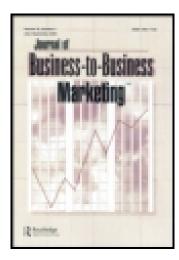
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Publisher: Routledge

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Journal of Business-to-Business Marketing

Publication details, including instructions for authors and subscription information: http://www.tandfonline.com/loi/wbbm20

Business Marketing Comes of Age: A Comprehensive Review of the Literature

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Published online: 22 Oct 2008.

To cite this article: David A. Reid & Richard E. Plank (2000) Business Marketing Comes of Age: A Comprehensive Review of the Literature, Journal of Business-to-Business Marketing, 7:2-3, 9-186, DOI: 10.1300/J033v07n02_02

To link to this article: http://dx.doi.org/10.1300/J033v07n02_02

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Business Marketing Comes of Age: A Comprehensive Review of the Literature

David A. Reid Richard E. Plank

ABSTRACT. Since 1978 business marketing has seen a great deal of research activity. It is reasonable to ask whether this has led to advances in theory development and a general increase in our level of knowledge of business marketing. This article reviews the business marketing literature from 1978-1997 from twenty-three journals, five sets of proceedings, and selected books of articles in an attempt to answer that question. Over two thousand articles were examined to assess the current state of the field and suggest directions for future development. As the sheer number of articles since 1978 would suggest, the field of business marketing has attracted a considerable amount of attention. Close examination of the past twenty years of research, however, clearly indicates that certain areas have received a disproportionate share of the research effort. Organizational buyer behavior, strategy and planning, and sales management accounted for over forty percent of the articles published. Important areas such as computers and technology in business markets, marketing to the government, ethics in business markets, and pricing, in contrast, have received relatively little research attention. Regardless of the uneven coverage, the research in business marketing over the past twenty years has been conceptually and empirically strong. Changes in the way business is done has also resulted in a recent surge in theory development in the area of buyer-seller relationships within the context

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The authors would like to thank the editor, J. David Lichtenthal, and the three anonymous reviewers for their constructive comments and contributions to this paper during the review process.

Journal of Business-to-Business Marketing, Vol. 7(2/3) 2000 © 2000 by The Haworth Press, Inc. All rights reserved.

of relationship marketing. Increased attention has also centered on cross functional issues, networks, and strategic alliances. [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-342-9678. E-mail address: <getinfo@haworthpressinc.com> Website: <http://www.haworthpressinc.com>]

INTRODUCTION

The study of business marketing as a distinct subject matter has had a surprisingly long history. For example, the first case book dealing with industrial marketing was Copeland (1930) and an early textbook strictly on industrial marketing was Frederick (1934). Academic research on the subject was relatively sparse until 1972 when *Industrial Marketing Management* was introduced as a peer refereed journal specifically for industrial marketing. Since that time academic research within the context of industrial and business marketing has continued to progress. The last comprehensive review of the field was Webster (1978a). Hence, the focus of this review is on industrial/business marketing research which was published from 1978 through 1997.

Despite Fern and Brown's (1984) challenge, industrial marketing, or business marketing as it has come to be known, continues to grow as a specific sub-discipline within marketing. Since 1978, almost 2,200 articles dealing with business marketing have been published in the selected refereed academic outlets included in this review. Currently, there are close to a dozen business marketing textbooks in print, the most recent being Anderson and Narus (1999), compared to only 2 major U.S. textbooks in 1978, Hill, Alexander and Cross (1975) and Corey (1973). There have also been a number of books targeted to executives on various aspects of business marketing (e.g., Patti and Kennedy 1991; Messer 1992; Sherlock 1992; Skinner 1995; Yovovich 1995; Peck 1997; Bly 1998; Silverstein 1998).

Given the tremendous growth in the business marketing literature since 1978, it seems only appropriate to ask:

- how much progress has been made in understanding the nature of business marketing,
- what specific areas of business marketing have been studied the most,
 and
- how much progress has been made with respect to theory development regarding the positive and normative dimensions of business marketing practices?

This paper presents a comprehensive review of the academic literature on business marketing from 1978 through 1997. During this time period there have been a number of reviews that have addressed specific areas within business marketing; most of these have focused on organizational buying behavior. Recently, a series of reviews have examined the contributions of Industrial Marketing Management (LaPlaca 1997), Journal of Business and Industrial Marketing (Johnston and Lewin 1997), Journal of Business-to-Business Marketing (Lichtenthal, Wilson and Long 1997), and Advances in Business Marketing and Purchasing (Plank 1997). Each provided useful insights, but was limited by its focus on only a single publication source. Thus, there remained a need for a more integrative and comprehensive review. Toward that end, we have developed a database and analyzed a total of 2,194 articles from twenty-three key marketing journals, five sets of academic proceedings and twelve scholarly books. Table 1 provides a complete list of the sources used for this review and indicates the first year that a particular reference appeared in the database. Basic information on each article entered into the database includes the topics addressed, and whether the article was empirical or non-empirical. For empirical articles, information was also collected on research design used, sampling results, type of respondents sampled, and statistical analysis techniques used.

While the intent in compiling the database for this review was to be as inclusive and comprehensive as possible, limits had to be set to keep what was already a daunting task from becoming an impossible one. Thus, not all possible publication sources were included in the database. Among those not included were journals focusing on specialized areas such as logistics and physical distribution, health care, public relations, direct marketing, and international business. Difficulty in obtaining access to many of the overseas publications also resulted in the work included in the database being primarily from American publications. However, the database does include two of the most prominent European journals, European Journal of Marketing and International Journal of Research in Marketing. The large and growing number of association proceedings also meant difficult choices had to be made. As can be seen from Table 1, only the proceedings of the three largest U.S. marketing groups plus the Society for Consumer Psychology were included. Books of articles, as opposed to textbooks which were completely excluded, were also entered on a selective basis. Included were books such as those representing compilations of articles from various special academic business marketing meetings and the Advances in Business Marketing series. Excluded were trade books and articles from trade publications such as Business Marketing Magazine.

The review begins with a summary profile of the database which provides information on the number of articles from each publication source, the number of articles per year, and a descriptive breakdown of the articles in terms of empirical versus non-empirical methodology, research design, and major statistical techniques. Articles in the database were classified into twenty-eight specific topics and the breakdown by topic is presented. For

discussion purposes within this article, the twenty-eight topics are grouped into seven major topic areas. These seven major topic areas reflect those major headings used in business marketing textbooks in discussing the subject. The categories are reported in the following order: business marketing strategy, organizational buying behavior and purchasing management, marketing sciences, product, pricing, distribution, and promotion. An assessment of the major themes, major individual contributions, and future trends is provided for each area. Suggestions for needed research for each area are also provided.

TABLE 1. List of Reference Sources and Number of Entries and Year of First Publication

Source	n	%	Year
Association for Consumer Research Annual Conference	15	< 1	1980
American Marketing Association Summer Educators' Conference	80	3.6	1978
American Marketing Association Winter Educators' Conference	19	< 1	1989
Academy of Marketing Science Annual Proceedings	58	2.6	1978
Business Horizons	20	< 1	1981
California Management Review	4	< 1	1980
European Journal of Marketing	78	3.6	1979
Harvard Business Review	21	< 1	1978
International Journal of Research in Marketing	24	1.1	1984
Industrial Marketing Management	815	37.1	1978
Journal of Advertising	3	< 1	1979
Journal of the Academy of Marketing Science	36	1.6	1979
Journal of Advertising Research	3	< 1	1980
Journal of Business	4	< 1	1978
Journal of Business-to-Business Marketing	31	1.4	1991
Journal of Business and Industrial Marketing	164	7.5	1986
Journal of Business Research	82	3.7	1978
Journal of Consumer Research	2	< 1	1980
Journal of Marketing	102	4.6	1978
Journal of Marketing Research	40	1.8	1978
Journal of Product Innovation Management	90	4.1	1984
International Journal of Purchasing and Materials Management	186	8.5	1978
Journal of Personal Selling and Sales Management	130	5.9	1983
Management Science	13	< 1	1979
Marketing Science	10	< 1	1984
Society for Consumer Psychology Conference	2	< 1	1990
Sloan Management Review	13	< 1	1978
Misc. Book Chapters and Articles	132	6.0	1978
Total	2194		

Year indicates the first year the publication is used for the database. 1978 was the first possible year, the latest is 1991, the year the *Journal of Business-to-Business Marketing* was first published.

ANALYSIS OF THE DATABASE

As previously mentioned, a total of 2,194 articles dealing with business marketing were identified by examining the publications listed in Table 1 for the years 1978 through 1997. An article was defined to be a business marketing article if it dealt primarily with an issue within the context of business marketing or employed a sample of primarily firms from business markets. Thus, as a example, sales articles that dealt with industrial selling or whose samples were industrial salespeople were included. On the other hand, if an article dealt with selling, but used retail salespeople as its sample population, it was excluded. Each of the authors had to agree that a particular article qualified in order for it to be included in the database. The database itself was compiled over a number of years.

Not surprisingly, Industrial Marketing Management contributed the largest number of articles (815). The International Journal of Purchasing and Materials Management was second with 186 articles. A relatively recent journal, The Journal of Business and Industrial Marketing, first published in 1986, contributed 164 articles. As would be expected, The Journal of Consumer Research and the annual proceedings of the Association for Consumer Research did not contribute very many articles. The same was true for general business/managerially-oriented scholarly journals such as Business Horizons, California Management Review, Harvard Business Review, and Sloan Management Review.

Table 2 shows the number of articles by year published. The field of business marketing, after having 104 articles published in 1978, experienced a significant decline in the number of articles published for the years 1979 through 1984. Research activity increased in 1985, and has averaged over 125 articles per year for 1985-1997. As shown in Table 2, the peak years during the period under review were 1997, with 170 articles, and 1990 with 167. It should be noted that 6 journals were all started during the time frame of this review: International Journal of Research in Marketing, Journal of Business-to-Business Marketing, Journal of Business and Industrial Marketing, Journal of Product Innovation Management, Journal of Personal Selling and Sales Management, and Marketing Science. Hence, some of the more recent increases in activity are, in part, because of increased opportunities for publishing business marketing articles.

Table 3 provides a numerical summary of the database. Of the 2,194 articles, 1,288 are empirical in that they collected data and report the findings. The remaining 906 are non-empirical articles and can be viewed as falling into three broad categories: reviews, new or revised theoretical perspectives, and normative works aimed at managers. An overwhelming number of the non-empirical pieces were normative in nature. There was also a

TABLE 2. Number of Publications by Year Published

Year	Number of Publications	% of Total
1978	104	4.7
1979	61	2.8
1980	73	3.3
1981	72	3.2
1982	71	3.2
1983	63	2.9
1984	84	3.8
1985	104	4.7
1986	108	4.7
1987	104	4.7
1988	95	4.3
1989	92	4.2
1990	167	7.6
1991	108	4.8
1992	135	6.2
1993	124	5.6
1994	164	7.5
1995	149	6.8
1996	146	6.7
1997	170	7.7
Total	2194	
Average per year	110	

total of nineteen academically-oriented review pieces. These reviews were very focused, mostly in the area of organizational buying behavior.

Of the 1,288 empirical articles, 79.9 percent used a survey research design. Survey research designs were defined as studies where data was collected by administering a questionnaire by mail, telephone, or through personal interviews. There were 54 reported experiments, most of which used student subjects, twenty-four content analyses, primarily in the promotion area, 110 case studies, most of which utilized one to three cases, and 49 studies based on secondary data. A total of 22 articles involved the use of multiple designs which could not be simply classified into one of the above areas.

As shown in Table 3, descriptive statistics (54.5% of the empirical articles) were the dominant form of statistical analysis employed. It was interesting to find that descriptive statistics were not employed in all the empirical studies, especially since one would expect them to be used to describe the sample

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TABLE 3. Statistical Review of the Database

T	I. API	0404	
	ll Articles	2194	
•	pirical Articles	1288	
Non	-Empirical Articles	906	
Res	earch Designs Utilized		
(1)	Survey or interview	1029	
(2)	Experiment	54	
(3)	Case study	110	
(4)	Content analysis or other observation	24	
(5)	Multiple design	22	
(6)	Secondary data	49	
Stat	istical Techniques Used in Analysis		
(1)	Descriptive statistics		703
` '	Exploratory factor analysis		126
٠,,	Cluster analysis		37
(4)	Regression (parametric)		194
(5)	Correlation, all types		201
(6)	ANOVA		129
(7)	Perceptual mapping		2
(8)	Multidimensional scaling		8
(9)	MANOVA		55
(10)	CFA and LISREL		97
(11)	ANCOVA		4
(12)	MANCOVA		6
(13)	T-Test		109
(14)	F & Z tests		66
(15)	General non-parametric testing		94
(16)	Discriminant analysis		54
(17)	Canonical correlation		10
(18)	Conjoint analysis		16
(19) Logistic regression and log linear analysis		25	

(20) All others not otherwise classified

population for external validity purposes. Other than descriptive statistics, the four most commonly used statistics were correlation (15.6%), parametric regression (15%), analysis of variance (10%), and exploratory factor analysis (10%). Structural equation modeling was used in 7.5% of the studies, with many of those instances representing confirmatory factor analysis. The great majority of structural equation modeling occurred after 1990. The all other category in Table 3 consisted primarily of instances of the use of coefficient alpha as a measure of internal consistency and other more specialized types of analyses.

Scales were often used, but factor structures and other measures of scale validity and reliability were not always reported in earlier articles, leaving the reader to assume the scale performed as had been reported in previous research. Recent articles, however, were more consistent in their reporting of this information. Given recent advances in structural equation modeling and the use of these techniques to ascertain measure validity this trend is likely to continue.

Table 4 lists the number of articles by topic area. Each article was classified into a topical category with the possibility that an article could be included in one, two, or three topic areas depending on the breadth of the article and its focus. A total of 240 articles fit into three topic areas, 797 articles had a two topic area focus, and 1,157 articles were focused on a single topic. Articles were assigned to a topical area using the following approach. In compiling the database, each was read and examined by both of the authors as well as graduate assistants. Each reader categorized each article and where there was agreement, the article was entered into the agreed upon category(s). When there was a lack of consensus, the authors met to examine the article and resolve the issue.

As Table 4 shows, the most studied area was organizational buying behavior with 448 articles followed by strategy and planning (332) and general sales management (296). Other areas that had a fairly large number of articles included new product management and development (255), purchasing management (253), and personal selling (242). The areas with the fewest articles were public relations (9), marketing to government (11) and marketing ethics (18). Other areas not well represented were logistics and physical distribution (22), computers in business marketing (29), sales training (35), and forecasting (38). In some cases the limited number of articles in an area may be due to the existence of specialized journals for these topics (e.g., *Journal of Logistics and Physical Distribution* and *Journal of Forecasting*), while in other cases it may be that there is limited interest or the topic is perceived as not being unique to business marketing. Since as previously noted, many specialized journals and proceedings were not included in the database, these areas may be limited simply because of this.

A total of 130 articles had topic areas that could not be classified into the existing database typology. These included some important new areas such as internal marketing, quality, and generalized discussions of business marketing which did not readily fit any category.

In the sections that follow, the twenty-eight topic areas are grouped for discussion purposes into seven research areas. This grouping is clearly one of convenience, as with any such effort not everyone will agree with all of the

TABLE 4. Number of Articles by Topic

Topic	n	% of Total (3471)
Advertising	58	1.7
Sales promotion	50	1.4
Public relations	9	< 1
Promotion	65	1.9
Marketing research	110	3.2
Forecasting	38	1.1
New product management and development	255	7.3
Personal selling	242	7.0
Sales training	35	1.0
Sales motivation and compensation	100	2.9
General sales management	296	8.5
Purchasing management	253	7.3
Computers in business marketing	29	< 1
Decision support and management science	58	1.7
Organizational buying behavior	448	12.9
Product management	89	2.6
Pricing	73	2.1
Business services marketing	82	2.4
Channel management and administration	135	3.9
Logistics and physical distribution	22	< 1
International business marketing	125	3.6
Marketing to governments	11	< 1
Market segmentation	64	1.9
Market planning and strategy	332	9.6
Marketing and other functions	67	1.9
Ethics in business marketing	18	< 1
Buyer-seller relationships	268	7.7
Other	141	4.0

Note: Grand total (3471) exceeds total number of articles as 1157 articles covered one topic, 797 articles covered two topics and 240 articles covered three topics.

groupings. The classification scheme used reflects the categories typically used in business marketing textbooks. No statistical analysis of the classifications was intended. Each research area's topics are discussed as to the direction of the field and the nature of the research. The first research area, labeled strategy, includes market planning and strategy, marketing and other functions, ethics, international, marketing to governments, and general business marketing. The second area is organizational buying and purchasing. This includes the topics of organizational buying behavior, purchasing management, and buyer-seller relationships. The third area, marketing sciences, includes market research, forecasting, computers in business marketing, decision support and management science, and market segmentation. The fourth area, product, includes new product management and development, product management, and business services. The fifth area is pricing. The sixth area, channels, includes channel management and administration, logistics, and physical distribution. The last area, promotion, includes advertising, sales promotion, public relations, general promotion, personal selling, sales training, sales motivation and compensation, and general sales management.

The purpose of this paper is to provide a general overview and assessment of the field. For people new to the field it provides a comprehensive assessment of the field and offers suggestions for needed research. For experienced researchers with a defined focus in the field, it provides insights into areas they may not be familiar with and identifies additional research opportunities.

MARKETING STRATEGY

We begin the review with the area of strategy and its associated topics. This section is divided into the following categories: business market planning and strategy, international business marketing, marketing to governments, marketing and other functions, ethics, and general literature.

Business Market Planning and Strategy

The planning and strategy research includes a number of clearly identifiable streams. One major stream consists of papers calling for more strategic planning in business markets and looks at general strategy issues. For example, Schanck (1979) discussed the need for a more strategic orientation. Hakansson (1980), building on the IMP research, suggested that buyer needs and supplier strategies be considered in developing strategy. Dawson (1980) called for developing internationally-based business marketing strategies. His early piece foresaw the increasingly global environment of business competition and the need to integrate a firm's business activity globally to

achieve competitive advantage. Coe (1981), based on a sample of 209 respondents, described the use of strategic planning concepts by business marketers. In light of all the changes that have been taking place in strategic planning, it is interesting to note that there has been no follow-up to this study.

Another example of work in the general strategy area is Hutt and Speh (1984) who developed the concept of the marketing strategy center and stressed the interdisciplinary role that the marketing group played in industrial organizations' development of strategy. This important work is, in fact, a forerunner of the notion of supply chain management, with the marketing group playing an important role as a creator of interfunctional as well as cross-company value. Turnbull and Valla (1986), building on work done by the IMP group, called for the use of an interaction approach to developing strategy. The interaction approach takes a very cross-functional perspective. Kerin and Harvey (1987) applied game theory to strategic marketing thinking, indicating the potential usefulness of that paradigm for strategic planning. In another important piece, Hakansson and Snehota (1990) argued that marketing strategy cannot be done solely from the perspective of a single firm. They argued that it is really dependent on a number of significant issues, such as suppliers and wholesalers, and therefore requires what they call a network concept. In essence, Hakansson and Snehota (1990) state that strategy needs to be developed from the perspective of the supply chain. Their perspective of networks is similar to the Japanese concept of Keiretsu. However, the culture of business in Japan is very different from most other economies with respect to the relationships between firms and networks are therefore likely to operate somewhat differently in western cultures. Network marketing is examined in a book of readings edited by Iacobucci (1996). The collected works in the Iacobucci text focus on defining the concept of networks, describing various network examples, and providing methodological devices for doing research on networks. The new world order suggests that network-linked organizations are the emerging organizational form. Berling (1993) makes a similar case, arguing that what is emerging from a strategic perspective is an emphasis on building relational advantages, partnerships, alliances, and networks to further competitive advantage.

