V-4

CUSTOMER ANALYSIS
FACTORS LIST

PURPOSE: Our most important business decision is deciding what type of customers to pursue. The customers we actually sell to may or may not be the ones we intended to serve. Therefore, the accuracy and depth of our understanding of their characteristics is fundamental to a realistic appraisal of our opportunities.

FACTORS: An analysis of the following factors can help give us insights concerning who we are really selling and why.

A. CUSTOMER SEGMENTS

    1.   Functions/Needs
    2.   Groups

B. PRODUCT MODULES ACQUIRED

C. SATISFACTION LEVEL

    1.   Product
    2.   Support

D. DEGREE OF PRODUCT USE

    1.   Volume
    2.   Frequency
    3.   User Characteristics

E. CUSTOMER'S IMAGE OF US

F. BUYING METHODS

    1.   Decision Participants
    2.   Buying Criteria
    3.   Justification Methods

G. OBJECTIONS AND CONCERNS

    1.   Most Frequent
    2.   Toughest

H. DEMAND STIMULANTS

I. COMPETITORS CONSIDERED

    1.   Strongest
    2.   Second Strongest
    3.   Third Strongest

J. WHY BOUGHT FROM US INSTEAD OF COMPETITION

K. WHY BOUGHT AT TIME OF CLOSE INSTEAD OF SIX MONTHS EARLIER

L. LEAD SOURCE

M. SALESPERSON

N. CHANGES IN ABOVE CHARACTERISTICS WITHIN-

    1.   Past 6 Months
    2.   Past 2 Years

O. DIFFERENCES IN PLANNED VERSUS ACTUAL CUSTOMER CHARACTERISTICS

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EXHIBIT V-5
RATING SCALE,
CUSTOMERS

TOPIC	CRITERIA	SCALE		OUR RATING
CUSTOMER SATISFACTION	Percent of customers classified as being highly satisfied with our product	Over 75%	= +2	UNKNOWN
		50% to 75%	= 0	
		Under 50%	= -2	
CUSTOMER PROFILE DATA	Percent of customers for which we have collected at least three segment variables	Over 75%	= (+2)	+2
		50% to 75%	= 0	
		Under 50%	= -2	
PRODUCT USAGE	Percent of customers using our product "extensively"	Over 75%	= +2	UNKNOWN
		50% to 75%	= 0	
		Under 50%	= -2	
SEGMENT IDENTIFICATION	Extent to which the characteristics of our three main segments have been defined, documented, and communicated	Much	= +2	+0
		Some	= (0)	
		Little	= -2	
REASONS BOUGHT	Extent to which we are aware of the primary reasons why each customer in the past 12 months has acquired our product	Have formally asked customers	= +2	-2
		Have asked sales person	= 0	
		Gut feel	= (-2)	

INPUT
MMK3

EXHIBIT V-6
CUSTOMER ANALYSIS
WORKSHEET SUMMARY

Project __GLS__   Page __1__

Date __3/5__

CONCLUSIONS/COMMENTS	IMPACT #
	O · T · S · W

100% OVER $2 BILLION

LACK BANKS, INS. CO. (REGULATED)

MIX BETWEEN HQ AND REGIONS

MOSTLY PROC. INDUSTRIES
    7/20 = OIL   5/20 = AEROSPACE

MARKET SATURATED OVER $10 B CO.

ACTUAL SEGMENTATION DIFFERENT
  FROM PERCEIVED

EVALUATION OF DATA AVAILABILITY	EXC.	(GOOD)	FAIR	POOR

ISSUES TO RESOLVE/DATA NEEDED

PRODUCT IMAGE = VERY LARGE COMPANIES,
LACK OF REGULATORY FEATURES HURTS?
WHAT INDUSTRIES TCS SELL TO?
WHAT CUSTOMER NEEDS DID WE FULFILL?
CONSOLIDATION FEATURE NOT EMPHASIZED ENOUGH?
CALLING ON $1-5 B CO.?

ACTION NEEDS

FURTHER SEGMENTATION OF "OVER $1 Billion" CO.
LOST PROSPECT ANALYSIS
CUSTOMER NEEDS SURVEY
ANSWERS to Above Issues

O = Opportunities,   T = Threats,   S = Strengths,   W = Weaknesses
Form # OTM 1135

INPUT

• Recommendations (a summary of decisions and/or actions suggested by the auditor).

• Appendix C provides a set of unused worksheets.

2. ESTABLISHING MARKETPLACE INTELLIGENCE-GATHERING SYSTEMS

a. <u>Scope and Uses</u>

• Marketplace intelligence provides the ultimate competitive edge. Most companies have access to the same pool of people and financial resources. It's who acquires the best market data and most effectively acts upon it that will achieve the best competitive edge. Gut-feel decisions are rapidly being obsoleted by data-based decisions. Thus an essential part of becoming truly marketing oriented is to aggressively establish effective systems and procedures to collect, analyze, and utilize marketplace information.

• Exhibit V-7 provides examples of marketing information system components. They include sources of information, uses, and data items.

  - Sources can be classified according to whether they are event triggered, time triggered, or employee triggered. To have a constant, fresh, reliable flow of information, a marketing information system must include all three.

  - Uses for marketing information include early warning, analysis, and decision making. Early warning is strategically the most important use, yet ironically it is the least common.

  - Data items to be collected, stored, and processed must be carefully defined. Thus it is extremely worthwhile for firms to define and publicize what data items are needed.

INPUT

EXHIBIT V-7

EXAMPLES OF MARKETING INFORMATION SYSTEM COMPONENTS

SOURCES

EVENT TRIGGERED

Contact Report
Sale
Lost Sale
Competitor Moves
Prospect Identifi-
cation

TIME TRIGGERED

Annual Customer
Survey
Lost Prospect
Review

EMPLOYEE TRIGGERED

Competitor Moves
Prospect Identifi-
cation

USES

EARLY WARNING

Product Mix Shift
Sales Force Produc-
tivity Changes
Sales Cycle
Lengthening
Competitor Strategy
Shifts

ANALYSIS

Promotion Effectivness
Sales Unit Analysis
Revenue per Person-
Month
Segment Penetration
Competitor Strategy

MARKETING DECISIONS

Customer Needs
Selection
Customer Group
Selection
Product Features
Customer Support
Sales Promotion
Sales Tool Develop-
ment
Distribution
Channels
Pricing
Sales Strategy

DATA ITEMS

CUSTOMERS AND LOST SALES

Segment Variables
Decision Criteria
Decision Participants
Product Use
Competing Products
Product Experience

PRODUCT

Unit Sales
Product Mix
Sales Cycle

PROSPECTS

Source
Decision Participant
Product Interest

SALES FORCE

Unit Sales
Product Mix
Product Gaps
Activity Frequency

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b.   Typical Problem Areas

● Common deficiencies (and their consequences) in marketing information systems among information services vendors include:

- Lack of customer profile data (can result in undetected market segmentation trends, erroneous product enhancement decisions, misplaced sales promotion budget allocations, etc.).

- Lack of lost-prospect data (failure to see the commonality among lost prospects severs a key feedback mechanism for adjusting marketing strategy).

- Inadequate competitive data (prevents development of a market strategy that exploits competitor weaknesses, greatly hampers sales-force productivity).