A number of other topics related to general strategic marketing have also been addressed. For instance, Slater (1993) provides normative advice for competing in what he calls high velocity markets, markets that change rapidly. This is similar to what D'Aveni (1994) refers to as hypercompetitive markets.

Taking a unique perspective, Barius (1994) discusses the use of the concept of simultaneous engineering in marketing. He argues that many marketing activities can be done simultaneously, much as in engineering, to speed

the product to market and provides a case study as an example. Juttner and Wehili (1994) argue for merging marketing thought with a competence-based perspective. Borrowing from recent strategic management literature, the authors frame the development of a competence-based marketing strategy model. Taking somewhat narrower perspectives, Polonsky (1995) provides an argument for using stakeholders to define environmental strategy, while Frankwick et al. (1994) examine the impact of organizational beliefs and their changes on strategy formulation.

A great deal of the work in the strategy area has centered on portfolios and their usage by business marketers. In an early example, Boyd and Headen (1978) discussed the idea of defining and managing the product-portfolio. Fiocca (1982) provides a discussion of account portfolios and Yorke and Droussiotis (1994) provide an empirical study of usage from the perspective of customer satisfaction. Finally, Turnbull (1990) provides a review article examining the use of portfolio planning models in buyer-supplier relations.

Competitive intelligence usage and other perspectives on defining competition have also attracted considerable attention. Zinkham and Gelb (1985) provide an empirical examination of how business marketers practice competitive intelligence, while Jain (1985) provides a normative discussion of how to go about doing competitive analysis. From a more theoretical perspective, Sheth (1985) describes the determinants of competitive structures in business markets. Oral and Reisman (1988), using a relatively small sample (27 respondents), focused on actually measuring industrial competitiveness. Lastly, Ramaswamy, Gatignon, and Reibstein (1994) developed a model of competitive marketing behavior in business markets.

The use of various accounting-related techniques, in reference to either strategy development or measurement of success, have also been discussed As noted by Rayburn (1977), the interface of marketing and accounting has a rich history. Examples of this research include Kortge (1984) and Powers (1987), who examine the use of breakeven analysis; Brown (1979) who looked at life cycle costing; Stevenson, Barner, and Stevenson (1993) who examined activity-based costing; and Morgan and Morgan (1980) who looked at cost controls used by firms. Wagner and Hall (1991) provide a discussion of lease accounting as a business marketing strategy. More recently, Gagne and Discenza (1995) provide an excellent discussion of target costing. This phenomenon occurs in the automobile industry, as well as others, and involves the buyer and seller setting target prices which usually decrease over time as both parties make attempts to lower the selling price (in essence, this is basically a form of negotiated pricing). Other work of interest includes work on national account marketing (e.g., Stevenson and Page 1979; Stevenson 1981), and the use of social auditing for marketing managers (Kizilbash et al. 1979). Surprisingly, there is only one article on risk analysis in strategic planning in a business marketing context (Shah and LaPlaca 1981).

The evaluation of marketing activities has also been investigated in the business marketing strategy literature. An article by Lambert and Sterling (1987), for instance, provides some interesting insight on the kinds of profitability measures that business marketers use. About 78% of the respondents used profitability reports by product line, but only 66% by product and only 20% by customer or channel of distribution. Full absorption costing was used by 76% of the respondents, but only 17% of the firms adjusted their results for inflation or replacement costs. Along the same lines, Jackson, Ostrom, and Evans (1981) examined measures used to evaluate business marketing activities. Gross (1985), on the other hand, provides a general framework for measuring marketing productivity. Hooley and Jobber (1986), based on results from 1775 respondents, defined five common factors that contributed to the success of top performing firms. The five factors that were consistent with the top 73 high performing firms were: (1) A relatively high customer orientation, (2) The ability to respond flexibly to environmental changes, (3) A proactive planning process, (4) An emphasis on product differentiation, and (5) Very tight control over the marketing function and tactical activities.

One of the most influential pieces of research in this area is the modeling work done by Choffray and Lilien (1978) on measuring industrial response. Their model, consisting of four sub-models-awareness, acceptance, individual evaluation, and group decision making-has generated a great deal of testing within each submodel area.

Cressman (1995) provides an interesting framework for diagnosing marketing activities. The author argues that because many organizations are under pressure to reduce costs the real risk they face is that personnel reductions and other cost-cutting measures may significantly reduce competitiveness. The author provides a process using value chain analysis to assess contributions of marketing staff to adding value for the company's customers and thus tries to ensure that cuts made in staff focus on only non-value adding activities.

Other contributions to the strategic literature include the many articles which describe strategic issues in either a specific industry, company, or part of the world (e.g., Hallen and Johnson 1985; Lamb 1990; Weinrauch et al. 1991). Within this area, high technology marketing has seen a number of research contributions. They include Samli and Wills (1990) who provide a general discussion of strategic issues in high technology marketing, MacInnis and Heslop (1990) who provide a discussion of how to plan in a high technology environment, and Traynor and Traynor (1989) who examine the marketing approaches used by high technology firms.

A classic article by Jackson (1985) provides an interesting discussion of buyer-seller relationships and the notion of switching costs as an important element in strategy development. Burger and Cann (1995) provide the only explicit general discussion of post-purchase strategy in the literature, although Samli, Jacobs, and Wills (1992) do provide a discussion of pre- and post-sale services. These authors provide lists of about 7 different pre- and post-sale services that are important in international business. For pre-sale activities they include such activities and identifying key services, assisting in international financing, and planning EDI systems. For post-sale activities they include training, technical assistance, maintenance and repair and suggestions to generally minimize post-sale risk.

Finally, there has also been limited discussion of the use of strategic alliances. Examples of this work include Sethuraman, Anderson, and Narus (1988) who used social exchange theory to examine the determinants of partnership success and advantage, Bucklin and Sengupta (1993) who studied successful co-marketing alliances, and Walters, Peters, and Dess (1994) who provided some guidelines for making alliances work.

Summary of Planning and Strategy Research

While the strategy literature in business marketing is quite broad, it is also quite uneven. A variety of issues have been examined but there is little consensus on many issues and even less programmatic work. Most of the work has tended to be conceptual in nature. Empirical work has been primarily descriptive and has yielded some insight into how firms deal with some aspects of strategy.

The work in the strategy literature reflects the tremendous changes that are going on in the environment and how firms are dealing with them. Discussions of strategic alliances and partnerships demonstrate the increase in these kinds of arrangements that are occurring. Achrol (1991) argues that with an increasingly turbulent environment the necessity for changes in organizational forms is a forerunner of changes in strategic orientation. Work on networks and a broadened view of supply chain strategy have suggested new approaches to strategy and its formulation (Turnbull and Valla 1986; Hakansson and Snehota 1990). The concepts of switching costs, which can be linked to the work of Williamson (1979), and transactions costs also provide an important thread for the practitioner as they can be used to think through strategic issues as well as the obvious tactical usages of the concepts in focusing marketing activities. As technology continues to play a more important role in everyday life, high technology marketing will continue to be an important context for both examining strategic as well as tactical issues. Measures of marketing performance and models of strategic marketing response will probably need to be reformulated to take into account networks as more and more companies take this perspective in various industries.

The strategic planning literature as exemplified by work in such journals

as Long Range Planning, and Strategic Management Journal is quite broad. While much of the work in these journals focuses on financial dimensions, using secondary data, in examining performance, mergers, and acquisitions, behavioral issues of interest are also explored that may be useful in understanding strategy in business markets.

In light of the research to date, many questions regarding marketing strategy in business markets remain unanswered. Among them are the following:

- What long term strategic advantages accrue to a firm's adopting a supply chain focus?
- What activities and processes performed within the firm contribute to sustainable competitive advantage and under what conditions?
- What role does creativity and creative thinking play in developing successful strategic plans?

International Business Marketing

The international aspects of business marketing have a fairly extensive research history. Research in this area can be grouped into five categories: exporting, international strategy, countertrade, specific country or area studies, and marketing functions.

As a mode of entry, exporting is considered the easiest way to get into international markets, hence, it is not surprising that this area has been examined in some detail. An early article by Gronhaug and Lorentzen (1982) empirically documented basic export strategies in business markets with regards to distribution channels and partner choices.

However, there has been very limited examination of export performance of business marketers. Koh and Robicheaux (1988) took a broad view and examined export performance as a function of overall export strategies. Using a sample of 233 US firms they found that export pricing, and going directly to the buyer had the biggest impact on export performance. McGuinness and Little (1981) examined the influence of product and firm characteristics on exporting of new products, whereas Samiee and Walters (1990) examined only firm characteristics such as size on both export planning and performance. McGuinness and Little found that certain product characteristics had an impact on export performance, but that firm characteristics were more important. Samiee and Walters looked at firm characteristics in more detail and found that planning, attitudes, and information gathering on the part of the firm had the most impact.

Attitudes toward exporting has also received only limited attention in the business marketing literature. Johnston and Czinkota (1985) examined them among high technology companies. Their study was very narrow, three industries and only firms with sales of \$50 million or less. They collected 301

responses and found attitudes varied across the industries and, as expected, companies having more favorable attitudes toward exporting were generally more successful. More recently, Axinn, Savitt, Sinkulu, and Thach (1995) looked at the attitudes toward exporting of smaller industrial firms in a longitudinal study. They found a relationship between export intentions on the part of managers and their belief in its value. They did not, however, find any relationship between export intentions and actual exporting practices. The research addressing export attitudes in business may possibly reflect a belief that business marketers' attitudes are not all that different than those of consumer goods marketers when it comes to exporting.

Among the other aspects of exporting that have been examined, Klein, Frazier, and Roth (1990) used transactional cost theory to examine channel integration in international markets, focusing on exporting. Bello and Verhage (1989) defined the export tasks. They then looked at size and distance factors and the impact of those factors on whether or not an exporter will assign some export tasks to the middleman used in the process. As Bello and Verhage (1989) expected, larger exporters do more tasks themselves relative to the distance involved (the greater the distance, the more likely these tasks are done by the exporter). In general, exporters have a desire to control those tasks which offset the higher costs of completing the tasks. From a normative perspective, Seringhaus (1987) examined the practice of using trade missions to assist in export market entry. Finally, Turnbull (1990), using the IMP case format, studied the role of personal contacts in industrial export marketing. His examination of primarily British companies found personal contacts to be very important.

International strategy has also had only limited discussion in business marketing literature. Dawson (1980) suggested a normative framework for setting business marketing strategies within multinational settings. Dawson identified five models of industrial development. He then suggests that companies wishing to do business in a country must: align their strategies with the nature of development in the country, be systemic in their approach, be socially conscious, be adaptable, and have policies that reflect interregional differences—and at the same time preserve national identity and culture.

Only two empirical papers have attempted to examine general strategic performance. Fraser and Hite (1990) examined the general impact of strategic orientation on performance in global markets using a sample of 110 medium size companies. They argue that their results suggest that the general relationship of market share to profitability, identified in the PIMS studies, does not appear to exist across international markets. But they note that marketing mix variables of product, sales force, and advertising appear to be related to international performance. Samiee and Roth (1992) looked at the impact of marketing

standardization on performance. What they found was that marketing standardization by a firm had no statistical impact on a firm's profitability.

Of the literature included in this review, only one empirical study was found that addressed entry mode choice. In the study, Erramili and Rao (1993) used transaction cost analysis as the theoretical basis for trying to understand how service firms made entry decisions. The authors note that service firms may choose between full control modes of entry, such as a wholly owned operation or various forms of shared control such as a joint venture or licensing and franchising. They found that service firms tend to enter sharing control with partners when asset specificity is low and that this tendency increases when country risk is high and when the firms are smaller and have less resources.

Few attempts have been directed at the use of market segmentation in the development of international markets. An early study by Chiesl and Lamb (1983) looked at how business markets were segmented internationally. Plank (1985a) provided a normative approach which suggested an additional level of segmentation using the country as the basis. Frear, Alquire and Metcalf (1995) also looked at country as a basis of segmentation using a sample of 135 firms representing 42 countries. The authors clustered the countries into groups, something that has been done for years in the academic literature, but their approach was to use the sourcing strategies to do the clustering. What was not done, but might be interesting, is to compare sourcing strategies of firms operating in specific countries with the development level of that country, thus tying the idea of Dawson (1980) into this methodology. Schuster and Bodkin (1987) investigated exporters views of segmentation. Using a small sample of 68 respondents from the state of Virginia, they found that 72% do differentiate between domestic and foreign in terms of marketing mix, but only 22% differentiate between countries. This suggests that the sophistication level of this sample was relatively low.

One of the more extensive streams of research in the international area of business marketing has been countertrade. Shipley and Neale (1987) provide an empirical examination of barter and countertrade activities. Using a UK sample they found 57 companies out of 217 who responded from a sample frame of 1000 who did countertrade. Of those 57, a total of 35 did international countertrade, 22 did domestic countertrade and no companies did both. Respondents reported the biggest benefit of countertrade was that it allowed entry into difficult markets. The biggest drawback was companies often had no use for the goods they had to take in countertrade deals. Okoroafo (1994), on the other hand, provides a normative model for implementing countertrade. Palia and his colleagues (1992; 1993; Palia and Shenkar 1991; Palia and Yoon 1994) have documented empirically countertrade practices, mostly in Asian countries. Finally, Forker (1992) and Pearson and Forker (1995)

have examined the role of supply management in the countertrade process. Although this material is enlightening, it may be of diminishing value given recent trends. There is growing anecdotal evidence in the trade press that suggests that countertrade is ceasing to be an issue in many markets. This includes trade press articles that report on the dissolution of major Fortune 500 companies' countertrade departments and reports by many observers that countertrade is just not much of an issue. Even the requirements that a certain percentage of exported goods have local content, laws that were in effect in many countries, seem to be lessening due, perhaps, to the many trading blocks that are growing in importance and lowering barriers within their own borders. Whether or not countertrade continues to be important is certainly an empirical question and dissolution of countertrade departments in some companies may just be a recognition that the job is better done with a different administrative structure.

Another area that has been examined in some detail in the international business marketing literature is the marketing activities within specific country or area markets. Most of these studies are very specific and normative in tone. Examples of these include: Herbig and Palumbo (1993) who examined aftermarket distribution in Japan; Tsurumi (1982) who examined business marketing systems in Japan; Oikawa and Tanner (1992) who examined the impact of Japanese culture on business relationships with them; Wortzel (1983) who examined marketing to developing Asian countries; Hill (1980) who discussed doing business in Eastern Europe, Domenski and Guzeh (1992) who examined organizational buying in Poland; and Mafi and Carr (1990) who provided some guidelines for doing business in Iran. Other research (Chang and Ding 1995; Davies, Leung, Luk, and Wong 1995) has examined the impact of culture on organizational buying behavior of business relationships in China. Work by Spekman (1991) examined U.S. buyers' relationships with suppliers from the Pacific Rim countries outlining some of the problems of importing and negotiating with companies from this part of the world. While in a slightly different twist, Banting, Beraco, and Gross (1991) examined and compared organizational buying in capitalist versus socialist states and found the process much different under state ownership. From the European side of things, Roos, Veie, and Welch (1992) reported on a case study of how equipment is purchased in Czechoslovakia while Dion and Banting (1990) and Saghafi, Sciglimpaglia, and Withans (1995) examined empirically NAFTA and the EEC and the impact of those trade blocs on business marketing activity.

There have also been a number of articles that have examined functional issues as they relate to the international context with perhaps the most work focusing on the purchasing area. For example, Carter and Narasimnan (1990), Monczka and Trent (1991), Monczka and Trent (1992), and Hibbert

(1993) have all discussed some aspect of global sourcing. Empirical examination of various aspects of global sourcing have been done by Ford (1984), Haugland (1990), Min and Gale (1991), Gulbro and Herbig (1995), Levthesser, LaBahn, and Harich (1995), and Thorelli and Glowacka (1995). This work points out the increasing importance of worldwide sourcing to meet needs of what are increasingly global company operations. It also points out the increased emphasis on global strategic orientation, even by companies that would not be considered large multinationals. There have also been many discussions of the cross cultural aspects of this type of work (e.g., Chiesl and Knight 1981; Chiesl and Knight 1985; Ghauri 1988; Kaynak 1989; and Kaynak and Kuchukemiroglu 1992). In general, this work points out the problems associated with attempting to do global sourcing and the general associated problems with a global strategic orientation.

There has also been a number of studies that have looked at specific aspects of marketing activities. For example, both Cavusgil (1988) and Weekly (1992) discuss issues with regard to pricing. Hill and Allaway (1993), Samli, Wirth and Wills (1994), and Honeycutt and Ford (1995) all discuss issues on managing sales forces. The use of trade shows has been examined by Bello and Barksdale (1986), who empirically examined exporting at trade shows and O'Hara, Palumbo and Herbig (1993), who discuss the use of trade shows outside of the US. In the new product development area, Chakrabarti, Feinman and Fuentevilla (1978) empirically examined differences in product innovation internationally. Results of their research, which examined 500 randomly selected innovations, indicated that the US as compared to Great Britain, West Germany, France, Japan, and Canada, had more innovation, but no real advantages over other countries in time to market, profitability or other measures of success. More recently, Kleinschmidt (1994) has also reported on new product development. He compared European versus North American companies on new product development processes and results. He found them to be somewhat different and suggests that at least some of the variance is likely to be explained by cultural/national conditions. A number of research projects have also looked at international ramifications associated with various distribution and logistics issues. Murphy and Daley (1994), for example, look at the special logistics issues when doing international sourcing. Wetzels, DeRuyten, Lemmiah, and Koelemeijer (1995) examined the measurement of service quality in international distribution channels. Fram (1992), as well as, Cavusgil, Yeoh, and Mitri (1995) discuss how to select foreign distributors. The latter discusses how to make these decisions using expert systems technology. In more of a theory testing paper, Johnston, Sakano, Cote, and Onzo (1993) examined interfirm power in Japanese distribution channels. Finally, Lilien and Weinstein (1984)

have also used the Advisor program to examine marketing expenditures in an international setting.

One final international area that has not received any significant attention is that of legal issues in international marketing. This is surprising given that different countries have very different legal and regulatory systems that require very different approaches to various business practices. One interesting paper in this area is by Breitenbach (1995) who examines the issue of resolving international business disputes, most of which deal with very fundamental buyer-seller issues. He provides a practical framework for purchasing to examine and attempt to resolve these disputes. A second paper by Harvey (1987) examines the problem of product counterfeiting. While most of the counterfeiting problems seem to involve consumer products, industrial products also face problems with this, especially in such areas as parts supply.

Summary of International Research

International marketing has taken on greater importance in the academic world over the past 20 years in keeping with the increased global competition. This is evidenced by the increase in academic journals dealing with international business and that more journals are actively encouraging internationally based research for submissions. There also appears to be an increase in academic partnering across international boundaries.

In summary, many areas in business marketing have been examined in an international context. However, for much of this research, the international dimensions have been incidental to the major work being done in the topic area. Several areas which are international in character have had extensive work, such as countertrade, exporting, and linking marketing practices to success in international markets. Most of the work, however, has been either descriptive or is in the very early stages of development. The normative work has tended to be very narrow in focus.

Clearly more research within an international framework is needed. Research and anecdotal trade information tells us that doing business internationally is quite different from doing business in the United States. Differences exist in cultures, business processes, business customers, distribution channels, and expectations.

However, caution needs to be used as research processes may require significant changes due to the many problems, such as language and country infrastructure, that confront those doing international research. Psychological variables, for example, pose a special problem for the researcher. Just because a variable exists in the language does not mean that it is a concept understood by the respondent. Thus, caution with scales used to measure psychological variables must be advised.

Given that the globalization of business is becoming a reality, suggested research questions in need of attention include:

- What is the impact of global sourcing on business marketing activities, both normatively and positively?
- How will global sourcing impact the sales process and the strategic sales planning process?
- What normative issues face firms when attempting to do business in an economic community such as the European Union?
- How do different legal systems, principles, and legislative laws across political boundaries impact business marketing activities?

Marketing to the Government

This area has had almost no activity. There were just eleven references to marketing to government buyers. Work has been done in bidding (Boughton 1994; 1997; Gordon and Welch 1978), market research for government markets (Vest 1986), the defense industry buying process (Schill 1980), and the nature of competition in government procurement (Entrikin and Peterson 1981). Other papers of note include Goretsky (1986), who provides advice on market planning for government procurement and Sheth, Williams, and Hill (1983), who discuss general similarities and differences between government and business procurement. Despite a lack of research on selling to the government, there are a number of books available to interested readers that may generate some possible research avenues. Among these are Bauer (1994), Sullivan (1997), Worthington, Goldsmith, and contra-Alston (1998), Estell (1991), and Fishner (1989).

Given the importance of governmental agencies to business markets, there are many interesting questions that could and should be examined. Included among these are:

- What are the similarities and differences in marketing activities in dealing with governmental versus commercial markets?
- What are the key marketing processes within the firm that contribute to success in governmental markets?
- Within open bid processes, what processes and activities contribute to successfully obtaining a bid while at the same time maximizing realized revenue?

Marketing and Other Functions

Research examining the role of marketing/purchasing and other functions in the firm can be divided into three groups. The first examines such issues as

marketing and other functional areas such as R&D, production, and engineering. A significant proportion of the work in this area has centered on the relationship between marketing and R&D. The second deals with the purchasing function and its role with engineering, manufacturing, and in new product development. The final group addresses the notion of cross functionality in general.

The notion of the interface between marketing and R&D is an old one. For example, a classic work by Berenson (1968) examined this issue in detail, specifically developing a model to assist in the transfer of R&D findings to the marketplace. He suggested four organizational mechanisms: project team, product manager, functional grouping of resources, and some combination of these as the means for an organization to structure its operations to improve the R&D interface and ultimately the transfer of R&D to the marketplace.

Souder (1981) provided empirical evidence of the disharmony between marketing and R&D. An empirical piece by Gupta and Wilemon (1988) examined the idea of credibility leading to cooperation in the R&D/marketing interface. Using a small sample (17 firms), Moenaert and Souder (1990) studied the use of external information by both R&D and marketing personnel. Gupta, Raj, and Wilemon (1985) investigated the R&D and marketing interface within a high technology context. Lucas and Bush (1988) explored the impact of personality on the R&D/marketing interface. In a conceptual piece, Wilson and Ghingold (1987) argue for linking market needs and R&D, by among other things, a better interface which they argue will improve the firm's marketing efforts. New and Schlacter (1979), also a conceptual piece, suggest that earlier marketing appraisals of R&D projects could result in the earlier abandonment of bad projects, suggesting that marketing research and market studies would lead to more effective R&D from a market perspective.

A number of research projects have studied R&D and marketing within the context of new product introductions. Souder (1988), for example, empirically examined how to manage the interface of R&D and marketing throughout the new product development process. Work by Hise et al. (1990) examined marketing and R&D interaction and found that the better the interaction, the more likely the firm was to be successful with the new product introduction. A recent normative piece by Moenaert and Souder (1990) provides an information transfer model for integrating marketing and R&D personnel in the new product development process.

There has, of course, been a fairly good amount of interface research beyond just marketing and R&D. Early work by Taylor and Anderson (1979), for instance, suggested the use of goal programming to facilitate the interaction between marketing and the production planning process. This particular research is evident in the operations literature on production planning which occasionally examines how to get other significant functions involved in the

production planning process. There is also some discussion of this particular interface in the forecasting literature. In addition, there is ample evidence, both anecdotal and scholarly, that companies are essentially achieving this using very different approaches. For example, JIT II, which involves having a supplier's employee on the buyer site to coordinate inventory and production with the supplier's production, is becoming far more common. Electronic data interchange (EDI), which links the material requirements planning (MRP) systems of the buyer and supplier firm, can do the same thing but without the direct use of personnel. Both techniques result in the coordination of production and marketing for production planning purposes, using the customer as the bridge.

Lancaster (1995) provides an interesting review of some of the literature on the production/engineering interface and offers normative guidelines for its coordination. Other work has addressed conflicts between engineering and marketing (Weinrauch and Anderson 1982), the sales and production interface (Clare and Sanford 1984; Konijnendik 1993), and the marketing and manufacturing interface (Crittenden, Gardiner, and Storm 1993).

Most of the research on functional interfaces has been descriptive or normative in nature. A noteworthy exception is a study by Hallen, Johanson, and Seyed-Mohamed (1993). Using social exchange and contingency theory, the authors examine the technology adaptations that firms make to achieve a fit between the firm's products, processes, and procedures. While they specifically studied the adaptation across the relationship between firms, their research also has connotations for within-firm analysis. They found that customer technologies matter and that the relationships differ based on the kind of technology. Customer technology, therefore, needs to be considered in marketing efforts and intrafirm relationships need to recognize this and address it.

Three articles in the business marketing literature addressed the interface of purchasing and other areas. Dale and Cunningham (1983) examined the purchasing/manufacturing interface in the make or buy decision. Using a case study methodology, they outlined the complexity of this decision, the large number of people and organizational functions that need to get involved, and the accounting methods that need to be used. Anklesaria and Burt (1987) looked at personal factors and their impact on the purchasing/engineering interface. Williams, Giunipero, and Henthorne (1994) found that building cross functional linkages between marketing and purchasing is currently being done by managers with good results. The academic and trade literature provide ample evidence that, in many firms, purchasing is getting more involved in new product development process at a much earlier stage and working more closely with engineering, manufacturing, and R&D.

The final area of research takes a more macro view of cross functional

efforts in organizations. Lim and Reid (1992), Cespedes (1994) and Hutt (1995) are all examples of this type of research. Of these, Hutt (1995) offers a more theoretical perspective, while both Lim and Reid (1992) and Cespedes (1994) have a more pragmatic, normative focus. All three papers point out the need to understand how to better integrate functions in the organization.

Summary of Marketing and Other Functions Research

The relationship of marketing and other functions has taken on a new urgency over the past fifteen years. As technology such as EDI continues to expand in use, the need to examine how work gets done within and across organizations will increase. Most business marketing thought within organizations has focused on the interaction of marketing and R&D. The consensus of this research and the normative advice is that improved linkages lead to better new product activities.

The interface of marketing and purchasing has also been examined, but has not been explored thoroughly to date. The increase in partnering type activities and closer working relationships between suppliers and distribution partners and buyers and sellers in general, calls for a greater understanding of ways to coordinate work across functional boundaries as well as across organizations. An issue that clearly needs better delineation is what exactly is meant by the supply chain. Is it just the interface of purchasing and suppliers with logistic activities serving as the synergizing factors? If it is, then the interface considerations are fairly straightforward. If, however, the supply chain is viewed as the entire process from the supply of raw materials through the distribution channel to the customer, then the interface considerations are far more complex. At its most complex level, one could conceive of strategic issues involving one supply chain pitted against another, which, given the competitive advantage available through purchasing and distribution, is easily conceivable. Currently the perspective in supply chain research seems to be leaning toward that of the network perspective rather than a firm perspective in an effort to understand that complexity.

Additional research questions that need to be addressed include:

- What specific change orientations produce better cross-functional cooperation?
- Under what conditions do cross-functional activities produce superior performance?
- What changes need to be made to motivational systems as well as corporate culture to insure cross-functional activities contribute value?
- What is the continuing role of information technology applications such as enterprise resource planning systems (ERP) and how can they be used to better facilitate improved cross-functional as well as cross-company process improvements?

 What sorts of cross-functional configurations have the greatest impact on organizational value?

Ethics

There has been a great deal of research examining business ethics. Most of this research has appeared in a specialized journal on ethics or in general marketing journals. However, this research has typically not been in a business marketing context. In the journals included in this review, only fourteen articles dealing with ethics in a business marketing context were found. Most of these articles were primarily survey-based empirical studies that attempted to define and/or describe managers' ethical or lack of ethical behavior. For example, Rudelius and Buchholz (1979), Browning and Zabriskie (1983), and Forker and Janson (1990) all examined ethical behavior in organizational buying. Rudelius and Buchholz (1979), using a sample of purchasing agents, attempted to determine which situations were perceived as ethical dilemmas. Both Browning and Zabriskie (1983) and Forker and Janson (1990) used self-report studies to investigate which kinds of ethical problems were being violated the most. With NAPM sponsorship, the latter study was able to be far more inclusive. Results of this broad study indicated most firms did have ethics policies and that they did seem to be a deterrent to major problems. Most respondents, NAPM members, felt that only advertising specialties and business lunches were ethical, but that buyers admitted to accepting other kinds of "favors" from sellers. A more narrowly targeted study by Dempsey, Bushman, and Plank (1980) examined buyers' perceptions and use of personal inducements in the buying process, while Turner, Taylor, and Hartley (1994) looked at ethics policies and the acceptance of bribes and other gratuities. Only one study (Trawick, Swan, McGee, and Rink 1991) has examined the influence of buyer ethics on the actual buyer-seller dyad.

As is discussed in the sales research portion of this paper, ethics in selling has received considerable attention. Examples from the sales area include Trawick, Swan, and Rink (1988) who looked at back door selling as an ethics problem as well as Trawick and Swan (1988) who examined the ethical issues involved in the use of personal inducements. In a related area, Weeks and Kahle (1990) studied the impact of a salesperson's social values on their work effort.

There have been only a few normative articles on ethics in business marketing. In an early piece, not specifically tied to practices in business markets, Lantos (1987) equates ethics with morality and provides a defense of the free market system. He argues that absolute standards as opposed to relative ones are a more defensible approach to setting ethical standards. More recently, Gundlach and Murphy (1993) have argued for a set of ethical and legal foundations which underlie relationship marketing and the link of ethics to

legal development. From an ethical perspective, they suggest three foundations of ethical exchange: equality in exchange, the notion of keeping a promise, and the dual morality of duty and aspiration. They then argue that the dimensions of ethical exchange include trust, equity, responsibility and commitment.

Summary of Ethics Research

Ethical issues in business markets continue to be unexplored terrain. What is interesting about the business marketing ethics literature (and generally sets it apart from the consumer marketing, general marketing, and business ethics literature) is its emphasis on the buyer and buyer ethics. This focus is noticeably absent from discussions of ethics in other business areas which invariably focus on the firm or marketer and not the consumer. In fact, little has been written about the responsibilities of the customer other than in ethics research in business markets.

The major weakness in the ethics research is the lack of any international perspective. There is a great deal of anecdotal data that doing business in different parts of the world requires, among other things, adherence to somewhat different ethical standards. Companies with a great deal of international/multinational experience have reported such differences in the trade press and an examination of the many "doing business in" trade books suggests there are different ethical standards and rules in different parts of the world. More research is needed to document these purported differences and to examine how they impact on doing business. Additionally, research might also want to consider:

- What corporate and individual values contribute to ethical and unethical behavior?
- What cultural values lead to different ethical orientations in different parts of the world?
- Are ethical values moving more closely together worldwide or are they separating further?
- Are business buyers more ethical than end consumers?

Miscellaneous

The miscellaneous research category includes material that because of the broad focus could not be easily categorized into other areas. Thirty-one articles were assigned to this category.

One set of papers in this area dealt with business marketing in general. One such example is Webster's (1978a) early review of business marketing. In his review, Webster pointed out that more research on business marketing

was needed and that given business marketing's unique aspects, research on business marketing would continue to grow. Judging from the almost 2,200 articles that have been published since that review, his prediction was correct. A distinctly opposite view was offered by Fern and Brown (1984) who argued that business marketing was not a separate area of study. It is interesting that while their paper generated a good deal of discussion, it generated little in the way of published rebuttals (Cooke 1986).

Another general business marketing article that is noteworthy, is one by Giunipero, Crittenden, and Crittenden (1990) that explored how to market to nonprofit organizations and examined the buying behavior of those organizations. No other work was found in the business marketing literature reviewed that dealt with nonprofit organizations. Nonprofits offer interesting business-to-business research opportunities because of the many differences that exist between them and for-profit organizations.

There were also a number of articles that dealt with organizational issues. Among these, Ames (1978), for example, presents a very general discussion of maintaining a management ethic in the process of managing a business-to-business firm. Only one article discussed the notion of internal marketing within business-to-business firms (Harrell and Fors 1992). Herbig and Shao (1993) explore the Keiretsu concept and its applicability to American firms. Finally, both O'Neil and LaFiel (1992) and Morgan and Piercy (1992) discussed various aspects of quality management as it applies within the business-to-business sector.

Articles addressing business marketing education were also assigned to the miscellaneous category. Examples of work in this area include empirical pieces by Plank (1982) and Messina, Guffrida, and Wood (1991) that examined business marketers' views of what was needed for entry-level business marketing positions. Taking quite a different perspective, Wills (1984) discussed the marketing of a business school to industry. On a more micro level, Lichtenthal and Butaney (1991) examined how business marketing was taught at various institutions.

Environmental marketing was also the subject of a number of papers. Both Peattie and Ratnayatan (1992) and Apaiwongse (1994) discuss "Green Marketing." Both authors see that environmental awareness and sensitivity can provide a potential competitive advantage to a firm. Langrehr, Langrehr, and Tatreau (1992) looked at buyers' perceptions of recycled products. Apaiwongse (1993) provides an interesting study of market reactions to EPA policies. While the sample was somewhat small (42 companies), it provides insight into how companies deal with this regulatory agency. There is a great deal of activity on environmental marketing in other literatures in marketing, notably marketing and public policy and in the consumer behavior arena. There is also a great deal of anecdotal evidence in the trade press in this area.

For example, ISO 14,000, a new international quality standard for firm environmental management, has been recently discussed in the business marketing literature (Miles 1997). Yet, there is much more interest in environmental management in the business press, especially in the European Common Market where the environment is a much bigger political issue.

Finally, some other areas that have been touched upon in the literature include how to hire a consultant (de Monthoux 1978; Basham 1983), entrepreneurial aspects (Murray 1981; Morris and Trotter 1990), and marketing in high technology environments (Meldrum and Millman 1991; Meldrum 1995).

Summary of Miscellaneous Research

This category provides a number of interesting topics, none of which have been well developed. One would have expected issues relating to business marketing education to have received considerably more attention than they have. Given the unique aspects of business marketing, the limited familiarity with business marketing of most students, and the limited time devoted to business marketing in most curriculums, business marketing academics and managers must give greater attention to this situation. Likewise, while high technology marketing has been discussed in the area of new product development and in advertising, little general work is evident.

Some interesting questions relating to the literature in this area might include:

- How can we better educate undergraduate students about business marketing given their limited exposure to business-to-business firms and products?
- What impact will ISO 14,000 and similar environmental issues have on marketing activity over time?
- Do nonprofit organizations differ from for-profit firms in their response to different marketing activities?
- What constitutes high technology and what does it mean to market to businesses who are high technology businesses?

ORGANIZATIONAL BUYING

This part of the manuscript reviews the literature on what is termed organizational buying. This comprises three major sections: purchasing management, organizational buying theory, and finally buyer-seller relationships. The work on purchasing management generally focuses on the work that the purchasing function does in the organization. Organizational buying behavior

focuses on the theoretical attempts to understand how organizations buy and includes a detailed review of the many reviews in this area. Finally, the buyer-seller relationships segment reviews the literature that focuses on the buyer and seller as the unit of analysis.

Purchasing Management

In general, purchasing has drastically changed as a function within organizations and the purchasing management literature confirms that trend. Historically, purchasing was treated as a distinct, strategically insignificant, separate function. Purchasing function was not as sophisticated and for the most part was not viewed as an important function. As the purchasing and business marketing literature documents, this view began to change in the 1970s. Many companies, especially those in manufacturing, recognized that a very high proportion of the cost of goods sold was in the cost of purchased goods and services. The realization that small decreases in those costs led directly to improvements in profitability caused a reassessment of the strategic value of purchasing.

Changing Nature of Purchasing. The reformation of the purchasing function has been addressed in a number of articles. Blenkhorn and Banting (1978) recognized early on the changing nature of industrial purchasing in organizations and suggested a broadening of the concept and application from a functional non-proactive one to a more pro-active one focusing on interfacing with other functions in the organization. From this beginning the idea of reverse marketing has evolved, championed by Leenders and Blenkhorn (1988). Reverse marketing promotes a pro-active purchasing organization that engages in marketing-like activities when approaching and developing relationships with vendors. Kralyic (1983), in a classic piece, had much the same idea, suggesting that purchasing must broaden out to truly become more of a supply management function with strategic importance rather than just a mere tactical function.

Reck and Long (1988) provided the first explicit discussion of the view of purchasing as a major competitive weapon. Their work, based on interviews with fifteen firms, defined four stages from passive to integrative that firms go through in utilizing purchasing for strategic competitive advantage. Watts, Kim, and Hahn (1992), likewise, examined how to link purchasing to corporate competitive strategy.

The work of Reck and Long (1988) spurred others to explore the strategic aspects of purchasing (e.g., Rajagopal and Bernard 1993; Davis 1993; Dumond 1994). Burt (1989) looked at managing product quality through strategic purchasing. Oumil and Williams (1989) introduced the concept of market driven procurement. Freedman and Cavinato (1990) examined how to fit purchasing into a strategic role in the firm. Hines (1995), in line with the

current discussions of network competition, addressed network sourcing-the set of linkages that can lead to one supply chain network competing against others. Reverse marketing as a competitive strategy continues to be an important topic (Biemans and Brand 1995). The most recent work by Carter and Narasimhan (1996) documents the strategic nature of purchasing activities and the impact of purchasing decisions on overall corporate performance.

Another, similar, theme that has evolved is that of partnerships and strategic alliances. Much of the work in partnerships and alliances has been from the perspective of manufacturer distributor/channel member relationships; however, an extensive research base has evolved for partnerships and alliances as viewed from the buyers' perspective. Spekman (1988) discussed how buyers should select sellers for long term relationships. Ellram (1991) provided a general set of guidelines for the development and implementation of purchasing partnerships. Gentry (1993) argued that buyer-seller alliances often are based on the significant advantages to be gained in the logistics area, specifically transportation. Graham, Daugherty, and Dudley (1994) empirically assessed the long term impact of purchasing partnerships. They found partners in longer relationships reported better opportunities to implement their strategies.

International Issues. International issues have been a major subject of investigation in the purchasing management literature. Monczka and Giunipero (1988) provided some empirical evidence on organizational structure and international purchasing in a small sample of companies. Monczka and Trent (1991, 1992) outlined how to develop and execute a global sourcing strategy. Min and Galle (1991) provided empirical evidence of the variety of international purchasing strategies as practiced by U.S. multinational firms. Frear, Metcalf, and Alguire (1992) surveyed international purchasing activities and generally defined the nature and scope of those activities. Birov and Fawcett (1993) surveyed firms in the U.S. to document their perceptions of the benefits, requirements, and challenges in international purchasing. Finally, Alguire, Frear, and Metcalf (1994) examined the determinants of particular global sourcing strategies.