- Erroneous understanding of prospect decision-making criteria (results in poor product features and enhancement decisions, mistargeted advertising, ineffective sales support tools, etc.).

c.   Six Steps to a Better Marketing Information System

● INPUT recommends the following six-step approach to improving the market-place intelligence-gathering activity:

- Step one: establish market data collection priorities. Not everything can be collected at once. Concentrate resources on specific items that have the most strategic importance. For example, initiate a 90-day intensive campaign to upgrade competitive data collection. After that is completed, emphasize another data category.

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INPUT

- Step two: publicize key data needs among all employees. Practically every employee is in touch with the marketplace in one way or another, via business or personal contacts, by conscious planning or inadvertent actions. Explain to employees why market data collection is so important, then outline what is needed. Provide incentives to them for responding (e.g., "Tip of the Month" publicity via internal newsletters, complimentary food or drink tickets).

- Step three: establish easy methods for capturing marketing data. A suggested approach is to implement a market alert card system, using a format such as that shown in Exhibit V-8. The card is printed on post-card weight stock and is index card size. It can be kept in a pocket, briefcase, or desk. The card provides a means of recording information immediately while the thought is fresh. It can then be immediately forwarded.

- Step four: assign specific data collection responsibility. Be exact about who is being counted upon to collect what. This single step can go a long way to improving the quality and timeliness of marketplace data. People often assigned specific responsibilities include sales people, support personnel, accounts receivable staff, key managers, and executives.

- Step five: appoint a market data administrator. Collecting, maintaining, and analyzing the market data are essential tasks. Exhibit V-9 outlines the responsibilities of this position. Exhibit V-10 describes the market data administrator's duties and qualifications.

- Step six: establish central data files. Easy data access is an essential aspect of making marketing information systems work. Centralizing the data not only improves data access but facilitates determination of additional data needs.

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EXHIBIT V-8

MARKET ALERT CARD

MARKET ALERT

To GEORGE DAVIS

From JERRY ALEXANDER   Date 2/7

Priority	Urgent	(Important)	FYI	
Type	(Data)	(Suggestion)	Problem	
Topic	(Competition)	Product/Support	Promotion	
	Market Needs	(Pricing)	Sales Strategy	

Comment TCS JUST OFFERED POLOROID CORP. A $20K
DISCOUNT IF THEY WOULD BUY GL-70 WITHIN THE NEXT
30 OAYS! WHY ARE THEY GETTING SO DESPERATE?
IF THIS KIND OF PRICE COMPETITION KEEPS UP, (Turn over →)

Action Requested	Call Me	Other
	Notify JOHN WELLINGTON	

Comment (continued from other side) _____

I FEEL WE WILL NEVER BE ABLE TO COMPETE
HEADS ON AGAINST THEM. MAYBE WE SHOULD
OFFER A SMALL DISCOUNT ON GLS SO WE
CAN KEEP IN THE RUNNING, WHAT DO YOU
THINK?

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EXHIBIT V-9

RESPONSIBILITIES OF A MARKET DATA ADMINISTRATOR

ROLE

- System Manager
  - Data Collector
  - Data Custodian
  - Analyst/Advisor

DUTIES

Data Collector:
- Identify Data Sources
- Schedule Collection
- Receive Requested Data
- Forward Data to Custodian

Classify New Data:
- Receive New Data
- Classify and Index
- Publish Data Inventory

Maintain Data Bank:
- Organize Files
- Receive Additions Changes, Deletions
- Update Files

Fulfill Data Requests:
- Receive Data Request
- Search Data Bank Retreive Data
- Schedule Processing and Analysis
- Forward Results to Requestor

Analyze Data:
- Analyze Available Data
- Identify Relevant Trends
- Summarize Findings

Advise Company Personnel:
- Train Personnel to Use System
- Advise On New Analysis Opportunities

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EXHIBIT V-10

JOB DESCRIPTION: MARKET DATA ADMINISTRATOR

SUMMARY:	Directs the collection, storage, processing, and analysis of marketplace data. Functions as the Marketing Information System Manager.
DUTIES:	Performs three primary activities:

    (1)   Data Collection Manager: Indentifies data sources and manages the timely collection of data from those sources.

    (2)   Data Custodian: Classifies and stores new data, updates manual files, and fulfills information requests. Periodically publishes descriptions of available information.

    (3)   Analyst/Advisor: Analyzes existing data for situations and trends important to market strategy decision making, advises company personnel on the potential implications of the findings, trains personnel to use the system, and advises management on new opportunities for marketplace data analysis.

QUALIFICATIONS:

    (1)   Data Collection Manager: Knowledgeable concerning potential data sources. Effective in establishing procedures for collection data from a variety of sources inside and outside the company. Skilled at motivating personnel to adhere to established data collection methods. Familiar with marketing concepts and methods.

    (2)   Data Custodian: Capable of accurately and systematically maintaining files of marketplace information. Skilled in classifying and indexing market-related data. Persistent in searching for requested information. Responsive to timely needs of data requestors. Familiar with marketing concepts and methods.

    (3)   Analyst/Advisor: Skilled at identifying significant trends from the variety of marketplace data available. Capable of ascertaining the potential relevance of such findings to current market strategy issues. Able to concisely communicate analytical observations to company personnel at all organizational levels. Previous work experience includes marketing line or staff responsibility requiring contributions to market strategy analysis and decision making. Familiarity with marketing concepts and methods.

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- Appendix B comprises a list of automated sales and marketing systems vendors whose systems will aid in the centralization, collection, and analysis of data. (See the December 1983 INPUT report <u>Opportunities in Sales, Marketing, and Distribution Applications for Information Services Vendors</u> for a more complete presentation of these systems.

- Better marketing intelligence is vital to success in the 1980s. Management must attach strategic importance to its effective definition, development, and operation. Otherwise it will languish to the detriment of the entire firm.

3. MANAGING CUSTOMER SERVICE AS A PROFIT-ENHANCING ACTIVITY

- Marketing and management of customer service are increasing in importance.

    - For well-managed individual software products, the maintenance portion of total revenue tends to increase over time as maintenance revenue replaces sales revenue, as shown in Exhibit V-11.

    - Recent surveys show that customer services revenues represent 20% of total revenues for integrated services vendors and 10% to 12% for software vendors. These proportions are increasing.

    - Customer services is insulated from price erosion.

    - The cost of customer service is increasing because it is labor intensive.

    a. <u>Scope of Customer Service</u>

- Historically, customer service has been limited by most information services vendors to a few discrete components, e.g., installation, hardware/software maintenance, documentation and training.