Performance Evaluation. Research has also addressed the performance evaluation of purchasing organizations and suppliers. Evaluation has evolved to match changes in the nature of the purchasing function. Dummond (1991) empirically identified how changes have impacted performance measurement and the decision making process. Chao, Scheuing, and Ruch (1993) have further enlightened this process by looking at the incidence of the various perspectives to performance evaluation.

Evaluating and selecting vendors has generated even more research. The studies, as a whole, suggest that firms are looking at these decisions from different perspectives than in the past and using different costing assumptions. Navasimhan (1983) developed a model of supplier selection. Smythe

and Clemons (1993) provided a total cost supplier selection model using a case study to illustrate their approach. Biggs, Thies, and Sisak (1990) empirically examined the cost of ordering, which is one driver toward reducing supplier bases, and examined suppliers within the framework of multiple product/service purchases rather than a specific one. Holmes (1991) and Ford et al. (1993) looked at lease versus buy and make versus buy decisions. Ellram (1992, 1993) looked at the total cost of ownership model (TCO) and the function of cost reduction. Ellram defines TCO in relation to life cycle costing. She argues that there are three general components of TCO-pretransaction costs, transaction costs, and post-transaction costs. Purchase price is a part of transaction costs, but there is effort and cost prior to and after the purchase. From a purchasing management perspective, the argument is that TCO is a more appropriate decision making model since it incorporates all the costs over the life of the item being purchased. Cavinato (1991) went a step further by examining total cost advantages from an interfirm supply chain perspective. Cavinato presents a leading edge view and illustrates the perspective utilized by many world class companies. In line with this approach, both Gagne and Discenza (1992) and Lere and Saraph (1995) examined the concept of activity based costing and argued it is the best way to truly measure TCO. Williams, Lacy, and Smith (1992) looked at the concept of value analysis and noted how creative that technique has become as applied to vendor selection. Value analysis is part of the continuous improvement mentality that is driving not only JIT-oriented firms, but most firms interested in the quality revolution (Perry and Perkins 1992, Carter and Narasimhan 1994). The newest issues that have been developed are the concepts of target costing and target pricing as applied to the purchasing function (Newman and McKeller 1995). Target costing and target pricing are terms used interchangeably and describe a pricing process where the buyer and seller jointly determine selling price in a negotiation process. The target generally refers to a targeted cost/price agreement over a specified time frame, usually with cost or price decreasing as a result of buyer and seller reducing the costs.

The supplier performance measurement literature provides a number of articles on vendor relationships with suppliers. Billesbach, Harrison, and Croon-Morgan (1991) provide empirical evidence of supplier performance measures in JIT-oriented companies. Thompson (1990, 1991) provides an overall method for vendor profile analysis and a model for scaling evaluative criteria to do performance evaluation of suppliers. Watts and Hahn (1993) documented the increased use by vendors of supplier development programs targeted at supplier performance enhancement. Examples of the kinds of proactive activities that vendors are resorting to are presented in a model of how to evaluate supplier overhead allocations (Landeros, Reck, and Griggs

1994), the use of supplier capability surveys (Presutti 1991), and the employment of the quality function deployment (QFD) process to evaluate and select suppliers (Ansari and Modarress 1994).

Purchasing's Relationship to Other Functions. Another fairly well developed area is the relationship of purchasing to other functions within and outside of the firm. One example is in the area of new product development. Doulatshahi (1992) and O'Neal (1993) studied concurrent engineering and purchasing's role in cross functional teams both within the firm and on teams involving suppliers. Williams and Smith (1990) and Mendez and Pearson (1994) examined the role of purchasing in new product development and identified the importance of early supplier involvement in the process. In an interesting and related piece, Hakansson and Eriksson (1992) documented the use of supplier networks in the development of innovations and found support for the use of suppliers in the innovation process.

Finally, there are a number of articles in the literature that point to specific activities that suggest changes in purchasing's orientation and management. Ellram and Pearson (1993) looked at the overall role of the purchasing function in the development and use of cross functional teams. Trent and Monczka (1994) identified five critical success factors in developing and operating effective cross functional sourcing teams: organizational resources to commit, supplier participation, team authority, team effort, and team leadership. Giumipero and O'Neal (1988) outlined various obstacles to procurement in a JIT environment. Plank, Reid, and Bates (1994) discuss the increased use of barter and the rise of specialized barter intermediaries. Coleman and Mcknew (1990) provide a model for order placement and sizing that illustrates the increasing use of sophisticated heuristics and management science methods in purchasing. In the same vein, there is empirical evidence of the increased use of computers in purchasing, including EDI (Plank et al. 1992). Finally, Williams (1995) in a conceptual piece, talks about the notion of the learning organization and how it applies to the supply management function, arguing that being a learner is imperative for the 21st century.

Summary of the Purchasing Management Literature

The purchasing literature is broad and comprehensive. Many of the changes evident in the business world are reflected in the purchasing management literature stream. Unfortunately, little of what we know about how purchasing does their job is explicitly incorporated into the organizational buying behavior literature.

Examining the academic purchasing literature suggests the following very important trends of interest to business marketers:

- Purchasing has become more professional, more strategic, and more focused on generating competitive advantage.
- Purchasing has become more aggressive, proactive, and sophisticated
 in its approach to sourcing and supply management. This has resulted
 in a greater emphasis on target pricing, total cost of ownership (value in
 use), and more explicit measurement schema to evaluate supplier performance.
- Purchasing has become more aggressive in providing leadership for cross-functional and even multiple company teams in order to achieve competitive advantage contributions.
- Purchasing has become much more technologically-driven using computers and other technology to drive the purchasing function and process and is forcing suppliers to go in that direction as well or get left behind.

However, there are numerous changes that are taking place in purchasing organizations that have either not been addressed or only minimally addressed. For example, while purchasing credit cards have been in use for years, there has been virtually no discussion of them in the literature. Integrated supply marketing, JIT II, barter, and target pricing are concepts that leading edge organizations are adopting or experimenting with, yet the purchasing management literature has little or nothing to say about them.

Purchasing and supply management has taken an aggressive stance and made great strides with respect to improving purchasing processes and practices. A major contributor to these advances has been the National Association of Purchasing Management and its concerted efforts to advance the field. The end result of these efforts is that in many ways purchasing and supply management thinking is leading its marketing counterparts. Despite the best efforts of the Institute for the Study of Business Markets, there is no organizational effort on the business marketing side of the equation that matches the efforts being put forth by National Association of Purchasing Management and its vast membership to advance the field of purchasing and supply management. If the business marketing community is to keep pace with its purchasing counterpart, then a much more aggressive approach will be needed to address the many questions that remain unanswered. Among these are questions such as:

- What purchasing practices and procedures are most indicative of the way the organization is likely to value a marketing offering?
- Is there some typology of how a buying firm defines value?
- What is the impact of reverse marketing and how do markets respond to companies who practice reverse marketing?

- What impact does and should the firm's supplier evaluation system have on how the in- or out-supplier plans and manages their marketing processes?
- How do/should marketers proactively use their knowledge of purchasing activities in their marketing activities?

Organizational Buying Behavior

Organizational buying behavior (OBB) is the broadest and most researched area in business marketing. In the eighteen years covered in this review, there were a total of 411 articles that dealt with OBB in some fashion.

The literature on OBB is not only very broad, but also unique because of the many review articles that have provided comprehensive assessments of the research over the years. There have been a total of twelve review articles (Sheth 1977; Wind 1978a, 1978b; Bonoma and Zaltman 1978; Ferguson 1978; Thomas and Wind 1980; Johnston 1981; Johnston and Spekman 1982; Kennedy 1982; Smith and Taylor 1985; Spekman and Gronhaug 1986; Johnston and Lewin 1996). Each has provided valuable insights and suggestions to improve our understanding of OBB and the growth of research in this area. Thus, rather than replicating their efforts, we will discuss each review and draw from them an overall picture of the state of our knowledge of OBB.

Sheth. Although the first of the reviews (Sheth 1977) falls outside the stated time frame of this paper, we have included it because it offers a concise picture of where OBB research stood in the 1960s and 70s and serves as a useful backdrop for assessing what has happened over the last eighteen years. Sheth (1977) organized his review around the decision making process. He examined the decision making process from economic, organizational, and behavioral perspectives. In addition, he suggested research on individual, organizational, and situational correlates of buying decision making. In summary, his assessment of the field at that time was that:

- the field was very rich and, we knew more about organizational buying than we did about end consumers in some respects,
- that "a remarkable degree of parallel research, thought, and discovery exists between organizational and household buying behavior,"
- most researchers were preoccupied with descriptive models of the decision making process,
- market segmentation theory was not used in business markets to the extent it was in consumer markets,

- that very few field experiments had been done-most research, in terms
 of methodology, was either narrative, descriptive, or a case study, and
- finally, that three very weak areas in need of further study were the impact of situational correlates on decision making, the impact of organizational structure on the purchasing function, and the impact of marketing communications on the decision making process.

In closing, Sheth identified the following four distinct trends he felt would characterize future OBB research: the emergence of a consumer-oriented marketing approach in business marketing, the emergence of a new self-identity for purchasing as a separate and distinct function from manufacturing, the likelihood of increased regulation and enforcement of business marketing practices, and the emergence of a more cross cultural orientation to purchasing with the growth of global organizations. In retrospect, Sheth's assertions have proven very accurate. The first three are clearly representative of current practice and, while the last trend has not been the subject of much research, the movement toward global purchasing solutions is gaining momentum in a number of major worldwide businesses such as automobiles.

Wind. Evidence of the interest and growth in OBB research is reflected in the fact that in 1978 alone there were four reviews of the literature (Wind 1978a, 1978b; Bonoma and Zaltman 1978; Ferguson 1978). Wind (1978a), in his first of two reviews of the field, even went so far as to call for the establishment of OBB as a separate discipline. His review was divided in five sections that examined research traditions in the field, the substantive findings, methodological approaches, conceptual and methodological issues, and provided suggestions for future research.

Wind suggested that several changes were occurring in research traditions. There was a movement away from simple task and non-task models toward the development and testing of more complex buying behavior models. The unit of analysis was moving from individual respondents to buying centers or dyads. Like Sheth (1977), he also saw increasing emphasis on the organizational buying decision and the adoption process. A fourth change was a developing research focus on interorganizational issues such as reciprocity, bargaining, and negotiation. He also noted increased efforts to develop models of buyers' responses to industrial marketing activities, such as proposed by Choffray and Lilien (1978). The final change he identified was an increase in segmentation research efforts.

Wind suggested the field's substantive findings could be summarized into the following categories: the nature of buying centers and their relationship to the type of purchase, the average size of buying centers, types of buying centers, and the relationship of price to product complexity in purchasing. He also noted that, at that time, most organizations did not single source and purchasing behavior was clearly linked to the rewards perceived by the buyer. Research also pointed out that buying criteria used by buying group members reflect the group's task and non-task goals as well as their perceptions of the relevant organizational, social, and environmental variables affecting the buying situation.

From a methodological standpoint, Wind argued that the differences between academic and industry research are sharper in the organizational buying arena than in consumer behavior. Industry often pioneered the new methodologies. He also observed that OBB researchers could not necessarily use the same methodologies used by their consumer buying behavior counterparts. In addition, he identified and discussed issues and differences in problem definition, research design, and data collection associated with research in OBB.

The fourth section of Wind's review dealt with conceptual and additional methodological issues including the unit of analysis, the object of analysis, the definition of variables, and the time dimension. Unit of analysis problems centered around identifying relevant respondents, determining the multiperson dependent variable, accounting for multiperson independent variables and developing organizational measures. At that time, as he notes, the general question of the object of the analysis had received little attention. He suggested three major considerations relative to the dependent variable-a shift from single product to multi-product or assortment, a focus on organizational buying activities, and the consideration of the entire buying process including both pre- and post-buying activities. These concerns parallel changes occurring in consumer research during the same time period. Wind also discussed measurement of variables and the concept of organizational psychographics, a topic that to date has remained relatively unexplored. Finally, he noted that most organizational buying studies were static and cross-sectional, and suggested that studies be more dynamic.

Among his suggestions for future research, Wind argued for improving the quality of work in the field and for stronger definitions of theoretical and operational variables. He also pointed out that too much research represented one-shot studies and that more replication and programmatic research was needed. Areas cited that were in need of research were the buying center, buying situations, forecasting OBB, institutional and government markets, and interorganizational issues. He also suggested future research needed to consider new research designs, borrowing from other fields when appropriate.

Wind's (1978b) second review focuses on the buying center. While primarily written for an academic audience, the article is useful to managers initiating research for management purposes. Wind specifically noted that, as of that point in time, there had been relatively little research directed at understanding the buying center. Reasons were that the original buying cen-

ter definition was somewhat ambiguous and there were methodological difficulties associated with research focused around this concept.

On the conceptual side, problem areas included issues surrounding buying center involvement, buying center formation and structure, issues relating to single versus group decision making models, and single versus multiple decisions. It is interesting to note that while progress has been made in some of these areas (e.g., buying center involvement and buying center formation and structure), little progress has been made in addressing group decision making and single/multiple decision contexts.

Methodological issues relating to buying center research discussed by Wind include: cross-sectional versus longitudinal research designs, lab versus real world studies, observation versus survey, experimentation, and single versus multiple respondents. He concludes his methodological discussion by suggesting a need for more longitudinal work, laboratory work for better control, observation and experimentation, and multiple respondent data collection. With respect to the latter, he notes that analytical procedures to handle the inherent problems of multiple respondents have to be developed. Wind concluded that while the buying center is a viable concept, research priorities have yet to be defined.

Bonoma and Zaltman. Bonoma and Zaltman (1978) provide a very different type of review. Their paper is a report of a workshop they were involved in and presents some of the issues and findings discussed. The authors organize their discussion around a 2×2 grid of organizational locus of industrial buying influences. The horizontal axis differentiates within organization and between organizations issues. The vertical axis distinguished within the purchasing department and between purchasing and other departments/environment issues. Using this grid, four OBB scenarios emerge: (1) The Purchasing Agent: Factors in buying dealt with intraorganizational and intradepartmental issues and research (e.g., social factors, decision strategies, bidding rating systems, and risk avoidance), (2) The Buying Center: Addressed interdepartmental and intraorganizational research issues (e.g., the nature of the buying center, how it is structured, influence patterns, gatekeeping, and organizational climate), (3) Professionalism Among Purchasers: Was concerned with intradepartmental and intraorganizational issues (e.g., face to face communication, status, and reciprocity), and (4) Organizations and Environment: Focuses on interdepartmental and interorganizational issues (e.g., technology, nature of suppliers and/or business, government influences, and reciprocity).

As with previous reviews, methodological and conceptual considerations in OBB were also discussed by Bonoma and Zaltman. These were similar to those identified in other reviews and included such issues as ill-defined organizations, changes occurring in organizations, the relationship between consumer and industrial buying behavior, defining the unit of analysis, ap-

propriate methodology to use in studies, the problems of time and shifting of groups within the buying process, and measures to use in market segmentation. Finally, the authors noted the limited generalizability of the research as well as the limited training and support for industrial buying behavior research compared to consumer research.

Ferguson. Ferguson's (1978) review was positioned as an update of an earlier review by Webster (1969). Ferguson began his review by reassessing the field's shortcomings as noted in the Webster review. These shortcomings included a lack of replication, clear hypotheses and careful data collection, a lack of programmatic research, and the small number of studies. His conclusion was that, despite some progress, these shortcomings continued to persist.

Ferguson focused specifically on the issues of research techniques, communication, decision making, and models of OBB. In his assessment of OBB models, he suggests that of the various models, Brand's (1972) model that utilized the BUYGRID model of Robinson, Faris, and Wind (1967) was the most significant. Interestingly enough, this particular work has not been followed up by any of the authors who actually tested BUYGRID. Ferguson further notes the models of Sheth (1973), Webster and Wind (1972) and Stiles (1972) had not had much impact at that time.

Thomas and Wind. Thomas and Wind (1980) provide a review similar in design to that done of Wind (1978a). However, what differentiates their review from others is their effort to provide a complete and definitive summary of the substantive findings of the research at that time. They divide their review, which focuses only on the academic literature, into three areas: the buying center, the organizational buying process, and factors affecting either the organizational buying center or the overall process. They conclude with an extensive discussion of methodological and conceptual issues, similar to that of Wind (1978), but with slightly greater scope and detail.

Thomas and Wind point out that, despite familiarity with the buying center, there continued to be little known about its composition, determinants, changes in usage, and the nature of the influence patterns. The research showed that: buying centers have multiple participants which may change with the situation, participants often come from different functions and different organizational levels, and individuals play different roles and differ in importance depending upon the conditions and marketing stimuli involved.

Their discussion of the buying process, with results from over thirty studies, highlights five different conceptualizations of the buying process in organizations (Robinson and Faris 1967; Ozanne and Churchill 1971; Webster and Wind 1972; Bradley 1977; Wind 1978). All of these have been the subject of further study, with the exception of Bradley's four step government buying model. Key findings of organizational buying processes studies indicate the process is complex, difficult to model, differs by product

and industry, and across buying situations. Areas of study for which there was only limited work at that time included identification of needs (Von Hippel 1978), evaluation of alternatives (Wildt and Bruno 1974; Scott and Wright 1976; Wind, Grashof, and Goldhar 1978), purchase decision ("How Industry Buys Chemicals" 1979), and postpurchase evaluation (Lambert, Dornoff, and Kernan 1977).

Twenty-six articles were identified as dealing with factors affecting the buying decision process. These were divided into four categories-personal factors, interpersonal factors, organizational factors, and interorganizational factors-with interpersonal factors accounting for the greatest number of articles. Wind and Thomas suggested that, in addition to these factors, the effects of a firm's marketing variables, the marketing strategies of competitors, and environmental factors should be included in future comprehensive studies/models of OBB.

Johnston. Johnston's (1981) review begins with an examination of the breadth of OBB research. He suggests that the complexity of the organizational buying process has limited research and that work in OBB needs to be better integrated into marketing theory. While changes are occurring, Johnston argues that four assumptions normally underlie organizational buyer behavior research. The first is that "Industrial buying behavior may be studied separately from selling behavior or actions taken by a separate individual or individuals in the firm." This assumption has led to the examination of individual variables as opposed to the alternative of a dyadic or systems perspective. The second assumption is that "The appropriate way to approach and model industrial buying behavior is through a stimulus (S)-response (R) view of cause and effect." He saw this assumption as inaccurate and inappropriate and suggested that a more accurate and appropriate approach would be a "transactional" one, such as a dyadic model. The third assumption was that "The key theoretical processes occurring in industrial buying behavior are rational decision making, including decision optimization, strategic choice processes and information processing." Johnston points out that there is nothing inherent in the industrial purchasing process that would make it purely rational. The final assumption is that "The industrial buying process takes place over time and is a logical, chronological series of well-planned and executed stages of rational decision making." He takes issue with this assumption as being reductionistic and points out that studies have not demonstrated this to be true.

Johnston's review of the literature is organized around the industrial buying process, the unit of analysis, and models of industrial buying. Despite numerous attempts at defining the steps or stages involved in the buying process, he points out that research has failed to support this contention.

Johnston provides a rigorous analysis of the unit of analysis, examining

research from the perspective of the firm, the purchasing manager, other individuals within the buying organization, the dyadic paradigm, and the systems perspective. He notes that while useful for macrosegmentation purposes, the firm as the unit of analysis obscures the fact that people drive the organization and its decisions. The most common unit of analysis has been the purchasing agent. Research has been devoted to assessing the involvement and influence of others in the purchasing process, including problems of measuring individuals' influence and their roles. Work at the dyadic or systems level of analysis, at that point in time, was primarily conceptual in nature.

The final portion of Johnston's review focuses on the fourteen complex models of buying behavior (Robinson, Faris, and Wind 1967; Robinson and Stidsen 1967; Howard and Morgenroth 1968; Wind and Robinson 1968; Saleh et al. 1971; Webster and Wind 1972; Sheth 1973; Hakansson and Ostberg 1975; Wilson 1975; Bonoma, Bagozzi, and Zaltman 1977; Calder 1977; Spekman 1977; Choffray and Lilien 1978; Johnston 1979). He concludes his discussion of OBB models by suggesting that each of the existing models is not without problems and that systems models offer the greatest promise for capturing the actual dynamics involved in organizational buying.

Johnston and Spekman. Johnston and Spekman (1982) offer a more limited review of the literature. Sensing a lack of purpose and direction in OBB research, they propose an integrative approach to OBB. Their approach takes a decision system perspective based on a conceptual model proposed by Kickert and van Gigch (1979). Kickert and van Gigch argue that a decision process model consists of three components, a subsystem, an aspect system, and a phase system. These are essentially a set of objects, the relationships between the objects, and an environment. Within the organizational buying process, Johnston and Spekman suggest the subsystem consists of individuals, buying centers, functional departments, SBUs and the like. The aspect systems are the issues, topics, tasks, and decisions. The phase system is the time phase of the decision process. Existing research is then examined within the proposed framework. In summarizing the research, they note that more work is needed on the multiperson nature of the buying process, variables relating to the buying center and the procurement decision process, the relationship between organizational decision processes and structure, and how decision processes flow through an organization. They conclude with a call for methodological triangulation (i.e., using multiple methods to attack the same problem).

Kennedy. Kennedy (1982) provides a review of the literature from a predominantly British perspective. Her review, in addition to American-based research, includes numerous European works and sources including several doctoral dissertations, not covered in other reviews. She points out that there has been no study that has attempted to describe buying behavior across all sectors of British Industry. In essence, she suggests that a major problem is that the descriptive work at that time had not been done on a large enough scale. Additional weaknesses included the lack of replication across a range of sectors, the exploratory nature and subjective results of much of the research, and a lack of research on locus of buying responsibility.

Smith and Taylor. Smith and Taylor (1985) also provide a European perspective. Building on work by another European author, van de Most (1976), they suggest the literature has the following four orientations-multi-phased decision procedure, decision making unit or buying center, different purchasing situations, and risk and organizational decision making. Their discussion of multi-phased decision procedures, buyer center, and purchasing situation is similar to what has been discussed in earlier reviews. The unique contribution of their review lies in their detailed discussion of organizational decision making and risk.

Smith and Taylor point out that research into decision theory has generated a vast literature, much of which has focused on quantitative models. However, much of the quantitative work has not been fruitful. They suggest the reason for this is because many of the assumptions underlying the quantitative models are suspect. To illustrate this they use the notion of a rational man as an example and point out the problems with definition and how that impacts model building and performance. They argue that qualitative decision modeling, which deals with behavioral processes, may be a more fruitful vein of research and provide a discussion of some of the critical decision process research. In particular, they suggest a model by Thompson and Tuden (1959) as being quite useful for distinguishing between different decision situations and their implications for choice activities and apply it to organizational buying decisions. Thompson and Tuden's model combines beliefs about causation (certain or uncertain) and preferences about possible outcomes (certain or uncertain) to yield a 2 × 2 grid. The resulting four decision situations are termed computation (certain beliefs, certain outcomes), compromise (certain beliefs, uncertain outcomes), judgement (uncertain beliefs, certain outcomes), and inspiration (uncertain beliefs, uncertain outcomes). The model suggests that in situations where there is little uncertainty about causation or preferences of outcomes, the decision is mechanical and merely involves choosing the appropriate technique. However, it is the three other situations, the authors argue, where qualitative models have much to offer. As evidence of this, they note that McMillan (1980) has attempted to categorize the many models using this framework. The authors summarize their review by noting that because business marketing is so complex, complete models may be too complex to be of use to managers. They argue that simplified

models such as the one they propose, while not providing the full solution, will be of greatest use to managers.

Spekman and Gronhaug. Spekman and Gronhaug's (1986) review provides a succinct discussion of the conceptual and methodological issues in buying center research. The first set of issues they address are concerned with developing the buying center concept. They suggest that buying center definition should be done in formal organizations, but note that the actual buying center may or may not be a formal part of the organization. With respect to buying center boundaries and their domain, they argue that the challenge facing researchers is to identify the composition of the buying center over time and the ties between the members.

The next set of issues they examine deal with structural considerations of the buying center. Research findings, they note, would seem to indicate that structural variables are viable constructs for measuring buying center influence and communication networks and that buying center composition, structure, and information processing capabilities will vary with situational factors. However, they argue that research has been plagued with methodological problems such as the use of objective versus subjective measures, use of respondents versus informants, data aggregation issues, and the question of formal versus informal buying center structure.

The final set of issues they examine are process issues in buying center research. Their discussion of process issues is divided into three componentspower and conflict, decision making, and communications. In assessing the buying center literature on power and conflict, the authors point out that research in this area needs to develop better scales and to incorporate the use of multiple respondents in research designs. The buying behavior literature has not captured the ties between power and conflict that are evident in the more general organizational studies. Summarizing issues in decision making, the authors argue that the debate regarding the number of steps is purely academic since evidence would seem to suggest the number of steps are a function of the decision context and various idiosyncratic factors. In spite of this, they point out that three subprocesses capture the essence of organizational decision making-problem recognition, screening of alternatives, and selection. With respect to the debate regarding whether buying decisions are iterative or sequential, the authors suggest that research seems to indicate that iterative is clearly a better descriptor of most industrial buying decisions. Research on the choice or selection phase of organizational buying has been hampered, they note, by researchers' reluctance to utilize multi-disciplinary and multiperson choice approaches in their research methods. Finally, they point out that research on communication flows has failed to formally incorporate network analysis in its efforts to understand the informal communication flows that are so important in organization buying decisions.

Scott and Webster. Scott and Webster (1991) provide a very detailed review of the OBB literature. The authors' state their goals as being to characterize the work, note other streams of research that can add to the literature, and promote theory building and testing. Despite the amount of research that has been done, they point out that the field is far from having a solid set of "middle range" theories and that conceptual models far outdistance the capacity to test them and establish them.

The authors begin with a discussion of the definitions and an overview of the field and suggest that the changes currently taking place may profoundly shift the focus of the field. Similar to other reviews, they look at approaches to the study of OBB, decision process models, comprehensive models and the resultant research they generated, and decision making unit research. Perhaps one of the most interesting and unique aspects of their review is their discussion of interaction and relationship models. Beginning with the general notion of dyadic models, they go on to discuss the IMP model, models based on channel relationships, buyer-seller relationship models, models of selling effectiveness, negotiation models, exchange models, adoption and diffusion models, decision system models, and script theory. They conclude that an interaction perspective, although poorly defined at this point in time, offers a very viable framework for capturing the dynamics of organizational buying and selling.

As with other reviews, the authors provide an assessment of the methodological issues confronting OBB research. In particular, they raise a number of questions concerning the validity of work based on methods suggested by Silk and Kalwani (1982). Newer measurement techniques and statistical analysis techniques, however, may effectively address these issues. In summary, they suggest that research in OBB should focus on integrating, extending, and testing propositions derived from existing conceptualizations rather than continually attempting to develop new conceptual models. They assert that changes in the business climate need to be reflected in how OBB is viewed and studied.

Johnston and Lewin. Johnston and Lewin (1996) review 165 articles that deal with OBB from six major journals and provide a suggested framework for future research. In the first part of their review they summarize and compare the three models of Robinson, Farris, and Wind (1967), Webster and Wind (1972) and Sheth (1973), noting the many similarities between them, and offer a composite model. Based on these models, they identify the following nine sets of constructs that affect OBB-environmental characteristics, organizational characteristics, group characteristics, participant characteristics, purchase characteristics, seller characteristics, conflict/negotiation, informational characteristics, and process or stages. They extend the original models by incorporating four additional constructs that have been found to impact

OBB and capture the dyadic or network/systems perspective. The constructs included role stress, decision rules (intrafirm level constructs), buyer-seller relationships, and communication networks (interfirm level constructs).

Next, Johnston and Lewin examine the research relating to each of the thirteen constructs. The most frequently used construct, purchase characteristics, was addressed in sixty-seven of the articles, while the least frequently used construct was role stress with only six articles. They then examined the forty-four articles that were empirical, outlining when a particular construct was used and the statistical significance of the findings. Of the 263 separate statistical tests, most were significant at the .05 level and only twenty-seven were non-significant at the .10 level. They note that constructs such as characteristics of the purchase, organization, or environment have been used primarily as independent variables, while constructs such as group characteristics and decision process/stages have used primarily as dependent variables. Constructs, such as buyer-seller relationships and communications networks, have been used equally as dependent and independent variables.

To put into perspective what has been learned over the period covered in their review, the authors develop a framework that provides a macro-view of OBB. In their framework, risk plays a central role. They argue, based on their reading of the literature, that much of the variation in OBB is related to the levels of risk associated with a given purchase situation. Using the notion of a risk continuum, they posit that as the risk associated with an organizational purchase situation increases, the buying group changes, members of the buyer center tend to be more educated, more experienced, and have more motivation. Likewise in this situation, proven products and solutions will be favored, information search will be more active, conflict within the buying firm increases, formal decision rules may be abandoned or changed, role stress will increase, and interfirm relationships will be more important. In concluding, the authors suggest that a meta-analysis could provide further insights into the research and that additional research is needed on role stress, external environment, and communication networks.

Summary of OBB Reviews. Taken together, the reviews provide a fairly comprehensive picture of the field of OBB and offer numerous insights and suggestions for future research. Their coverage in many cases reaches far beyond the stated scope of their review thus putting things into unique historical perspective. However, there are several streams of literature which have not been addressed in the reviews and there are a number of topics that have received very little research. Moreover, the years 1993 through 1995 saw some very interesting contributions to the OBB literature, which the reviews did not address (Johnston and Lewin's [1996] review did not include literature published after 1993).

Among the neglected topics, and perhaps the most important, is the lack of

any detailed discussion and/or integration of the purchasing management literature into OBB theory. As discussed in the section on purchasing management in this review, there is a great deal of research as well as numerous case studies on purchasing management that can offer much to researchers in business marketing in general and OBB in particular. As an example, how does the recent purchasing trend in most businesses toward developing vendor rating systems (Lindquist and Crow 1985) affect the research and findings on industrial buyer complaining behavior (e.g., Trawick and Swan 1981; Barksdale, Powell, and Hargrove 1984; Hansen, Powers, and Swan 1997)? In a developed vendor rating system complaining becomes "automatic," in that the vendor receives regular reports on their performance. Thus, the issue for the buying firm becomes what needs to be monitored and what are the standards.

There have been several noteworthy recent studies. Among these, Barclay (1992) examined the issue of outcomes and their subsequent effect on decisions, providing an interesting process perspective. His propositional model focuses on the outcomes of the organizational buying approach and how those outcomes might affect future decisions. Brown (1995) provides some new insights into how being the in/out-supplier impacts organizational buying attitudes. His conceptual model tests whether or not buyers cognitively address in-suppliers and out-suppliers differently. Michaels, Dubinsky, and Rich (1995) provide an interesting empirical examination of the components of buyer motivation, tackling it from a somewhat different perspective than previous research. The authors use expectancy theory and examine seven individual characteristics and four organizational characteristics for their impact on how buyers form expectancies, instrumentalities and valences toward pay, promotion, recognition, and rewards. Results of the regression analysis on data from 330 NAPM buyers, the authors found they could predict instrumentality and valences. For instrumentality, the main drivers were organizational commitment of buyer and supportive leader behavior. Michaels, Kumar, and Samu (1995), using a very behaviorally-oriented approach, looked at activity specific role stress in purchasing. They identified five distinct areas where stress comes into play in purchasing positions. The five areas were supplier relations and sourcing, core buying activities, source to scrap analysis, inside-outside decisions, and tooling activities. Research by Heide and Weiss (1995) examined switching behaviors in high technology markets, computer workstations. In general they found what might be expected, of 16 hypotheses tested, 11 were supported, buyers used closed consideration sets (no new vendors) when switching costs were higher. In general, the concept of switching costs has had very limited coverage in the decision choice literature of OBB.

Summary of Organizational Buying Behavior Research

Summarizing the vast amount of OBB literature is a difficult task. Scott and Webster (1991) provide perhaps the best assessment of the field by noting that conceptual development has been paramount in the field while empirical testing has not. As they rightly point out, there are more than enough conceptual models and what is needed now are efforts to integrate those models and to do more rigorous testing. This, in essence, reflects what Johnston and Lewin (1996) attempted to do in their review.

In assessing the OBB literature, one glaring weakness is the general lack of integration of the purchasing management literature into the organizational buying literature. With only a few exceptions, such as research on make or buy decisions, the findings of purchasing management have not been considered. As shown above, complaining behavior research clearly needs to consider the purchasing management literature. Most purchasing agent behavior has been studied from the perspective of personality, other psychological constructs (e.g., motivation, risk), or from a sociological group perspective (e.g., roles). But what individuals in purchasing and their departments actually do, how they see their work, and how they manage their operations has not been integrated into our understanding of how organizations buy. In fact, behaviors or what is actually done in general, have received only limited attention and even that has been very narrow and focused on the decision or stages of the buying process. Obviously, work by the IMP in Europe and work by people such as Vyas and Woodside (1984) are examples of a tradition where identifying actual behaviors of buying group members provides insight on how the process works. Another very related issue is the emergence of purchasing as a major strategic player in the firm and thus, the notion that industrial buying decisions can be of great strategic importance to the firm. Some of this has come through the buyer-seller literature (especially within the partnership alliance literature), but not in the general buyer behavior literature.

Another weakness in our understanding lies in the context of international buying behavior. Not only have we not examined the trends leading to global purchasing as a managerial issue, but we have not examined the nature of buying in different cultures. For example, no one seems to have examined the impact of culture, for example, in how buying is done from any perspective (Hofstede 1980).

Sheth's (1977) comments concerning a lack of research in the area of services procurement continue to be true. Research has also been very limited or nonexistent on institutions, in general, and on non-profits and government buying.

As with many of the other topical areas reviewed in this paper, there is a distinct lack of programmatic research in OBB. Of the 411 articles in this

review of OBB, 219 are empirical. This work is, for the most part, scattered across a great many topics and few authors have conducted more than one study in a particular area. Notable among those authors that have done more programmatic research are Wesley Johnston, Jagdish Sheth, Robert Spekman, Frederick Webster, Jr., Yoram Wind, and Arch Woodside.

Despite repeated pleas in previous reviews, there continues to be a need for agreement as to what are the areas most in need of research and which areas offer the greatest likelihood of increasing our overall understanding of OBB. A model for this kind of effort is readily found in the IMP group and their work on buyer-seller relationships. IMP research provides an excellent example of the kind of progress that can be made by combining multiple talents and resources toward pursuing a unified goal.

In general, we concur with Johnston and Lewin (1996) that the field has enough models and that further testing is needed. We also feel there have been enough reviews of OBB suggesting things that need to be done. It is time to address these issues. As with most areas in business marketing there is little programmatic research and even less replication. Examining buying, within the context of buying, rather than within a buyer-seller dyad or even network perspective, is needed and offers great value.

The focus of our research needs to be on the definition and determination of value by the buying firm and buying center members. At best, value has been indirectly examined in all of the research done on how organizations buy; it needs to be explicit and the focus of a research stream.

Reddy (1991) has suggested five ways of how valuing is done by customers: value analysis, value engineering, use value, value-in-use, and perceived value. He suggests that customers use one or more of these ways of valuing to ascertain the value of a particular offering. Anderson, Jain, and Chintagunta (1993) took a slightly different perspective and identified nine different methods of customer value assessment: internal engineering assessment, field value-in-use assessment, indirect survey questions, focus group value assessment, direct survey questions, conjoint analysis, benchmarking, compositional approaches to valuing, and importance ratings. They also provide some evidence of what companies actually do through a small sample field study.

It seems to us that all of our research in OBB, while informative of the process and providing insight into the how and the who of the decision, falls short on the why. It is our belief that value is the concept that defines the why of the purchasing decision. Given the importance of value in furthering our understanding of OBB, further research is needed to address the following:

 How can knowledge of a company's value orientation be used to construct a value proposition by the marketer?

- How are total overall cost or lifetime cost value orientations manifested within the firm and how can the marketing firm recognize and market to this orientation?
- How can the marketer change the value orientation of the buying firm?
- How is the value orientation formed during the buying process and when can the marketer have impact on that process?
- How can value orientation be incorporated into existing major frameworks of organizational buying?

Buyer-Seller Relationships

In recent years, interest and research on buyer-seller relationships in the U.S. has surged. In distinct contrast to this recent surge, Europeans, especially those involved in the International Marketing and Purchasing (IMP) group, have been exploring the buyer-seller perspective since the early 1970s. Research in buyer-seller relationships overlaps many areas (e.g., sales, OBB, and purchasing) and includes a variety of topics (e.g., dyads, alliances, and partnerships). Relationships can be at an individual level such as between a buyer and a salesperson as well as at an organizational level such as between a manufacturer and a distributor. Different theoretical perspectives have also been brought to bear on the problems of understanding relationships such as agency theory (Bergin, Dutta, and Walker 1992), transactional cost analysis (Lothia and Krapfel 1994), equity theory (Evans 1981; Lucas and Bush 1983), social psychology (Bonoma and Johnston 1978), and network theory (Hutt and Reingen 1987; Bristor and Ryan 1987; Hakansson and Snehota 1993; Hines 1995). The discussion of the relationship research is divided into the following sections-buyer-seller dyads, IMP research, general relationship theory, alliances and partnerships, channel relationships, buyer-seller models.

Buyer-Seller Dyads. In the U.S., 1978 seems to have been a pivotal year for buyer-seller research with the publication of several articles suggesting that examining the buyer-seller dyad was more appropriate than just examining buyers or sellers separately. Bonoma and Johnston (1978), for example, suggested that a dyadic or systems approach to examining buyer behavior (i.e., person-to-person or organization-to-organization) would provide more insight into the outcomes of the purchasing process. They also argued that the major factors which influence the industrial buying process are social ones. Wilson (1978) provided a dyadic model and argued that in order to understand the decision processes of buying centers, one must understand the interaction of the multiple participants in the buying center, as well as their interactions with sellers. A number of other authors have also provided dyadic models including Bonoma, Baggozi, and Zaltman (1978) and Hakansson and Wootz (1979). LaGarce and Prell (1978) also provide a dyadic model but cast from a slightly different perspective that they term transactional market-

ing. Transactional marketing, as they define it, refers to the incidence of an agreement of exchange between parties, as opposed to the actual exchange. The authors take more of a systems approach in their discussion of the many factors that impact on the process and lead to their definition of a transactional agreement.