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EXHIBIT V-11

REVENUE COMPOSITION FOR A HYPOTHETICAL SOFTWARE PRODUCT

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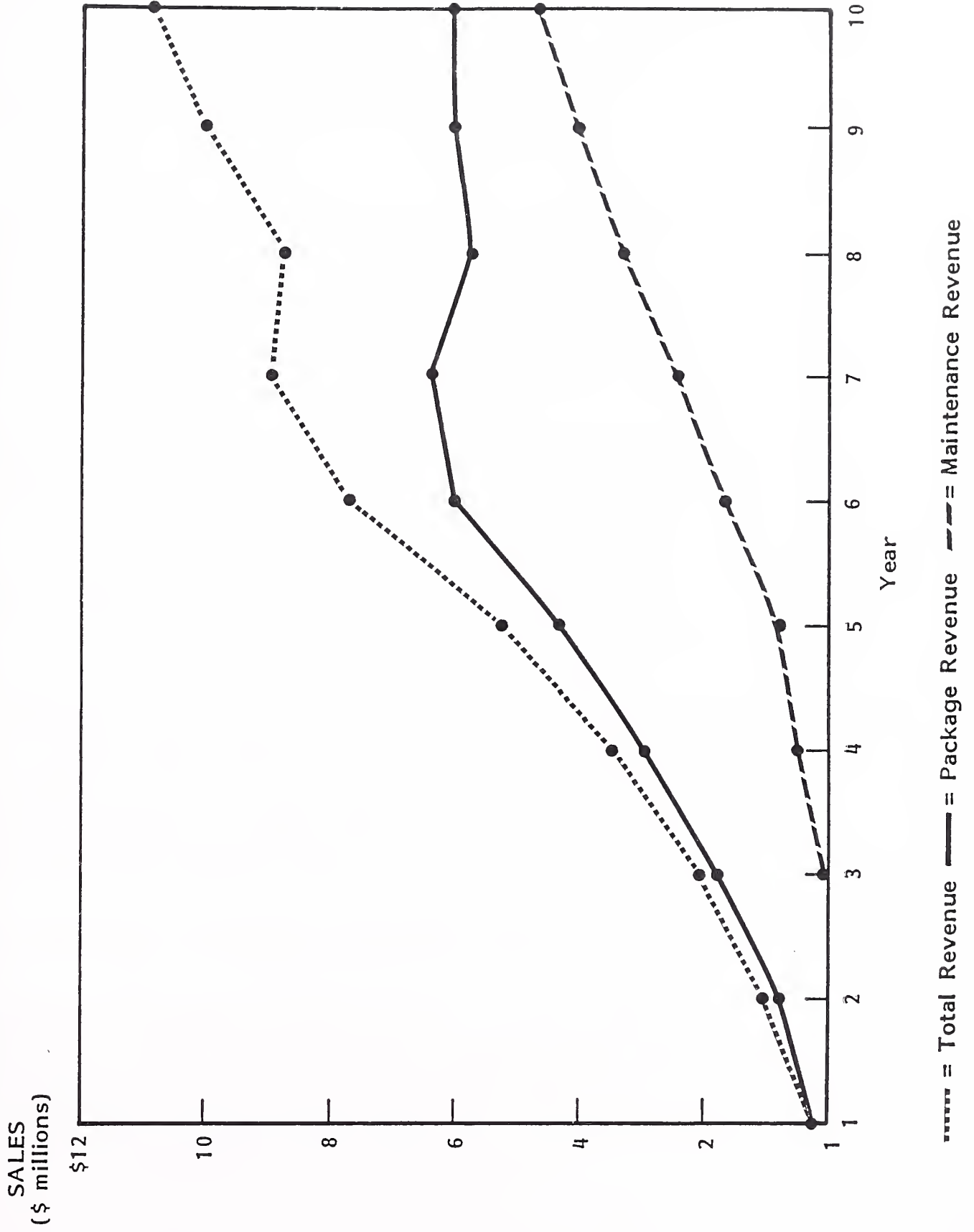
- While the following items might seem to overextend the responsibility of the customer service organization, they actually reflect the logical outcome of current user requirements and expectations, as shown in Exhibit V-12. Pursuing a broader customer service strategy represents a major revenue opportunity for a number of vendors.

  - System consulting - an after-sales activity that aims at integrating site configuration growth with users' application implementation plans. Customer service engineers usually have the status of system consultants with users; this activity merely sanctions that status on a fee-paying basis.

  - Environmental planning - monitors the quality of the locations in which the product is installed or service is given. Many vendors delegate this task to third-party companies.

  - Physical layout - normally a (free) part of service activites when hardware is involved.

  - Hardware/software configuration - usually accomplished initially (inconsistently) by the sales and sales support staff, whose main concern is to minimize sales price. The ongoing development of the configuration, particularly with a view to the hardware implications of software additions, is a service best rendered by customer service.

  - System and add-on installation - already a part of customer serivce.

  - Systems training - ongoing training in hardware and software use (as opposed to the initial training provided by sales support). In particular, ongoing software training should aim at eliminating the 60% of maintenance calls that are caused by user misuse or lack of understanding.