IMP Research. The IMP's research program is conducted by a loosely formalized group of researchers spanning a number of European countries and representing many institutions who have chosen an interaction perspective to coordinate their research efforts. The hallmark of the IMP research model, besides the nature of the model, is that the methodology used involves mostly qualitative methods and case studies.

The IMP approach has been discussed in depth by Turnbull and Valla (1985). As they point out, it has four major elements-the interaction process, the interaction elements-buyers and sellers, the interaction environment, and the atmosphere of the interaction parties' relationship(s). Metcalf, Frear, and Krishnan (1992), in their discussion of the IMP approach, note that four elements are exchanged by a buyer and seller-a product or service, money, information, and sociality. In examining product/service exchange, Metcalf, Frear, and Krishnan (1992) point out, that in terms of product importance there are many product service characteristics but only a few such as importance, complexity, and novelty have been examined. Information exchange includes such issues as the quantity, quality, type, and process of information exchanged. Social exchange is defined as referring to the interpersonal relationships among the employees who belong to the respective firms' buying and selling centers involved in the exchange and encompasses issues such as trust and empathy. These factors lead to two outcome variables: cooperation and adaptation. Cooperation is defined as "the extent to which the work of the buyer and seller is co-ordinated," while adaptation refers to "the extent to which the buyer and seller make substantial investments in the relationship." Metcalf, Frear, and Krishnan (1992) developed measures for the five variables of social exchange, product exchange, information exchange, cooperation, and adaptation. Data collected from the aircraft engine industry provided a weak but acceptable measurement model fit in support of their general model.

The IMP group's model and efforts have generated a considerable number of publications. Among these are three edited books by Hakansson (1982), Ford (1990), and Moeller and Wilson (1995) that discuss aspects of the model or present various studies based on the model. The list of articles includes Cunningham (1980), Campbell (1985a, 1985b) Turnbill (1990), Yorke (1990), Paliwoda and Bonaccorsi (1993), and Pardo, Salle and Spencer (1995). These articles have typically involved small sample (with one to thirty-five respondents) case study approaches and employed primarily inter-

viewing for data collection. Turnbill, Ford, and Cunningham (1996) provide a detailed review of the IMP research program.

General Relationship Literature. There has been a considerable amount of discussion over the last few years relationships and what is referred to as "relationship marketing." While there are differences of opinion as to what they mean, both Gronroos (1990) and Gummesson (1994) suggest a broad view of relationships and relationship marketing and see them as being a network phenomenon that includes the basic notion of a dyad. This view is reflected in Anderson, Hakansson and Johanson (1994) who provide a conceptual model of dyadic relationships with networks. Johanson and Mattson (1985) and Thoreli (1990) also discuss the notion of networks and dyads. Morgan and Hunt (1994) provide a specific theoretical perspective, that of trust and commitment as antecedents to relationships in markets. Evans and Lashin (1994) provide another perspective-a pragmatic input-output model with an assessment component. This component not only includes customer feedback, but benchmarking of both the company and its competitors. Bergen, Dutta and Walker (1992) provide a more theoretical discussion of agency theory as it applies to relationships. The classic and oft-quoted work by Dywer, Schurr, and Oh (1987) presents a discussion on the formation of relationships, primarily buyer-seller, but one that is also applicable in distribution channel relationships. They argue that relations are formed and go through a series of stages, awareness, exploration, expansion, commitment, and finally dissolution. Another interesting theoretical model is by Mintu (1989) who conceptualizes relationships in terms of dyadic communications. Dahlstrom, Dwyer, and Chandrashekaran (1995) use transaction cost economic theory to examine the impact of aspects of environment and structure on performance in exchanges. In the business marketing literature, a very comprehensive paper by Wilson (1995) provides a particularly useful theoretical perspective. Wilson argues that there are five stages in the relationship development process-partner selection, defining purpose, setting relationship boundaries, creating relationship value, and relationship maintenance. This model is an extension of the four stage model developed by Borys and Jemison (1989). Wilson further argues that there are 13 critical concepts that drive and define relationships. These are reputation, performance satisfaction, trust, social bonds, comparison level of alternatives, mutual goals, power dependence, technology, nonretrievable investments, adaptations, structural bonds, cooperation, and commitment. He argues that the various concepts vary in importance at different stages of the relationship process.

In general, what we mean by relationship marketing is somewhat mixed. It appears most people define it from the perspective of developing longer term relationships with customers. This differentiates it from marketing when one

defines marketing from the perspective of relational exchange which can be long or short term as noted by Dywer, Schurr, and Oh (1987).

Empirical efforts at defining types of relationships have been extremely limited and have only recently started to receive more attention. Many authors, such as Dwyer, Schurr, and Oh (1987), have suggested that buyer-seller exchange relationships can be looked at as a continuum ranging from pure transactions to pure relationships. Yet, research has yet to address in great detail how to identify and define relationship types.

One effort is by Cannon and Perreault (1994). These authors begin by examining major general theories of buyer-seller relationships, social exchange, transaction costs, relational contracting, and the IMP model. Cannon and Perreault then attempt to integrate these approaches and provide 12 constructs which they argue can be used to define relationship types. They then developed a series of scales, measured the variables using customer data collection only, provide measure validation and using cluster analysis developed eight clusters or relationship types. These they defined as market exchange, bare bones, contractual transaction, custom supply, operationally linked, collaborative, mutually adaptive, and customer is king. Their discussion provides a number of interesting points on why such relationships occur and also addresses the normative question of which one relationship is best. An important empirical point they make is that only 24% of the relationships described in their sample were single source relationships, and even in the collaborative relationships within their sample only 34% were single source.

Iacobucci and Ostrom (1996) provide another perspective for addressing these questions. These authors argue relationships are just not business-tobusiness, but involve individual to individual, and individual to business as well. Using a sample of 98 MBA students, they defined three sets of relationships. While it is difficult to ascertain validity of the work outside of the research sample, these authors bring to the topic area a number of very important points. First of all, business relationships can and need to be defined at different levels. Organization to organization definitions are critical to our understanding of buyer-seller relationships, but organizations consist of people and those people have relationships as well. Thus, relationships need to be understood at both levels. There also needs to be a recognition that individuals drive the organizational relationships and the constraints to those relationships such that the intersection of at least two types of relationships, organization to organization and individual to individual, is important. Iacobucci and Ostrom (1996) offer very important insights into the definition of buyer-seller relationships as well as the different levels and can serve as an excellent foundation for future and continuing research in this important area.

Alliances and Partnerships. There is a great deal of normative work on what strategic alliances and partnerships are, how to develop and maintain

them, and what they mean from a strategic perspective. Most of this work deals primarily with the development of alliances and partnerships. Examples of this research in the business marketing literature include both Ellram (1991) and Rognes (1995). There is a great deal of work extolling the virtues and discussing the strategic implications of partnerships. For example, Anderson and Narus (1991), Cardozo, Shipp, and Roering (1992), and Stafford (1992) examine partnerships/alliances as strategy. Kanter (1994) does much the same, pointing out that collaboration provides a competitive advantage when done correctly. Dunn and Thomas (1994) and Hardy and McGrath (1994) provide general discussions of how to go about partnering.

Other papers of interest include Stuart and McCutcheon (1995) who provide an empirical examination of the problems people face in establishing alliances; Johnson (1995) who defines an empirical taxonomy of disturbances to relationships; Landeros, Reck, and Plank (1995) who provide a model for maintaining existing partnerships; and Perrien, Paradis, and Banting (1995) who provide empirical examination of dissolving relationships. Ellram (1995) provides an empirical examination of the various pitfalls and success factors in buyer-seller partnerships. Narus and Anderson (1995) discuss how to use teams to manage collaborative relationships, while Frear and Metcalf (1995) examine technology network alliances. Varadarajan and Cunningham (1995) provide an excellent review paper which examines the various conceptual foundations of strategic alliances and partnerships and attempts to synthesize them. The paper focuses on discussing what is an alliance, the motives for entering into one, their forms and scope, the drivers, internal and external, which influence their formation, when do they work, the role of marketing in developing and maintaining alliances, and the costs or limitations to participating in alliances. The authors also identify interesting research questions.

Channel Relationships. The channel literature has produced a number of competing but similar models of long term relationships from somewhat different theoretical perspectives. Anderson and Narus (1984, 1987) and Anderson and Weitz (1987) provide models that are based on social exchange theory. Trust and communications are fundamental components of both models which seek to understand what makes relationships last or fail. Heide and John (1992) use institutional economics, transaction cost analysis, and power dependence theory to develop a theoretical model of channel relationships. Weitz and Jap (1995) provide a useful and very comprehensive review of channel relationship research. The authors begin by pointing out, as did Macneil (1980), that channel relationships are rarely, if ever, discrete transactions and thus relationships may be more important in this arena than in buyer-supplier transactions which have a higher likelihood of being discrete. They then provide a succinct history of channel research noting the movement from vertical marketing systems and authoritative control to more

conventional channels with contractual and normative control mechanisms. Based on a thorough review of existing empirical research, the authors suggest propositions dealing with the selection of channel partners, relationship development, communication, norms, conflict management, communication, and the role of personal relationships in boundary spanning situations.

Buyer-Seller Models. The buyer-seller literature has produced a number of models over the years and a great deal of empirical testing of various aspects of buyer-seller relationships. Wren and Simpson (1996) offer an instructive review. They discuss Anderson and Weitz (1992), Mohr and Nevin (1990), Dwyer, Schurr and Oh (1987), Ganesan (1994) and others, and argue that research has not been evolutionary and is disjointed as a result. In examining five major models, Weitz (1981), Campbell (1985), Dwyer, Shurr, and Oh (1987), Williams, Spiro, and Fine (1990) and Ganesan (1994), they note that all the models include factors related to the salesperson, buyer, interaction, and outcomes. Yet, as they point out, there is little overlap among the constructs. As an alternative, Wren and Simpson (1996) offer an integrated model that synthesizes the major models. Their model includes salesperson characteristics from the selling performance literature, customer characteristics from the OBB literature, an interaction environment which includes structure and communication variables, and interaction outcomes.

Summary of Buyer-Seller Research

The buyer-seller literature, whether in general terms, geared to buyer-supplier relationships, or to channel of distribution relationships, has seen tremendous growth. Not only has there been substantial theory building efforts, but a great deal of normative literature has also been developed from many disciplines, including marketing, management, public administration, and others. The recent review article by Wren and Simpson (1996) correctly described the progress in buyer-seller relationship research as being not only non-evolutionary but scattered and disjointed. Truly, there is a need for more evolutionary work. Much like the comments made by Johnston and Lewin (1996) regarding industrial buying behavior, the number of theories being put forth in buyer-seller relationship clearly exceeds the amount of empirical testing being done. Defining and describing relationship types represents a major research area that has received limited attention. However, these efforts have been noteworthy and hopefully portend continued effort to define the nature of relationships. Some suggested areas for future research include the following research questions:

- What kinds of relationships are there and how should they be empirically defined?
- How can we better measure the relationship as a whole?

- What is the link between the type of relationship a buyer and seller have and the skills needed by both parties to start or maintain that relationship?
- How are marketing and/or buying skills, behaviors, and outcomes affected by the nature of the relationship?
- Are some types of buyer-seller relationships generally more value-producing than others?
- How can marketers be proactive in generating relationship type change rather than just accepting the relationship as determined by the buyer?

Summary of Organizational Buying Research

Organizational buying research represents perhaps one of the broadest areas in business marketing research and, as argued in this review, includes purchasing management, OBB, and buyer-seller relationships. Because it represents such a vast amount of literature, summarizing it is a daunting task. Despite its breadth, there are trends apparent.

First, there is little integration of the purchasing management research with research done in either of the two other areas. While there has been discussion of the changes being affected in purchasing, they have had little impact on recent conceptual or empirical research.

There is greater level of congruence between OBB research and buyer-seller research. One only needs to examine the recent reviews by Johnston and Lewin (1996) of OBB and Wren and Simpson (1996) of buyer-seller relationships to see the similarities. It is also clear, from the work done over the years, that in both areas there has been much more conceptual work than theory testing. Much of the theory testing that has been done has been on the OBB side.

While the work of the IMP group was discussed in this review, their efforts have not been widely discussed or integrated into academic research efforts here in the United States. This may in part be due to the fact that most of the IMP's research has either appeared in European journals or a limited number of books that may not be widely available. Given that the IMP has generated a considerable amount of insightful work over the past twenty years, researchers in the United States need to capitalize on their efforts.

An important key to organizational buying and perhaps to the integration of the work in this area is customer value. The concept of customer value pervades the trade literature. Yet, other than the work of Anderson, Jain, and Chintagunta (1993), there has not been much conceptual development or empirical effort. Key questions still remain as to how industrial buyers define value, how value drives their decision process, and how value should be factored into marketing decisions. For example, should value only be defined

from the perspective of the buying firm, the perspective of shared value in the dyad, or in some broader fashion such as a supply chain perspective?

Finally, whether we examine the exchange process from the perspective of the buyer, seller, dyad, or network, additional research is needed in the area relationships. It is surprising that despite all the research to date, we still know very little about relationship types. Work by Cannon and Perreault (1994) and Iacobucci and Ostrom (1996) provide us with a starting point by suggesting that relationships can be defined in terms of who is involved (i.e., individual or organization). Additional research is also needed to better delineate the stages involved with different types of relationships as well as identifying appropriate marketing activities given different types and stages of relationships.

MARKETING SCIENCES

In this section, business marketing literature on four topics-market research, forecasting, market segmentation, and computers and decision support-will be discussed.

Market Research

Market research is used here to refer to literature on the practice of market research by business marketing firms as well as the literature assessing the market research practices of academics in business markets. While a variety of topics are addressed in this area, there are clearly two major themes in the literature-surveys and survey response rates, and research methods, measurement, and statistics. Not discussed here is the general use of information and the use of systems to integrate information. These topics will be discussed under computer usage, information systems and decision support later in this section.

Surveys and Response Rates. The first major theme deals with survey research and aspects of improving response to mail surveys. The work can be divided into two types, qualitative articles, which are either prescriptive or review articles, and quantitative articles, which generally test one or more factors and their impact on response rates. Qualitative work includes Pressley (1980); Gentry and Hailey (1981); Zdep (1986); Jobber (1986); Walker, Kirchmann and Conant (1987); and Jobber (1990). Jobber's (1990) article provides a fairly comprehensive review of the response literature.

Quantitative articles were far more numerous and include Hansen, Tinney, and Rudelius (1983); Skinner, Dubinski and Ingram (1983); Jobber and Sanderson (1983); Clark and Kaminski (1988); Murphy, Dalenberg, and Daley

(1990); Durhan and Wilson (1990); London and Donmeyer (1990); Karimabady and Brunn (1991); Diamantopoulos, Schlegelmilch, and Webb (1991); Faria and Dickenson (1992); Kallis and Giglitrano (1992); Chawla, Balahrishnan, and Smith (1992); Paxson (1992); Ford, McLaughlin, and Williamson (1992); Armstrong and Yokum (1994); Haggett and Mitchell (1994); Chawla and Nataraajan (1994); Kalafatis (1994); and Greer and Lohtia (1994). A review paper by Balabanas and Schlegelmilch (1996) not only reviews the findings, but also provides results of a survey of market research managers and executives in Great Britain as to what works or does not work. The quantitative articles suggest the following factors have a positive impact on response rates: sponsorship of the research, interest in the topic being researched, number of contacts and pre-notification, type of postage, and monetary and non-monetary incentives. Factors such as anonymity and nature of the cover letter appear to be inconclusive.

Research Methods. A second major theme in the research literature is the analysis of various research methodologies, predominantly in measurement and statistics, that are applied to business marketing. While primarily of importance to academic researchers, most of these ideas are applicable and important to managers. Work in this area has addressed measuring and modeling organizational purchasing influences (e.g., Silk 1982; Moriarty 1982; Kohli and Zaltman 1988; Kumar and Dillon 1990), intercoder reliability (Adele, Hughes, and Garrett 1990), adaptive survey research designs (Singh, Howell, and Rhoads 1990), and the use of conjoint analysis (Green and Srinivasan 1990). Some of these ideas are extremely important to the practice of academic research, the issue of multiple buying influences and how to combine those responses to truly reflect the purchasing decision is still one that is unresolved. Some authors, notably Wilson, Lilien, and Wilson (1994) have constructed their research to examine as the unit of analysis the decision making group. They prequalify the group, put them into a decision making lab exercise and then measure the output and thus avoid the problem.

Among some of the other themes that exist in the literature, an old and ongoing argument centers on the use of salespeople to gather and/or participate and assist in the market research process. Moss (1979), Grace and Pointon (1980), and Festervand, Grove, and Reidenback (1988) have argued strongly for the use of salespeople as part of market research/intelligence gathering. Lambert, Marmostein, and Sharma (1990) provide evidence of the relatively extensive use of salespeople and how they are actually used.

As might be expected, there are numerous normative pieces on how to conduct market research. Penn (1978) described problem formulation. Cox and Dominguez (1979) outlined the key issues and procedures in designing a research project. Wallace (1984) and Welch (1985) provide discussions of qualitative research in general and focus groups, respectively. At a broader

level, Nauman and Lincoln (1989) suggest using systems theory as a basis for conducting market research, and Gross (1985), in a particularly insightful piece, outlines the critical uses of research in business marketing. Finally, empirical work by Schlegelmilch, Boyle and Therivel (1986) and Schlegelmilch and Therivel (1988) reports on the usage of marketing research in different types of industrial firms.

Other Research Literature. Where and how to get information has also been the subject of some study. Comer and Chakrabarti (1978) profiled the information industry for business marketers. Fries (1982) discussed library resources. More (1978) empirically examined the uses of primary and secondary data, specifically in new product projects.

Competitor and customer analysis have also been addressed. Brock (1984) and Grawbowski (1987) outlined some practical approaches to competitor analysis, while Keep, Omura, and Calantone (1994) discussed what managers should know about competitive technology. Sinclair and Stalling (1990) provide a case study on the use of perceptual mapping as a tool for customer and competitor analysis. There are some what amount to standards of competitor analysis in the practitioner literature which are much more developed than any of the work cited here.

Customer analysis, compared to competitor analysis, is more thoroughly developed in the business marketing literature. Canning (1982) described how to do a value analysis of a customer base, while Meredith (1993) described a customer evaluation system. In line with Canning (1982), Anderson, Jain, and Chintagunta (1993) presented an instructive analysis of the methods and usage of customer value assessment. Their state of the practice study illuminates the customer assessment practices of leading edge companies. Campbell and Cunningham (1990), using a European database, examined the use of customer analysis across 300 companies. More recently, Mehr (1994) discussed focusing on large prospective customers and Perkins (1993) examined how companies measure and use customer satisfaction.

There has been a limited amount of fragmented literature on market and sales potential analysis. Chakrabarti and Morgan (1981) looked at estimating potential for aftermarkets. Kendall and French (1991) examined forecasting potential for new industrial products. A key piece of research in this area was Brown, Lilien, and Ulvila (1993), who did a state of the practice study and outlined current practices and new methods for estimating business markets.

Finally, the marketing research literature has also looked at how research can solve or deal with particular issues such as new product testing (Acito and Hustad 1981) and measuring firm image (Sims 1979). A substantial amount of this work has been in the area of market segmentation methods. Chiesl and Lamb (1983), Woodside and Wilson (1986), and Sinclair and Stalling (1990) provide typical examples of this stream of work. Chiesl and

Lamb, for example, provide a research methodology for segmenting international markets, using Japan as an example. A particularly interesting piece of work in this area is one by Gensch (1984), who explores targeting the switchable industrial customer. This particular work showed how some advanced research methodology could lead to strategic choices that were very profitable for a company in the long run. Switching costs, as defined by Jackson (1984), have received almost no explicit attention in the literature. This is somewhat surprising in that Williamson's (1975) work on transaction costs implicitly incorporates the notion of switching costs and his theoretical orientation has been utilized fairly extensively in a number of research areas in business marketing.