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EXHIBIT V-12

COMPONENTS OF CUSTOMER SERVICE

```
                    ┌─────────────────────────┐
            ┌───────│   System Consulting     │ *
            │       └─────────────────────────┘
 ┌────┐     │       ┌─────────────────────────┐
 │ C  │─────┼───────│  Environmental Planning │ *
 │ U  │     │       └─────────────────────────┘
 │ S  │     │       ┌─────────────────────┐
 │ T  │─────┼───────│  Physical Layout    │ *
 │ O  │     │       └─────────────────────┘
 │ M  │     │       ┌──────────────────────────────────┐
 │ E  │─────┼───────│  Hardware/Software Configuration  │ *
 │ R  │     │       └──────────────────────────────────┘
 │    │     │       ┌───────────────────────────┐
 │ S  │─────┼───────│  System/Add-on Installation│
 │ E  │     │       └───────────────────────────┘
 │ R  │     │       ┌─────────────────────┐
 │ V  │─────┼───────│  Systems Training   │
 │ I  │     │       └─────────────────────┘
 │ C  │     │       ┌─────────────────────────┐
 │ E  │─────┼───────│  Systems Documentation  │
 │    │     │       └─────────────────────────┘
 │ N  │     │       ┌──────────────────────────────┐
 │ E  │─────┼───────│  Hardware/Software Maintenance│
 │ E  │     │       └──────────────────────────────┘
 │ D  │     │       ┌─────────────┐
 │ S  │─────┼───────│  Supplies   │ *
 │    │     │       └─────────────┘
 │    │     │       ┌─────────────┐
 │    │─────┼───────│  Add-ons    │ *
 │    │     │       └─────────────┘
 │    │     │       ┌─────────────┐
 │    │─────┼───────│  Site Audit │ *
 └────┘     │       └─────────────┘
            │       ┌───────────────────────────┐
            └───────│  Relocation/Deinstallation│
                    └───────────────────────────┘
```
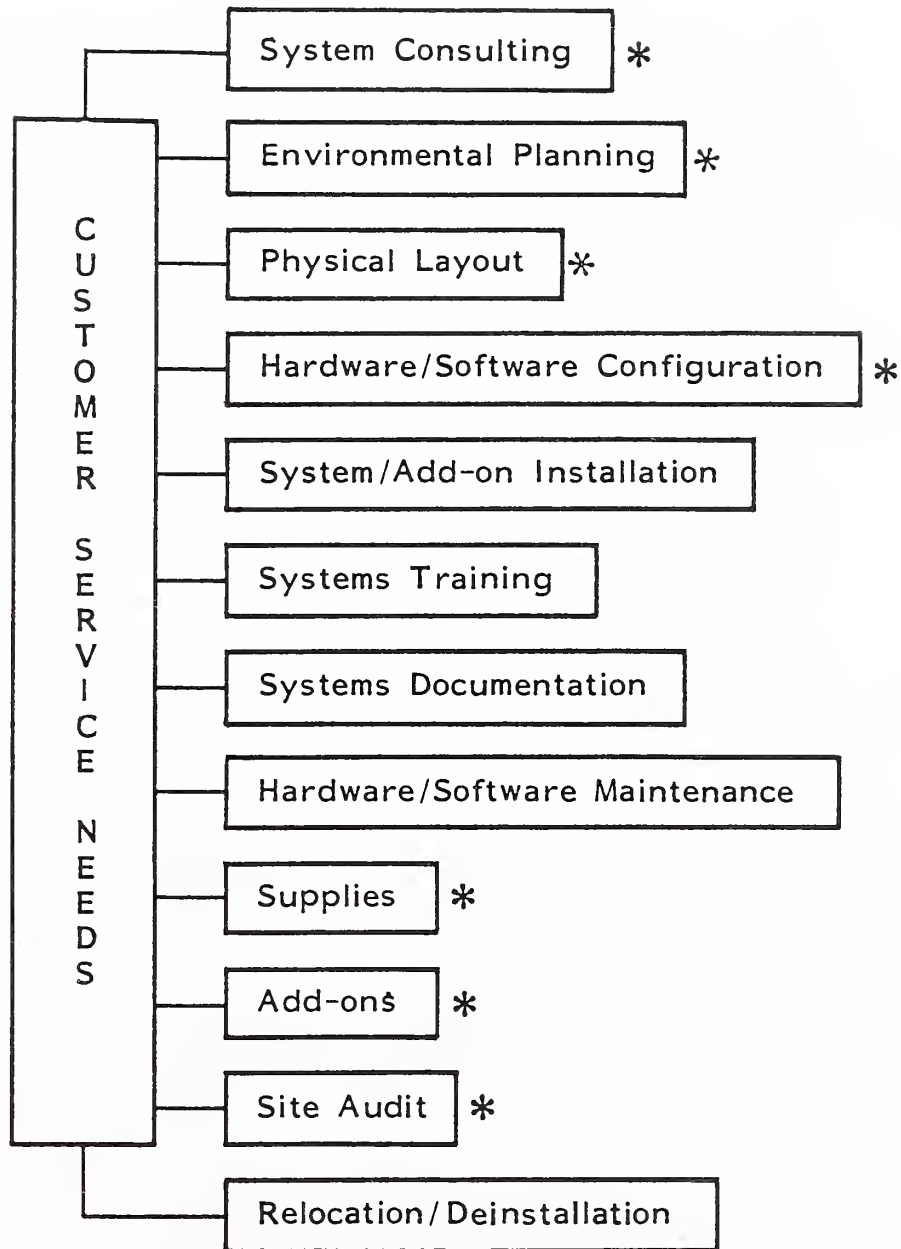
* Usually not part of today's customer service.
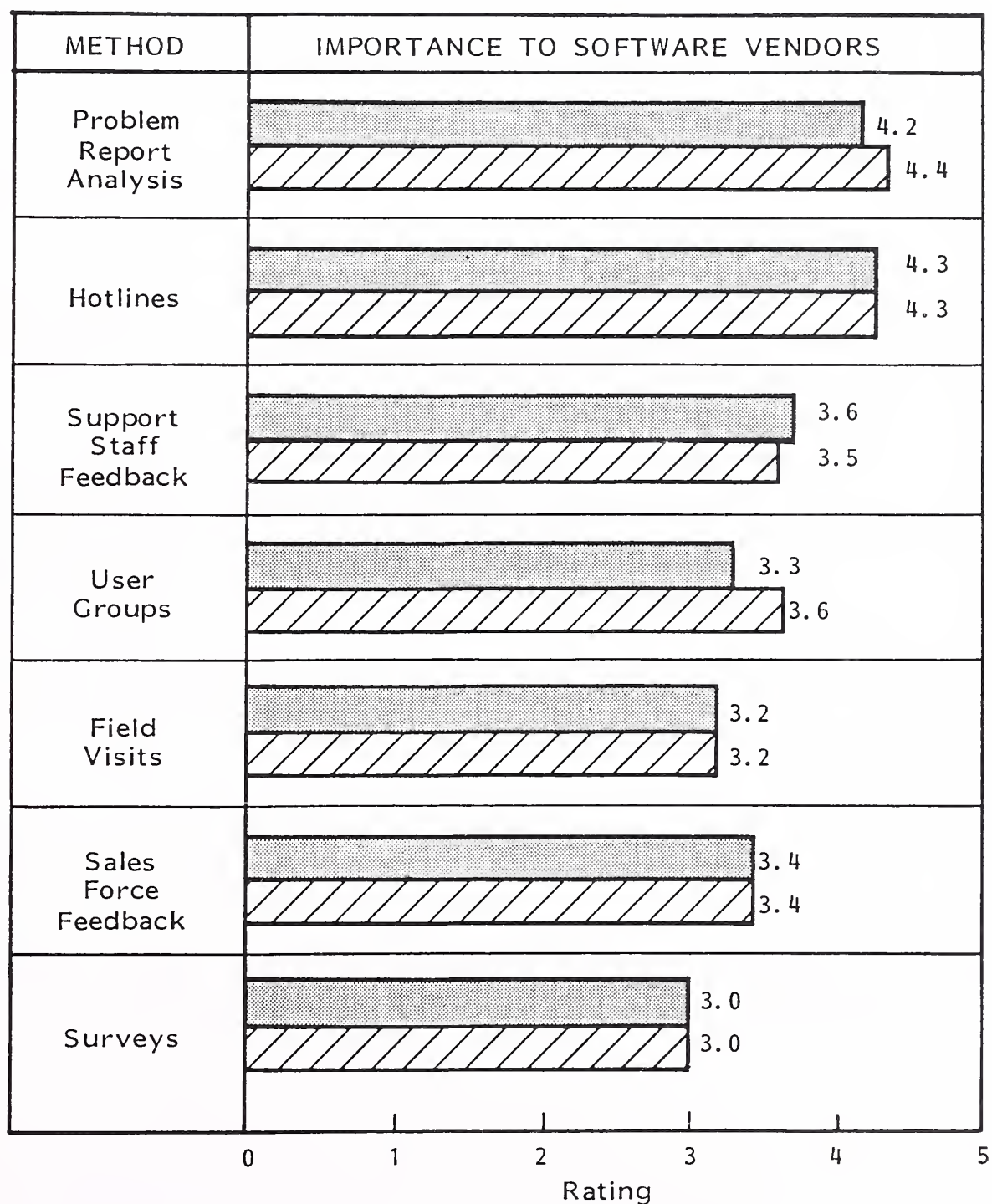
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- Systems documentation - both hardware and software. An integral part of systems training.

- Hardware/software maintenance - the core business of customer service organizations.

- Supplies - still frequently excluded from customer service operations for unexplained reasons.

- Add-ons - still the domain of sales, mainly because sales representatives see them as a captive source of revenue for commission generation. (This setup has more to do with the design of commission plans than with logic.)

- Site audit - frequently omitted from the list of vendor services, despite the excellent side benefits in customer satisfaction, service image, and field data gathering.

- Relocation/deinstallation - usually part of hardware-oriented customer services.

b.   Identifying Customer Service Needs

- There are many ways vendors identify customer service and software maintenance needs, as shown in Exhibit V-13.

    - Problem report analysis and hotlines are considered the most important means by vendors.

    - Support staff feedback, user groups, field visits, and sales force feedback are also important.

    - Surveys are considered less important.

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EXHIBIT V-13

IMPORTANCE OF METHODS OF IDENTIFYING
SOFTWARE MAINTENANCE NEEDS

METHOD	IMPORTANCE TO SOFTWARE VENDORS
Problem Report Analysis	4.2 (Now) / 4.4 (Future)
Hotlines	4.3 (Now) / 4.3 (Future)
Support Staff Feedback	3.6 (Now) / 3.5 (Future)
User Groups	3.3 (Now) / 3.6 (Future)
Field Visits	3.2 (Now) / 3.2 (Future)
Sales Force Feedback	3.4 (Now) / 3.4 (Future)
Surveys	3.0 (Now) / 3.0 (Future)

Rating

0 = Low Importance   5 = High Importance

▨ = Now   ▱ = Future

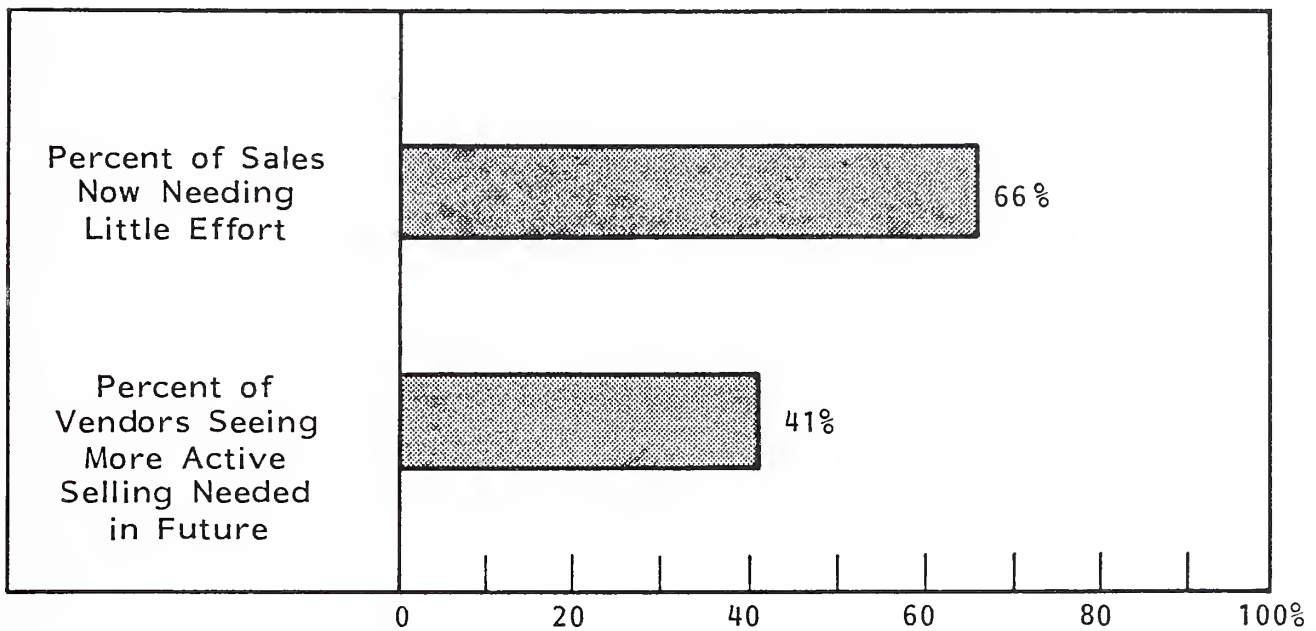SOURCE: INPUT Survey

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INPUT
MMK3

- Vendors plan to use problem reports and user groups even more in the future.

- Sixty-six percent of all software vendors perceive software maintenance sales as almost automatic, requiring little initiative on their part, as shown in Exhibit V-14. Forty-one percent do believe more active selling will be required in the future, however. INPUT emphatically supports this latter view. Customer service represents a major undeveloped source of additional revenue for many vendors.

    c.   Customer Service Pricing

- INPUT's ongoing custom research in customer service pricing has shown that, across industry and product groups, price is not a major consideration for most customers.

    - Customers' highest priorities are functionality, flexibility, and support. Customers will buy products that they perceive to be over-priced (from a supplier cost/profit standpoint) if it meets these needs better than competing products.

    - Vendors typically ascribe more importance to customer service pricing than customers do.

- Most companies use a mechanistic approach to customer service pricing, basing it on either a percent of the package price or a profitability target.

- This approach leads to leaving money on the table. Vendors should attempt to determine customer values for services and price accordingly.

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EXHIBIT V-14

SOFTWARE MAINTENANCE SALES EFFORT
BY SOFTWARE VENDORS

SOURCE: INPUT Survey

INPUT
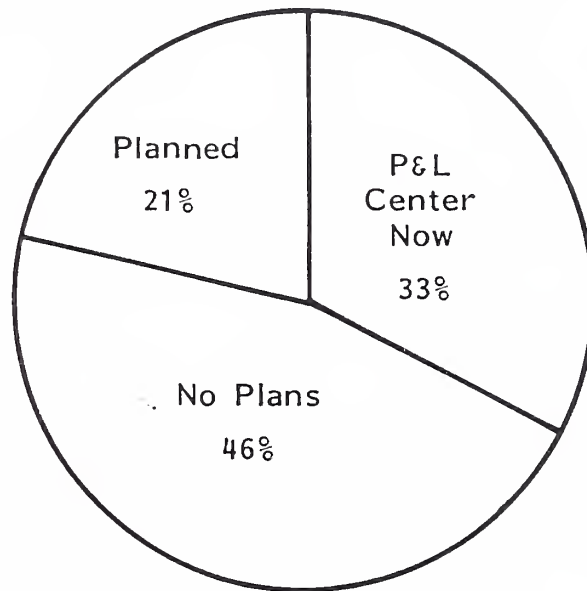MMK3

d.   Software Maintenance as a Profit Center

- In many companies, simply reorganizing the customer service center can increase its effectiveness and lead to enhanced customer service revenue.

- About one-third of all major software vendors have organized software main-tenance as a profit and loss (P&L) center. Another fifth plan to, so that within the next few years roughly half can be expected to be so organized, as shown in Exhibit V-15.

- Hardware vendors have more aggressive plans for their software maintenance functions. Almost two-thirds either are already organized as P&L centers or intend to be in the near future.

- The trend toward P&L centers is quite clear, and companies that have not made the switch should examine the possibility seriously.

e.   Maintaining Software Developed by Third Parties

- Vendors are increasingly adding software products acquired from outside suppliers to their own line of products.

  - Some minicomputer and small system vendors are not actually distrib-uting the software; they simply recommend it.

  - Other companies, such as IBM and Cullinet, buy up rights to products.

- When plans are made to purchase rights, software maintenance becomes an issue because it is not always clear whether the buying or the selling company should be responsible for the product.

  - The primary reason for acquiring the product externally in the first place is to lower the time and resources investment necessary to develop a software product.