Summary of Market Research

The business marketing literature has seen significant effort in areas of market research. As noted previously, the primary area is that of increasing return rates for mail surveys. Since much of the research done by both academics and practitioners involves the use of surveys, the improvement of survey response rates is a laudable effort. The research, while mixed, does suggest methods to improve response rates and thus make samples potentially more valid and less biased. There have been a number of review articles which provide succinct guidance on getting better response rates and all have been quoted in this paper. However, there are a number of issues that have not been examined in depth, but probably need to be. New technologies such as the Internet and the ubiquitous use of fax machines have not been explored in detail as to their usage as survey delivery mechanisms. Research in these areas is only just beginning and both media represent other methods besides that of mail for getting survey responses.

There has been some discussion of how to collect data from multiple respondents. This has come about as researchers have recognized the complexity of organizational buying processes and have documented the notion of buying groups or centers, both formal and informal and which typically consist of more than one person. While we know we have a problem both conceptually and methodologically in addressing the issue of multiple respondents, there is no readily apparent solution. For example, if we collect data from multiple respondents using key respondents and exhaustive snowballing we run into non-response problems as well as issues regarding how to combine the data. If we go to a laboratory method and put the groups together prior to the decision and then have them do some exercise then external validity is suspect, regardless of whether the example is real or hypothetical.

Doing research internationally and dealing with the impact of culture on research methods and measures needs to be better developed. There is very little guidance available in this area. Some work has been done by Triandis, Bontempo, Leung, and Hui (1990) in the psychology literature and Yu, Keown, and Jacobs (1993) who examined the cross-cultural implications of attitude-type survey research. There are perhaps other examples, but the work is really fragmented. There is some agreement as to the validity of translation and back translation as a method, but recent work by Plank (1998) argues that these methods will not guarantee measure validity. Finally, while not in the literature to date, the federal government is transforming the Standard Industrial Classification (SIC) system into the North American Industry Classification System (NAICS). The impact of this transformation should be of real interest to industrial market researchers. Questions of note for future research on market research in business markets include:

- How should multiple responses in group decision making situations be handled?
- What procedures are needed to ensure that cross-cultural and cross-language questionnaires are comparable?
- Will new technologies such as the Internet provide accurate and usable research?
- Will the NAILS system enable better, more usable data for developing market and sales potentials?
- How can financial modeling and other tools be integrated to facilitate more accurate market and sales potentials?

Forecasting

Forecasting applied specifically to business marketing is yet another area that has not received considerable attention. A total of only 35 articles were identified that dealt with some aspect of this topic. Despite the low number of articles, there are several distinctive research tracks in the literature.

By far the major track of research on forecasting deals with the problems of new product/service forecasting. There is a great deal of evidence to support the conventional wisdom that forecasting new products/services sales and success is much more difficult than forecasting for existing products or services. Little and More (1978), in a non-empirical work, address sales forecasting errors for new product projects. Numerous studies (e.g., Choffray, Lilien, and Yoon 1989; Scott and Kaiser 1984; Gartner and Thomas 1993; Beardslty and Mansfield 1978; Woodside, Sanderson and Brodie 1988; Thomas 1985) have consistently pointed out the difficulties with forecasting new product/service introductions.

A large track also exists on specialized forecasting techniques or forecasting in specialized markets. Specialized forecasting techniques such as the use of scenario analysis (deKluyver 1980), the use of multi-attribute value analysis to improve forecasting accuracy and the probable success of the products

(Keeney and Lilien 1987), and judgment modeling techniques in new product situations (Scott and Kaiser 1984) have all been explored. Oren and Rothkopf (1984) develop a very general and simple market dynamics model. In a non-empirical piece, Walton (1979) compared the forecasting techniques of opinion versus regression.

The markets and situations addressed include the solid state industry (Brown 1978), the telephone market (McCrohan 1978), demand for a recycling plant (Petty and Pointon 1979), forecasting in a developing country (Brasch 1978), commercial construction (Rosenberg 1982), jobs to order (Rudelius, Willis, and Hartley 1986, 1990), improving salespersons' forecasts (Cox 1989), and improving high tech forecasting (Wheeler and Shelley 1987).

Another track consists of general normative forecasting articles. Gross and Peterson (1978) examined ways to deal with the human aspects of forecasting. Herbig, Milewicz, and Golden (1993) discuss the do's and don'ts of sales forecasting. Cleary and Lanford (1978), at a more micro level, address the specific issues of technology assessment-referencing work by the economist Henry Adams and the law of acceleration as a means to understanding some of these issues. Buttner and Lanford (1980) address the basic issue of what to forecast within a technological environment. A final normative article on forecasting offers advice on using futures analysis and linking it to planning and strategy (Michman 1987).

A minor track in the forecasting area deals with forecasting accuracy. Most of the extensive body of research in this area is not business marketing specific. Business market articles include an examination of the accuracy of new product performance and forecasting (Choffray, Lilien, and Yoon 1989; Little and More 1978), evidence on the accuracy of new services forecasting (Woodside, Sanderson, and Brodie 1988), and the effectiveness of sales forecasting methods (Rothe 1978).

Summary of Forecasting Research

While some aspects of forecasting in business markets have received considerable attention in the literature, many areas remain unexplored. Almost no work has been done on the accuracy of various techniques or in comparing techniques in terms of their usefulness in different situations although Schnaars (1984) and similar articles do provide some general and valuable insights. Forecasting for new products/services is by far the most researched area, followed by forecasting in specialized markets or situations. Yet many fundamental questions remain unanswered. For example, basic issues such as the forecasting techniques most commonly used by business marketers, how longer term forecasts can be made more accurate, and the role and use of technology in improving forecasting remain unanswered. An extensive base of literature on forecasting in general appears in such journals

as The Journal of Business Forecasting and The Journal of Forecasting, which were not part of this review.

Given the evolution of shorter product and technology life cycles and the need to operate in more hypercompetitive businesses (D'Aveni 1996), research addressing the following questions may prove useful:

- Can forecasts be combined and new computer technology be utilized to routinize standard forecasting problems?
- What techniques or combination of techniques will lead to more accurate technological forecasts?
- How can the various resources, e.g., sales and marketing people, customers, secondary data, and systems be combined to provide more accurate and timely forecasts?

Market Segmentation

There has been a considerable amount of research on market segmentation. Over the years covered in this review there have been a total of 61 articles on the topic. Five of these are reviews that provide a good overview of the issues. Thomas and Wind (1982) draw and discuss empirical generalizations based on the research. Cheron and Kleinschmidt (1985), in addition to reviewing the literature, provide a framework for segmenting markets. Plank (1985b) discusses the value of the academic segmentation research to business marketers. He concludes that while providing some interesting usages of statistical techniques, it would be difficult for managers to use the research to date because it fails to provide any guidance as to implementation. Cross and Rudelius (1993) provide a brief review of both the practical and theoretical tradeoffs in market segmentation. Most of their discussion centers on understanding the role of various costs to the firm when making segmentation decisions. Finally, Wind and Thomas (1994) examine both theory and practice and provide a set of interrelated questions that managers must ask themselves in making segmentation decisions.

Based on these reviews:

- market segmentation, as a concept, is still much less prevalent in business markets than consumer markets,
- the concept is used less often even though the potential for its use is at least as great as it is in consumer markets, and
- much of the work done in business market segmentation has tended to concentrate on the technology of market segmentation rather than the actual usage and advantages gained from segmentation.

In general, the reviews cited above provide an excellent overview of the

segmentation literature in business marketing. Consequently, the remainder of this section will focus on interesting findings, specific applications, and advances in market segmentation. Gensch (1984) and Gensch, Aversa, and Moore (1990), for example, provide case study evidence on using switching costs to understand segments of industrial customers. As they point out, success at segmenting markets has clearly played an important role in the overall success of the company.

Rangan, Moriarty, and Schwartz (1992) provide guidelines for segmenting markets in mature industries. They argue that it is important to examine customer behavior for tradeoffs between price and service. Using a single company and 174 national accounts, they empirically derived four distinct segments using 12 behavioral variables, including price and service requirements.

Laughlin and Taylor (1991) discuss the need to segment based on homogeneity of response to marketing stimuli. They develop a segmentation scheme that uses response to marketing stimuli to segment markets based on customer concentration and product customization. In general, the argument has been raised that behavior-based segments are more useful than product-based segments (Dibb and Simkin 1993).

Giffith and Pol (1994) used a combination of industrial demographics to showcase their usage in micro-segmentation applications. They used a combination of SIC codes, sales, market share data and geographic data to segment markets. In an interesting application of statistical/computer technology Fish, Barnes, and Aiken (1995) demonstrate how neural nets can be used in segmentation studies.

Finally, Wind and Thomas (1994) note five questions that need to be posed:

- Should the market be segmented?
- How should the market be segmented?
- Which segments are to be selected?
- How should resources be allocated to segments?
- Can the strategy be implemented?

This final paper provides an excellent guideline for the practicing manager.

Summary of Segmentation Research

Market segmentation efforts in business markets continue to lag behind those of consumer markets. While Wind and Thomas (1994) were able to provide some excellent normative advice for segmenting business markets, the reviews of the segmentation literature clearly indicate that much remains to be done. Little progress has been made in identifying additional segmentation bases and moving beyond the more macro-levels of segmentation. For instance, developing segmentation studies around the in-

creasingly important concept of relationship marketing might prove to be a potentially powerful segmentation base/variable. The type of relationship a buyer wants with the seller suggests differences in service requirements, handling, selling, and service. Therefore, using the terminology of Laughlin and Taylor (1991), it would be expected that relationship types really impact how a company reacts to various marketing stimuli. Such research may be fruitful and provide more guidance for practicing managers.

Some interesting research questions might include:

- How can a firm incorporate field experimental segmentation research into their new product/service introductions?
- How should value be defined for purposes of segmenting business markets?
- How should relationships be defined for purposes of segmenting markets?
- How useful is the concept of switching costs for purposes of defining and segmenting markets?

Computers and Decision Support

Research in business marketing on computer usage, the development of management science models and decision support systems has been sparse. Only 74 articles have been written that deal with some aspect of this topic. Most of the research in this area consists of descriptive and normative work in the area of expert systems and work dealing with the use of information-how to get and how to use it. The remainder of the work is spread across a number of topics and is primarily descriptive or normative.

The topic of expert systems in business markets has been discussed by Steinberg and Plank (1990), Stevenson, Plath and Bush (1990) and Metzer and Goudhi (1993). In all cases the articles suggest areas where expert systems can be applied and how best to use them. To date, no empirical work has examined the actual implementation of expert systems in business marketing.

A number of authors have dealt with information collection and dissemination in a context other than marketing research. A classic article by Goretsky (1983) presents a general framework for information required for strategic planning, while one by Benjamin (1979) examines the general management of business information.

There are a number of other interesting articles on the use of information support for sales management related to this area. Stone and Good (1994) provide some empirical evidence on the use of information support for sales managers. Jagetia and Patel (1981) discuss how to develop an end-use intelligence system. Samli and Mentzer (1980) provide guidance on how to develop a general market information system. Meredith (1989) provides normative

advice on using databases. Bolfing and Schmidt (1988) discuss how to use expert database services. Binetti (1980) illustrates the use of on-line information to aid in the new product development process. Finally, Van, Doris, and Stidthey (1990) provide some advice on how to develop a database for sales leads.

Empirical work on computer usage in business marketing is meager. Research on the usage of computers in distributor marketing (Narus and Guimaraes 1987) and the increased usage of laptop computers by industrial salespeople (Moncreif, Lamb, and McKay 1991) are the exception. One general non-empirical paper on using personal computers to automate marketing activities provides an overview of using personal computers for business marketing applications (Manssen 1990).

Articles on management science models in business marketing are also sparse. Both Webster (1978b) and Brandi (1978) discussed the potential benefits of the application of management science to business marketing problems, with Brandi specifically focusing on simulation as a tool. Work by Lilien (1979) on modeling the marketing mix generated some discussion (Farris and Bussell 1980; Lilien 1980). There is also a general discussion of computer models with a case study by Arinze (1990). Choffray and Lilien (1982) have also written about a decision support model they developed for industrial product design. Steckel (1988) briefly described Pioneer, a decision support model for general industrial product planning. While not included in this review, the journal *Interfaces* provides a rich source of literature on the application of management science and similar tools to business problems, in general. An illustration of this is a piece by Gensch, Aversa, and Moore (1990) which outlines the impact of using advanced segmentation techniques on overall corporate profitability.

The implications of electronic data interchange (EDI) for business marketers has been addressed by Barrier and Morris (1987), while the impact of EDI in specific functions such as sales has been examined by Hill and Swenson (1994). The work by Barrier and Morris (1981) is somewhat unique in that it concerns the transfer of information between two or more companies, not just the use of information by one company. As is noted later in the purchasing management and buyer-seller literature discussions, changes are occurring in the fundamental approaches to how business is conducted and these changes are being driven in part by the availability and use of technologies like EDI.

Summary of Computers and Decision Support

As noted above, research in this area has been extremely limited. There was a brief flurry on computer expert systems and some attempts at computer models such as CALLPLAN (Lodish 1971). Bettis-Outland and McFarland (1998) review in detail the research activity in this area, which encompasses

sales force size modeling, resource allocation, sales force performance and compensation.

While the trade press has had numerous articles on sales automation and technology-enabled sales, there has been only limited academic research. Academic literature provides little descriptive or prescriptive information, much less assistance to firms in helping them determine when and what they should do in their sales automation activities. Among the basic questions that remain unanswered are the following questions:

- What kinds of sales automation projects are likely to provide the highest returns?
- How will these systems impact the actual sales process?

Summary of Marketing Sciences Research

The marketing sciences area has had mixed coverage. In the market research area, a significant amount of work has addressed issues in doing survey research and in improving response rates to questionnaires. Much of the work that has been done is useful to both academics and those in industry. Efforts have also been directed at addressing the methodological issues confronting business marketing researchers. There have also been a number of useful normative pieces on both doing and using marketing research, as well as work on conducting industry, competitor, and customer analysis. Of particular note in the area of customer analysis is work by Anderson, Jain, and Chintagunta (1993) that provides valuable insight into how the customer values an offering.

Forecasting issues, as they relate to business markets, as well as computers and decision support systems have received very little attention. Research on the latter could significantly benefit from an examination of best practices in industry. The Internet and its application and use by business marketers has also been overlooked.

Market segmentation, on the other hand, has received a fair amount of research attention. It continues to be important for both marketing academics and managers alike. Recent work by Wind and Thomas (1994) offers useful insights into its importance and how it can be done. The focus in much of the recent work has shifted away from showcasing statistical techniques to how it can be used to better the firm's products and services. However, while progress has been made, much needs to be done to better business marketers' understanding of segmentation and the value of doing segmentation research.

PRODUCT

This part of the review deals with research on both product and service

issues in business marketing. It begins with a review of the new products literature in business markets and then reviews the product management literature. Finally, the service and services marketing literature in business markets is examined.

New Product Development and Diffusion

New products have received considerable attention in the business marketing literature. The work falls into two major areas, namely new product/service and process success and adoption and diffusion theory in new products/services and processes.

New Product/Service and Process Success. Within the new product literature there are a number of different streams of research. One includes the normative modeling efforts that focus on identifying how to develop new products successfully. For the most part these are not based on broad empirical knowledge, although some of this work does include case studies as examples. One example is Banting (1978), who provides a case study on an unsuccessful innovation and provides some lessons from the failure. More typical of the normative studies is Merrifield (1978) who provides a model for industrial project selection and management. Lucas and Bush (1984) provide a general set of guidelines for marketing new industrial products and Bingham (1988) suggests a new product development model. Dundas and Krentler (1982) develop a critical path model for introducing new industrial products. Ford and Ryan (1981) provide a general method for taking technology to market by understanding the technology life cycle. More (1984) provides guidance on how to improve the adoption rate of new high technology products. Work by Rochford (1991) discusses generation and screening of new product ideas, while Vesey (1992) argued for the importance of speed to market and provides guidelines for speeding the product development process. Cooper (1988) suggested that predevelopment activities determine new product success and outlined those activities.

Related to the above, there have also been a number of normative articles on some specific aspect of marketing within a new products/services context. For example Rangan, Menezes, and Maier (1992) focused on issues involved in channel selection for new industrial products and offered a framework for making channel decisions. They identified eight generic channel choice factors, provided a three-step method for deriving and analyzing the factors, and illustrated the use of the framework in a business marketing application. Bello and Barczak (1990) looked at trade shows as a vehicle for improving company new product development efforts and offered guidelines on how they might be used. Dolan and Mathews (1993) looked at the research side of the equation and provided guidance on using customers for beta testing new products. A final example of this type of work is McKeown (1990), who

looked at how to get new products from new technologies and focused on the problem of going from abstract research to a marketable commodity.

Activities that lead to successful new product innovation have been studied extensively. A particular stream of literature begun by Cooper (1975) has generated well over 100 articles, most of which are empirical. Much of the work by Cooper and colleagues has been summarized in Cooper (1990, 1992), Cooper and Kleinschmidt (1995) and Johne and Snelson (1988). The work of Cooper is based on three major empirical studies employing similar methodology. Using a variety of data collection methods, respondents in the studies were asked to evaluate successful and unsuccessful new product introductions on a number of attributes. The attributes were factor analyzed and then cluster/discriminant analysis was used in examining those activities that contributed to effective new product introductions. Cooper and colleagues identified eight key factors that contributed to the success of a new product-(1) superior product with unique benefits to the customer, (2) well defined product and project prior to undertaking development, (3) technological synergy, (4) quality of execution of technological activities, (5) quality of other pre-development activities, (6) marketing synergy, (7) quality of execution of marketing activities, and (8) market attractiveness (Cooper and Kleinschmidt 1990). Montoya, Weiss, and Calantone (1994) arrived at similar conclusions in their meta-analysis.

Cooper and colleagues' empirical work, based on a project labeled New-Prod, resulted in over 20 different articles, and led to Cooper (1990) developing the Stage-Gate System Product Innovation Process. The Stage-Gate System argues that the new product development and commercialization process consists of a series of six stages from idea to full market launch and that prior to entering each subsequent stage a gate or hurdle must be passed. New product research has tended to focus on process as a whole rather than recognizing that different criteria are likely to impact the success or failure of a project at different stages.

One area which has attracted considerable attention is that of time as it relates to the new product development process. Vesey (1992) discusses speeding product development time to market, and Kortge and Okonkwo (1989) argue for simultaneous product development in order to reduce the failure rate. Mabert, Muth, and Schmenner (1992) provide six case studies on how to collapse new product development times. Hultink and Robben (1995) examined the relationship between a company's time perspective and how it measures new product success. Nijssen, Arbouw and Commandeur (1995), using a small sample of forty-one companies, examined how companies accelerate the new product development process. Taking a broader perspective, Karagozoglu and Brown (1993) examined the overall time-based philosophy of a company and its relationship to its management of the new product development process. The other major issue of time deals with first mover

advantages or in other words, when is it appropriate to be first or later in entering new markets. The great majority of this work has been done in consumer markets, but Yoon and Lilien (1990) provide an example of a study done in business markets and the work of Von Hippel (1978, 1988) on lead user analysis is also instructive.