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EXHIBIT V-15

SOFTWARE MAINTENANCE AS A P&L CENTER

SOFTWARE VENDORS

HARDWARE VENDORS

INPUT
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-   Contracting to continue buying central maintenance functions from the seller would lower initial investment costs.

-   Alternatively, all or part of the seller's technical and maintenance staff could be acquired with the product. They might not want to come, however.

•   Exhibit V-16 reviews the pros and cons of having the buyer or seller maintain third-party-developed software.

f.   Recommendations

•   Customer service represents a significant revenue opportunity for information services suppliers. There are several actions vendors can take to enhance revenue from this source.

•   Customer service resources can be leveraged by:

-   Innovative interactive training methodologies, which are useful for both installation training and as a replacement for labor-intensive and variable quality hotline service.

-   Integrated software development and maintenance tools.

-   User needs for customer service can be identified through problem report analyses, hotlines, support staff feedback, user groups, field visits and customer surveys.

-   Vendors can price more aggressively, pricing closer to customer value.

-   Customer service can be organized as a profit center, insuring its offerings are profitable and lending incentives to better performance.

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EXHIBIT V-16

MAINTAINING THIRD-PARTY-DEVELOPED SOFTWARE: BUYER OR SELLER?

ADVANTAGES TO BUYER MAINTAINING	ADVANTAGES TO SELLER MAINTAINING
• More direct quality control • Easier maintenance of documentation and other standards • Possible addition of key seller staff • Difficulty in motivating staff for maintenance • Easier field-central staff coordination	• Lower initial investment in resources and management time • Conserve scarce in-house staff • Greater expertise of seller's staff • Reluctance of seller's staff to join/stay with buyer

INPUT
FPS3 MMK3

4. IMPROVING MARKET SELECTION

a. Common Problems

- Selecting which types of customers to pursue is one of the most important business decisions a firm makes. Common mistakes in market selection made by information services vendors include:

    - Marketing to too wide an audience with too few resources.

    - Lack of awareness of subsegments within an existing market segment.

    - Failure to recognize that an existing product may appeal to a new group of customers.

    - Failure to learn enough about existing customers.

    - Lack of priority emphasis toward the most profitable segments.

b. Market Segmentation

- Market segmentation is the process of identifying groups of customers with common needs. Each market segment requires a unique market strategy.

- Creative market segmentation is very useful in helping to strengthen existing market positions as well as for identifying opportunities for new products. Payoffs from good segmentation include:

    - Identification of unseen segments where sales are easier.

    - Identification of customer groups where product appeal is declining (in time to take corrective action).

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- Early warning of impending market saturation.

• A good time to do a segmentation analysis is whenever:

  - Sales slow down for an extended period.

  - A new competitor emerges.

  - Major enhancement or new product decisions must be made.

• One of the keys to creative segmentation is to classify the market in terms of segment factors that are important causes of market behavior and are not obvious to competition. Exhibit V-17 lists segmentation factors that often fall into this category for information services vendors. A factor is valid for segmentation if it is:

  - Measurable.

  - Applicable to many customers.

  - Responsive to market strategy differences.

• An extremely worthwhile exercise is to segment existing customers. If carefully done it can reveal undetected shifts in customer characteristics, which, in turn, can often suggest how to improve market penetration via slight changes in market strategy. Comparing the characteristics of customers based on when the service was acquired is especially recommended. Customers should be grouped in six-month periods and then analyzed for subtle changes in characteristics.

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EXHIBIT V-17

SEGMENTATION FACTORS OFTEN IMPORTANT
TO INFORMATION SERVICES

TYPE BUSINESS

- SIC (4 Digit)
- Revenue Size
- Number of Employees
- Location
- Products Produced
- Regulation

GENERIC PRODUCT EXPERIENCE

- Beginner
- Some Use
- Sophisticated

PRODUCT'S ROLE IN CUSTOMER'S WORLD

- Input to
- Output From
- Inside of
- Outside of
- Importance to Company

DECISION METHODS

- Individual
- Committee
- External Personnel

STIMULANTS

- Demand
- Decision Now

PRODUCT USE

- Application
- Partial or Complete Use
- Light or Heavy Use Volumes
- Internal Changes Required
- Factors Affecting Use
- Predictability
- Trends in Use

DECISION UNIT COMPOSITION

- Signer
- Decision Maker
- Recommender
- Evaluator
- User

DECISION PARTICIPANT PROFILE

- Job Function
- Organization Level
- Authority
- Personal Needs

DECISION FACTORS

- Fit to Specific Needs
- Application Knowledge
- Change Required
- Training
- Ongoing Support
- Location
- Ease of Use
- Reliability
- Expandibility
- Match to Input/Output
- Ease of Separation
- Distribution Channel
- Financing
- Value

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APPENDIX A: DEFINITIONS

- INFORMATION SERVICES - The provision of:

    - Data processing functions using vendor computers (processing services).

    - The provision of data base access where computers perform an essential role in the processing or conveyance of data.

    - Services that assist users to perform functions on their own computers (software products and/or professional services).

    - A combination of hardware and software, integrated into a total system (integrated systems).

A. REVENUE

- All revenue and user expenditures reported are available (i.e., noncaptive) revenue, as defined below.

- NONCAPTIVE INFORMATION SERVICES REVENUE - Revenue received for information services provided within the U.S. from users who are not part of the same parent corporation as the vendor.

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INPUT

- CAPTIVE INFORMATION SERVICES REVENUE - Revenue received from users who are part of the same parent corporation as the vendors.

- OTHER REVENUE - Revenue derived from lines of business other than those defined above.

B. SERVICE MODES

- PROCESSING SERVICES - Remote computing services, batch services, and processing facilities management.

    - REMOTE COMPUTING SERVICES (RCS) - Provision of data processing to a user by means of terminals at the user's site(s) connected by a data communications network to the vendor's central computer. There are five submodes of RCS:

        . INTERACTIVE (timesharing) - Characterized by the interaction of the user with the system, primarily for problem-solving timesharing but also for data entry and transaction processing: the user is on-line to the program/files.

        . REMOTE BATCH - Where the user hands over control of a job to the vendor's computer, which schedules job execution according to priorities and resource requirements.

        . DATA BASE - Characterized by the retrieval and processing of information from a vendor-provided data base. The data base may be owned by the vendor or a third party.

        . USER SITE HARDWARE SERVICES (USHS) - These offerings provided by RCS vendors place programmable hardware on the user's site (rather than in the EDP center). USHS offers:

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INPUT

- Access to a communications network.

- Access through the network to the RCS vendor's larger computers.

- Significant software as part of the service.

- BATCH SERVICES - This includes data processing performed at vendors' sites of user programs and/or data that are physically transported (as opposed to electronically by telecommunication media) to and/or from those sites. Data entry and data output services, such as keypunching and computer output microfilm processing, are also included. Batch services include those expenditures by users who take their data to a vendor site that has a terminal connected to a remote computer for the actual processing.

- PROCESSING FACILITIES MANAGEMENT (PFM) (Also referred to as "resource management" or "systems management") - The management of all or a major part of a user's data processing functions under a long-term contract (more than one year). This would include both remote computing and batch services. To qualify as PFM, the contractor must directly plan, control, operate, and own the facility provided to the user, either on-site, through communications lines, or in a mixed mode.

- Processing services are further differentiated as follows:

  - Cross-industry services are the processing of applications that are targeted to specific user departments (e.g., finance, personnel, sales) but cut across industry lines. Most general ledger, accounts receivable, payroll, and personnel applications fall into this category. Cross-industry data base services where the vendor supplies the data base and controls access to it (although it may be owned by a third party) are

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included in this category. General-purpose tools such as financial planning systems, linear regression packages, and other statistical routines are also included. However, when the application, tool, or data base is designed for specific industry use, then the service is industry specific.

- Industry-specific services provide processing for particular functions or problems unique to an industry or industry group. The software is provided by the vendor either as a complete package or as an applications "tool" that the user employs to produce a unique solution. Specialty applications can be either business or scientific in orientation. Industry-specific data base services, where the vendor supplies the data base and controls access to it (although it may be owned by a third party), are also included under this category. Examples of industry specialty applications are seismic data processing, numerically controlled machine tool software development, and demand deposit accounting.

- Utility services are those where the vendor provides access to a computer and/or communications network with basic software that enables users to develop their own problem solutions or processing systems. These basic tools include terminal-handling software, sorts, language compilers, data base management systems, information retrieval software, scientific library routines, and other systems software.

- SOFTWARE PRODUCTS - This category includes users' purchases of applications and systems packages for use on in-house computer systems. Included are lease and purchase expenditures, as well as fees for work performed by the vendor to implement and maintain the package at the users' sites. Fees for work performed by organizations other than the package vendor are counted in professional services. There are several subcategories of software products.

INPUT

- APPLICATIONS PRODUCTS - Software that performs processing to service user functions. They consist of:

    • CROSS-INDUSTRY PRODUCTS - Used in multiple user industry sectors. Examples are payroll, inventory control, and financial planning.

    • INDUSTRY-SPECIFIC PRODUCTS - Used in a specific industry sector such as banking and finance, transportation, or discrete manufacturing. Examples are demand deposit accounting and airline scheduling.

- SYSTEMS PRODUCTS - Software that enables the computer/communications system to perform basic functions. They consist of:

    • SYSTEMS CONTROL PRODUCTS - Function during applications program execution to manage the computer system resource. Examples include operating systems, communication monitors, emulators, and spoolers.

    • DATA CENTER MANAGEMENT PRODUCTS - Used by operations personnel to manage the computer system resources and personnel more effectively. Examples include performance measurement, job accounting, computer operations scheduling, and utilities.

    • APPLICATION DEVELOPMENT PRODUCTS - Used to prepare applications for execution by assisting in designing, programming, testing, and related functions. Examples include languages, sorts, productivity aids, data dictionaries, data base management systems, report writers, project control systems, and retrieval systems.

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INPUT

- <u>PROFESSIONAL SERVICES</u> - Made up of services in the following categories:

    - <u>EDUCATION SERVICES</u> - EDP products and/or services - related to corporations, not individuals.

    - <u>CONSULTING SERVICES</u> - EDP management consulting and feasibility studies, for example.

    - <u>SOFTWARE DEVELOPMENT</u> - Including system design, contract programming, and "body shopping."

    - <u>PROFESSIONAL SERVICES FACILITIES MANAGEMENT (PSFM)</u> - The counterpart to processing facilities management, except that in this case the computers are owned by the client, not the vendor; the vendor provides people to operate and manage the client facility.

- <u>INTEGRATED SYSTEMS</u> (Also known as "turnkey systems") - An integration of systems and applications software with hardware, packaged as a single entity. The value added by the vendor is primarily in the software. Most CAD/CAM systems and many small business systems are integrated systems. This does not include specialized hardware systems such as word processors, cash registers, and process control systems.

- Integrated systems revenue in this report is divided into two categories.

    - <u>INDUSTRY-SPECIFIC</u> systems, i.e., systems that serve a specific function for a given industry sector such as seismic processing systems, automobile dealer parts inventory, CAD/CAM systems, discrete manufacturing control systems, etc.

    - <u>CROSS-INDUSTRY</u> systems, i.e., systems that provide a specific function that is applicable to a wide range of industry sectors such as financial planning systems, payroll systems, personnel management systems, etc.

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- Revenue includes hardware, software, and support functions.

C. OTHER CONSIDERATIONS

- When questions arise about the proper place to count certain user expenditures, INPUT addresses them from the user viewpoint. Expenditures are then categorized according to what the users perceive they are buying.

- The standard industrial classification (SIC) codes are used to define the economic activity contained in generic sectors such as Process Manufacturing, Insurance, Transportation, etc.

- The specific industries (and their SIC codes) included under these generic industry sectors are detailed in Exhibit A.

INPUT

APPENDIX A

INDUSTRY SECTOR DEFINITIONS

INDUSTRY SECTOR	INDUSTRY SIC	INDUSTRY NAME
Discrete Manufacturing	23	Apparel
	25	Furniture
	27	Printing
	31	Leather
	34	Metal
	35	Machinery
	36	Electronics
	37	Transportation
	38	Scientific and Control Instruments
	39	Miscellaneous Manufacturing
Process Manufacturing	10	Metal Mining
	11	Anthracite Mining
	12	Coal Mining
	13	Oil and Gas Extraction
	20	Food Products
	21	Tobacco
	22	Textile Products
	24	Lumber and Wood Products
	26	Paper Products
	28	Chemicals
	29	Petroleum
	30	Rubber and Plastics
	32	Stone, Glass, Clay
	33	Primary Metals

INPUT

INDUSTRY SECTOR DEFINITIONS

INDUSTRY SECTOR	INDUSTRY SIC	INDUSTRY NAME
Transportation	40	Railroads
	41	Local Transit
	42	Motor Freight
	43	U.S. Postal Service
	44	Water Transportation
	45	Air
	46	Pipelines
	47	Transportation Services
Utilities	48	Communications
	49	Electric, Gas, and Sanitary
Banking and Finance	60	Banks
	61	Credit Agencies
	62	Security and Commodity Brokers
	67	Holding and Investment Offices
Insurance	63	Insurance (Life, Health, Etc.)
	64	Insurance Agents
Medical	80	Health Services

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INDUSTRY SECTOR DEFINITIONS

INDUSTRY SECTOR	INDUSTRY SIC	INDUSTRY NAME
Education	82	Educational Services
Retail	52	Building Materials, Hardware
	53	General Merchandise
	54	Food
	55	Automotive and Gas Stations
	56	Apparel
	57	Furniture
	58	Eating and Drinking
	59	Miscellaneous Retail
Wholesale	50	Durable Goods
	51	Nondurable Goods
State and Local Government	91-97	As Appropriate
Federal Government	91-97	As Appropriate
Services	73	Business Services (excluding information services companies themselves)

INPUT

INDUSTRY SECTOR DEFINITIONS

INDUSTRY SECTOR	INDUSTRY SIC	INDUSTRY NAME
Other Industries	01-09	Agriculture, Forestry, and Fishing
	15-17	Construction
	65	Real Estate
	66	Combinations of Real Estate, Insurance, Loans, Law Offices
	70	Hotels, Rooming Houses, Camps, and Other Lodging Places
	72	Personal Services
	75	Automotive Repair, Services, and Garages
	76	Miscellaneous Repair Services
	78	Motion Pictures
	79	Amusement and Recreation Services, Except Motion Pictures
	83	Social Services
	84	Museums, Art Galleries, Botanical and Zoological Gardens
	86	Membership Organizations
	89	Miscellaneous Services

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APPENDIX B

EXAMPLES OF AUTOMATED SALES AND MARKETING SYSTEM VENDORS

VENDOR	SERVICES
American Software, Inc. Atlanta, Georgia	Sales Forecasting Software
Arlington Software Systems Arlington, Massachusetts	Telemarketing Support Software (PCAT)
Automated Data Processing, Inc. Clifton, New Jersey	Market Research, Territory Planning, Sales Forecasting and Sales Analysis Remote Computing Services
Computer Sciences Corporation El Segundo, California	Sales Forecasting and Analysis Market and Territory Planning and Sales Development Services
Control Data Corporation Minneapolis, Minnesota	Market Exploration Data Bases
Dun and Bradstreet New York, New York	Market Exploration, Telemarketing Services
International Business Machines Armonk, New York	Market Exploration and Sales Development Application
McGraw-Hill New York, New York	Market Exploration, Market Research and Sales Planning/Tracking Services
University Computing Company Dallas, Texas	Information File, Customer Profitability Analysis System and Customer Marketing Analysis System

INPUT

MARKET ALERT

To _____

From_____ Date _____

Priority	Urgent	Important	FYI	
Type	Data	Suggestion	Problem	
Topic	Competition	Product/Support	Promotion	
	Market Needs	Pricing	Sales Strategy	

Comment _____

_____

_____

_____ Turn over ➡

Action Requested	Call Me	Other
	Notify	

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Comment (continued from other side) _____

_____

_____

_____

_____

_____

_____

_____

_____

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RATING SCALE
CUSTOMERS

TOPIC	CRITERIA	SCALE		OUR RATING
CUSTOMER SATISFACTION	Percent of customers classified as being highly satisfied with our product	Over 75%	= +2	
		50% to 75%	= 0	
		Under 50%	= -2	
CUSTOMER PROFILE DATA	Percent of customers for which we have collected at least three segment variables	Over 75%	= +2	
		50% to 75%	= 0	
		Under 50%	= -2	
PRODUCT USAGE	Percent of customers using our product "extensively"	Over 75%	= +2	
		50% to 75%	= 0	
		Under 50%	= -2	
SEGMENT IDENTI- FICATION	Extent to which the character- istics of our three main seg- ments have been defined, docu- mented, and communicated	Much	= +2	
		Some	= 0	
		Little	= -2	
REASONS BOUGHT	Extent to which we are aware of the primary reasons why each customer in the past 12 months has acquired our product	Have formally asked customers	= +2	
		Have asked sales person	= 0	
		Gut feel	= -2	

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RATING SCALE
CUSTOMERS

TOPIC	CRITERIA	SCALE	OUR RATING
LOST CUSTOMERS	Extent to which we have formally determined reasons why customers have elected to leave us during the past 12 months	Have formally asked lost customers = +2 Have asked our company personnel Have not analyzed = -2	
	Totals	Maximum = +12 Minimum = -12	

INPUT
MMK3

CUSTOMER ANALYSIS
WORKSHEET SUMMARY

Project _____   Page _____

Date _____

CONCLUSIONS/COMMENTS	IMPACT #			
	O	T	S	W

EVALUATION OF DATA AVAILABILITY	EXC.	GOOD	FAIR	POOR

ISSUES TO RESOLVE/DATA NEEDED

ACTION NEEDS

O = Opportunities,   T = Threats,   S = Strengths,   W = Weaknesses

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APPENDIX D

VENDOR QUESTIONNAIRE

I. What successful marketing tool or strategy have you used in the past two years?

_____

   A. Customer Needs: _____

   B. Customer Groups: _____

   C. Marketing Mix: _____

      1. Product: _____

      2. Support: _____

      3. Pricing: _____

      4. Channels: _____

      5. Promotion: _____

      6. Sales Strategy: _____

II. How successful was the strategy? (Quantified measure if possible.)

_____

III. Why was the strategy successful? What was the key to its success? (Find the cause-effect-cause-effect relationships.)

_____

INPUT
MMK3

IV. I'd like to name about 10 different aspects of marketing systems that may
have been a factor in the success of this product. Please rate each from
1 to 5, with 1 for no impact and 5 for high impact.

	Used	Contrib.	Impact

MARKET INTELLIGENCE

1. How important was formal market
   intelligence gathering to the success of
   this product?

   Comments: _____

   _____

2. Please rate the importance of the
   following two factors in gathering
   intelligence on the competition for this
   product.

   - Incentives for employees to collect
     competitive information.

   - Emphasis on competitive intelligence
     gathering by senior management.

   Comments: _____

   _____

3. How important were each of the
   following four factors in helping you
   understand the market for this product?

   - Customer satisfaction surveys.

   - Lost business surveys.

   - Detailed customer profile analysis.

   - Purchased market studies.

   Comments: _____

   _____

INPUT
MMK3

	Used	Contrib.	Impact

4. Are there any other major market research techniques you used for this product? How important were they?

   Comments: _____

   _____

5. How great an impact have market intelligence bulletins had on the sales of this product?

   Comments: _____

   _____

MARKET PLANNING

1. How important was formal market planning in the success of the product?

   Comments: _____

   _____

2. How important was each of the four following sections of the product marketing plan?

   - Corporate strategy
   - Environment analysis
   - Competitive analysis
   - Company analysis/audit
   - Other

   Comments: _____

   _____

INPUT
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	Used	Contrib.	Impact

3. How important were the following four items in developing and implementing the product marketing program?

    -   Market segmentation.

    -   Product policy.

    -   Focus on narrowly defined markets.

    -   Marketing audits.

    Comments: _____

    _____

MARKETING ORGANIZATION

1. How important were each of the following four factors in marketing of this product?

    -   Product managers focused on this product.

    -   Product managers focused on specific markets.

    -   Accounts management.

    -   Sales force allocation.

    -   Sales force training.

    Comments: _____

    _____

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APPENDIX E: RELATED INPUT REPORTS AND SERVICES

A. REPORTS

- <u>Effective Corporate Planning in the Computer Services Industry</u>, December 1980.

- <u>Improving Sales Productivity in the Computer Services Industry</u>, November 1980.

- <u>Information Services Pricing Trends and Techniques, Volume I: Processing Services and Integrated Systems</u>, September 1983.

- <u>Information Services Pricing Trends and Techniques, Volume II: Software Products and PRofessional Services</u>, December 1983.

- <u>Marketing Methods That Increase Sales in Europe</u> (INPUT, Ltd.), December 1983.

- <u>Opportunities in Sales, Marketing and Distribution Applications for Information Services Vendors</u>, December 1983.

- <u>Personal Computer Opportunities for Remote Computing Services Vendors</u>, June 1983.

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- <u>Personal Computer Software Market Opportunities</u>, November 1982.

- <u>Software Maintenance Planning</u>, August 1982.

- <u>U.S. Information Services Markets, 1983-1988: Volume I - Industry-Specific Markets</u>, December 1983.

- <u>U.S. Information Services Markets, 1983-1988: Volume II - Cross-Industry Markets</u>, December 1983.

B.   RELATED INPUT SERVICES

- ON-TARGET MARKETING, a marketing analysis and planning methodology.

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