Other aspects of the new product development process have also been studied. Haley and Goldberg (1995), using a sample of sixty-six firms, discuss how to use financial tools and examine the effect of these tools on various aspects of the new product development process. How firms integrate customer requirements into the product design process was the subject of a small sample (12) study by Bailetti and Litua (1995). McGuinness (1990) and Rochford (1991) examine new product idea generation and screening, the latter using a small response set of twenty-nine high technology firms.

Work by Cooper and deBrentani (1984) and deBrentani and Droge (1988) suggest decision support systems of various types for use in new product processes. Choffray and Lilien (1986) present a decision support system for evaluating new product launches. The NewProd system of Cooper (1992) has been developed into a decision support tool. Taking a slightly different perspective, Keeney and Lilien (1987) examine how to use multi-attribute value analyses to design new products. An early article by Howell (1980) suggests how to use the learning curve approach in designing and launching new products. Comer, O'Keefe, and Chilenskas (1980) provide an interesting discussion of the general problem of technology transfer from the government laboratory to business markets. This particular topic has been very important lately, given the change in world politics and the decline in the importance of defense markets. Much of what has been written on technology transfer is primarily in engineering and science related publications.

Another topic of research has been the use of either external or internal parties in the design, development, and launching of new products. Studies of external parties has keyed on the use of customers to help develop new ideas (von Hippel 1978) and, more recently, use of lead users in the product innovation process (von Hippel 1986; Urban and von Hippel 1988; Herstatt and von Hippel 1992). Similarly, Cardozo, Smith, and Viswanathan (1988) examined how to identify early adopters for novel products and Foxall (1989) generally examined the notion of user-initiated product innovations.

Internally, Rochford and Wotruba (1993) discuss the role of the sales force in new product development. Atuahena (1995) examines the role of purchasing in new product development, something the purchasing literature, both academic and managerial, has also dealt with. Johne (1984), using a small 16 firm sample, examines how experienced innovators organize for innovation. Rochford and Rudelius (1992) examine how using cross-functional ideas affects new product development, whereas Littler, Leverich and Bruce (1995)

specifically examine the factors that lead to collaboration in new product development. Griffin and Hauser (1992), more specifically, examine cross functional communication patterns among new product teams. Griffin and Hauser (1996) also review the general literature on integrating R&D and marketing in the new product development and suggest a number of research hypotheses. The concept of venture teams and venture departments as keys to new product development have also been discussed (Fast 1978; Fast 1979a; Fast 1979b, and Bingham and Quigley 1989) from both a conceptual as well as normative perspective. Interestingly, the business marketing literature has generated only one empirical examination of the use of venture teams or departments, namely, Barczak and Wilemon (1992), who used a sample of 114 to examine new product teams and what makes for a successful new product team leader.

Diffusion Research. Diffusion research has been extensively reviewed by Rogers (1995). While diffusion theory underlies virtually all of the new product research efforts, it is not represented to any significant extent in the business marketing literature.

Diffusion of innovations theory generally concerns itself with the communication process regarding new ideas. As Rogers (1983) has stated diffusion concerns itself with an innovation which is communicated over time among members of a social system. Marketing represents a small portion of research in this area. Much of the marketing related research has focused on the individual, especially in the consumer goods side of things. The trend in the business marketing research, however, appears to be moving to more of an organizational focus.

Kennedy (1983) provides a review of diffusion theory from a business marketing perspective. The focus of her review is primarily on organizational, environmental, and individual variables which influence adoption. She argues that marketing theory has typically focused on adoption from an economic perspective. Theory in marketing needs to incorporate a multidisciplinary approach to better explain and predict adoption behavior. A similar argument has been made by Tigert and Farivar (1981) and Bass, Krishnan, and Jain (1994) based on the Bass model (Bass 1969). Another review of the diffusion literature is provided by Ray (1988). In compiling his review, he focuses on a number of industrial processes over time. He concludes that the introduction of a new technology usually leads to improvements which widen its adaptability and make it more efficient.

Frambach (1993) offers not only a review but a model of organizational adoption and diffusion of innovations as well. Frambach argues for a model of diffusion which integrates both the demand and supply aspects of diffusion and incorporates the concepts of networks and buyer-seller dyads into diffusion research. His argument is reflected in work by a number of authors. For

example, More (1986) explicitly examined developer/adopter relationships and provided a framework that incorporated the dyad consisting of three subprocesses: development, adoption, and interfacing. Foxall (1988), using the International Marketing and Purchasing Group (IMP) methodologies, examined manufacturer and user initiated process innovation as well as vertically integrated user-initiated product innovation. Freeman (1991) discussed networks of innovators. Midgely, Morrison, and Roberts (1992) examined the impact of network structures on industrial diffusion processes.

Adoption. Research in diffusion theory is spread across a number of different disciplines and has also focused on specific industries. One area that has attracted a considerable amount of research is the study of adoption. An early example of work in this area is one by Hayward, Allen, and Masterson (1977), who developed a technique called innovation profiles for use in predicting capital goods adoption. In an industry specific study, Hayward (1978) developed profiles of adopters of flour milling innovations. In a later piece, Hayward and Masterson (1987) studied innovation of capital goods in the flour milling and baking industries and provide sales management implications.

Cohn (1980) examined managerial attitudes toward adoption and found that CEO attitudes were not related to adoption. Rabino (1983) used the notion of concept evaluation in discussing how marketers could facilitate the adoption of image systems used by art and production directors. More (1984) provided a planning framework for improving adoption rate. Robertson and Gatignon (1986) provided research propositions for organizational adoption and the effects of competition. Rosen, Schnaars, and Shani (1988) examined the impact of setting industry standards on diffusion within an industry. They argued that setting standards reduces risk of failure but also increases the risk of collusion and inefficiencies on the part of competitors. Rosenberg (1988) looked at the role of research industrial product diffusion. Harrer, Weijo, and Hattrup (1988) explored the role of change agents in a case study of irrigation equipment used by farms. Day and Herbig (1990) furnish a discussion of how the diffusion of industrial products differs from retail products. Their results suggested three fundamental differences-funding commitments, time orientation, and risk. Sinkula (1991) explored factors influencing the organizational adoption of scanner based research methods. He argued his findings were largely in agreement with the general findings discussed by Rogers (1983). Gauvin and Sinha (1993), working with a sample of 8,000 firms, looked at the adoption of computer technology. Their model of the adoption process for computer technology adds the concept of opportunities for adoption and portrays it as a two stage process with adoption being a function of both opportunities and innovativeness. Their findings, when compared to a single stage logit model, suggests the two stage model is more robust.

In a particularly interesting piece, Herbig (1991) develops a cusp catastrophe model of industrial innovation and offers a number of testable hypotheses. Catastrophe theory argues that phenomena are discontinuous and this methodology provides a method for developing and testing models that have as their assumption discontinuous relationships among variables. Kauffman and Oliva (1994) offer a solid review and example of how this method works. To date, this perspective has only received limited application in marketing (Wind 1979; Plank 1981).

International Aspects of Diffusion. There have also been several papers that have addressed international aspects of the diffusion of innovations. Chakrabarti, Feinman, and Fuentevilla (1978), for example, used a country orientation to examine how different countries compare in their ability to innovate and diffuse innovations. Abu-Ismail (1982) looked at diffusion in Kuwait. Phillips, Calantone, and Lee (1994) examined the variables of perceived ease of adoption, perceived utilities, behavioral intention, and cultural affinity on the adoption of mining technology in China. While there are some questions on measurement and scaling, the overall model fits were good and support the notion of the impact of culture on technology transfer.

Summary of New Product Research

This area has been very prolific, primarily driven by the work of Cooper and colleagues, but many other researchers have also made a significant impact. However, this area suffers from problems similar to those in the sales performance literature. Recent work by Cooper (1990) on the Stage Gate model has pointed out that new product development is a process that occurs over time. Most of the early research and much of the continuing research examines from a cross-sectional perspective the impact of various issues on the overall success of a particular product or project. However, as the stage gate process argues, different activities are likely to be more or less important at different points in time and are likely to have differential impacts at different points in time. There is a need to understand how the process impacts the output, which is different from the focus of the input-output research that has typically characterized this area. Limited work has examined specific parts of the new product process, but this work has been very narrow in scope and does not connect to the entire process. Readers should again be cautioned that much of the work on new products in business markets appears in a wide variety of journals including those of management and engineering, and that while there appears to be a great deal of overlap, some interesting perspectives appear in other literatures not covered in this review. In addition, continued work on the diffusion of innovations paradigm also crosses many disciplines and is broader than the limited coverage in the business marketing

literature. Based on the foregoing discussion, some suggested research questions follow:

- How does the degree of technology impact on the new product process and the degree of product success?
- Does the level of technology in the product/service or marketplace impact on the type of activities, behaviors, and skills necessary to successfully introduce a new product?
- What stages require which skills and activities on the part of the marketer to be successful?
- Under what conditions is it viable to introduce suppliers of products/ services into your new product development process and when should they become involved?

Product Management

The industrial product management literature has been relatively narrow in scope. Some significant work has been done examining the problem of weak products and how to eliminate them from the product mix. There have also been some efforts at modeling general product management. Industrial branding has been virtually ignored and only one paper (Easton 1978) has looked at packaging.

Weak products and their elimination has been examined at length in a series of studies by Avlonitis (1982, 1983, 1984, 1985a, 1985b, 1986a, 1986b, 1993). His work is based on two different data sets. The first data set deals primarily with the product elimination process in firms-how the process is managed, who makes the decisions, how weak products are identified, and what major factors are considered in the decision to eliminate. His latest work (1993) represents a second data set reporting factors managers consider in deciding to drop a product. Vyas (1993) provides a holistic view of the complexity of the product elimination process using a case study format, whereas Saunders and Jobber (1994) document the strategies used by companies to both simultaneously delete one product and launch its replacement.

There is a small and mostly dated stream of research dealing with industrial product managers, most of which use a comparative format with consumer product managers. Kelly and Hise (1979) and Cummings, Jackson, and Ostrom (1984) document some of the differences between the job functions. Eckles and Novotny (1984) focus on the industrial product manager, empirically defining their authority and responsibilities with a sample of 92 product managers. Dawes and Patterson (1988), using a sample of 163 respondents, examined the performance measurements of industrial and consumer product managers. Finally, Lysonski and Woodside (1989), using boundary role theory, examine conflict resolution and performance of industrial product managers using a sample of sixty-nine managers.

The general product management area includes a number of papers with somewhat different perspectives. Rao (1981) presented an early dynamic industrial product modeling article. Steckel (1988) presented Pioneer, a decision support system for industrial product planning. Jackson and Shapiro (1979), as well as Clark and Fujimoto (1990), provide general discussions of the problems of product management and offer normative guidance on how to effectively manage the process.

A number of authors, most notably Yelle (1980), Swan and Rink (1980), and Thorelli and Burnett (1981), have examined life cycles as a factor in product management. The latter used PIMS data from 1,148 businesses. More recently, Popper and Buskirk (1992) have discussed the technology life cycle as it relates to business markets, noting among other things the time shrinkage of the life cycle.

Another area that has received some research focus is the bundling/unbundling of product offerings. Such bundling and unbundling of products is very common in certain businesses, such as computers, where the sales force may actually bundle or unbundle based on their perceptions of the customer and the customer reactions to a product offering. System integrators, as an example, are companies which actually provide different bundles of hardware/software. Often a salesperson of a major supplier, such as IBM, may unbundle some of their components and bundle another company's products to provide a better fit for the customer or to conform to the customer specifications. Wilson, Weiss, and John (1990), for example, look at both bundling and unbundling of products within multi-component systems, such as a computer network system which may have many different pieces of hardware and software. Using mathematical modeling they develop a model for bundling and unbundling that considers system integration, optimality and modularity, and whether the system conforms to open standards. Paun (1993) provides a set of normative standards for determining when to bundle or unbundle products.

Brand equity, a major issue in consumer markets, has received limited attention in business markets. Saunders and Watt (1979) used a case study to determine if brand names could differentiate identical industrial products and found some examples where this has occurred. Sinclair and Seward (1988) used 368 respondents to examine the effectiveness of branding a commodity product. This paper examined branding practices in a very narrow product category, building products, and queried both manufacturers and retail distribution outlets. While there was thought to be extensive branding benefits, as perceived by both the manufacturer and the retail outlet, only a few companies realized any benefits. Using a sample of 135 companies in the UK, Shipley and Howard (1993) found that brand names are extensively used and thought to be valuable. More recently, both Mudambi (1995) and Kim et al. (1995) have suggested the need to rethink the industrial branding process. In particular, Kim et al. provide a model with propositions which suggests how brand equity is built and proposes that, in

some instances, brand equity may be as important in business markets as it is in consumer markets. The use of co-branding, a subject of growing interest in consumer markets, has not to date been examined in business markets.

Summary of Product Management

Other than the product elimination research there has been very little programmatic research in the product management literature. There has been minimal work dealing with the people involved in product management and exactly what the job entails. Much more needs to be done to define the product management process, the skills/competencies needed to do the job, as well as work examining best practices in product management. As noted, the notion of the bundling and unbundling of product offerings is a very basic strategic question that is only now being addressed in some fashion. Also noted is the potential importance of brand equity, something that is very important in consumer markets and needs to be examined in business-to-business markets.

Given the preceding comments, the following questions need to be addressed:

- How important is brand equity in business markets? If so, how can it be developed and managed?
- What are best practices in product management in business markets?
- What impact, if any, are advances in computer tools having on product management?
- What is, or should be, the role of product/brand managers in business marketing?
- What is the role of co-branding in business markets?

Services

Industrial services and/or service businesses is but a small niche in the overall arena of service businesses. Most of the service literature concerns itself with consumer products. However, industrial services can mean both a service business or the idea of service that accompanies or augments the product that is marketed. It is the latter which appears to be important in business markets since organizational buyers are generally perceived as being much more concerned with the service aspects of the products they buy than the typical consumer. The service literature in business marketing can be divided into four major areas. The first area deals with services as a strategic and a competitive weapon, both within a services business framework, but primarily as an augmentation to the product offering. A second smaller area deals with new service development. The third area, which is equally small,

deals with professional services. Finally, there is a much larger area that deals with the importance of customer service, service quality, and other tactical issues of making service happen. Each of these areas will be discussed below.

Gronroos (1979) was the first to suggest a theory for marketing industrial services. Likewise, Jackson and Cooper (1988) have argued that there are some unique aspects to the marketing activities of industrial services. The remainder of the work is primarily normative, with the only empirical effort being by Kyj (1987), who examined how companies use customer service as a competitive tool.

Roscitt and Parket (1990) argue for a model of strategic service management pointing out the importance of service strategy as a competitive weapon. Both Wagner and LaGarce (1981) and Wagner (1987) make similar arguments. Cooper and Jackson (1988) take a marketing orientation approach arguing that companies in the service sector need to be service marketing-oriented. Samli, Jacobs, and Wills (1992) discussed the pre/postsale services that are generally needed to be competitive in an international marketing environment.

With respect to new service development, deBrentani (1991, 1995) has been the primary advocate of the need for research on new industrial services. Utilizing the research methodology pioneered by Cooper (1975) in examining new product success and failure, deBrentani has examined the factors that lead to the success and failure of new product services. Another interesting small sample study was done by Woodside, Sanderson, and Brody (1988) who looked at testing the acceptance of a new industrial service-a wool testing service in New Zealand.

In terms of the marketing of professional services Gummesson (1978), in an early piece, has suggested a theoretical approach to the marketing of professional services. He defines professional services and identifies eight components which fit into three broad areas: inputs/resources, process/operations, and end product output. He essentially argues that services can be defined as an input-process-output phenomenon. Yorke (1990) using the IMP group approach to research develops a model for services marketing. More recently, Bostrom (1995) provides a large sample (398 respondents) empirical study of professional services. His approach is interesting because, in effect, he tries to ascertain what makes for a good customer of a service. Within a very narrow context, users of architectural services in Sweden, he found that architects consider people who cooperate with them to have a high degree of knowledge, good relational characteristics such as trust and honesty, and value and understand good architectural work.

The final and largest area of services research centers on efforts examining various aspects of customer service. Two important empirical pieces are Day and Barksdale (1992) and Morris and Davis (1992). The former examines how firms select a professional service. The latter looked at how firms mea-

sure and manage their customer service operations. The only other empirical piece by Morris and Fuller (1989) examined how CPA firms price their services. A number of other conceptual and managerial pieces also deserve mentioning. Gummesson (1981), following up on his theory article, developed a concept called marketing cost as applied to service firms. What he basically does in this article is take into account the fact that professional service providers play dual roles: service provider and marketer. Thus, he argues those costs must be properly apportioned. Tinsley and Lewis (1978) provide a set of normative guidelines for the general evaluation of industrial services for buyers of those services. McGuire (1986) discusses how to develop customer service policies. Coppett (1988) takes the concept of a marketing audit and discusses how to audit your customer service activities. Lynn (1986) provides a discussion and an example of segmenting a business market for a professional service. Cohen and Lee (1990) examine the importance of using spare parts and after-sales service activities to keep in touch with your customers, while Szmigin (1993) discusses how to manage the quality of your business services.

A limited number of articles have also addressed quality and its measurement. Babakus, Pedrick, and Richardson (1995) is an example of the use of SERVQUAL to measure service quality. Holmlund and Kock (1995) took a somewhat different perspective to the same topic by defining the dimensions of quality. Wetzels, DeRuyten, Lemmiah, and Keolemeijer (1995) used both SERVQUAL and a conjoint exercise to examine service quality. Kasper and Limmink (1989) examined perceptions of after-sales service quality among two groups, the service managers and the customers, and pointed out the need for objective measures of service quality. From a normative perspective, Moore and Schlegelmilch (1994) discuss how to improve service quality in business markets in general. As with the consumer services literature there is a great deal of debate on the SERVQUAL measure. The purchasing literature on evaluating suppliers seems to support the need for the development of specific measures used by the buyer to evaluate suppliers. When the supplier is a service, the evaluation schema developed by the customer, to the extent that it is used, becomes the defacto measure of service quality. The purchasing literature, however, is not well developed in this area (see Tinsley and Lewis, 1978 for an early work). The managerial literature provides many case studies of supplier evaluation schemes, but unfortunately most of them deal with products.

However, the literature would seem to suggest that the customer evaluation schema becomes the measurement tool and the content of that schema is relevant, not a generalized measurement schema such as SERVQUAL. The extent to which a generalized schema, such as SERVQUAL, fits the customer evaluation tool the more relevant it becomes.

Summary of Services

The services research agenda really breaks down to two issues, those of how to manage a service business (where the offering is a pure or mostly service offering) and the notion of the role of service in the product offering. The research in both areas is fragmented. Additional research is needed in order to assess the usefulness of SERVQUAL business markets. The fact that measurements of SERVQUAL are very mixed in terms of reliability and validity means additional research is warranted.

As has been suggested, many purchasing departments establish formal measures of supplier performance. These are, in essence, the value measures for the buying firm. Whether a marketer is dealing with products or services, the job is to comply with the necessary performance measures or to change them. Among the many potential research topics in the services area in need of additional research are the following:

- What is the relationship between product, service, quality, price, and value? In other words, what is the relationship of these constructs in business markets; does it vary across products and services? If so, why?
- How should companies go about developing a service quality measure?
- How does one develop brand equity in service businesses? Is it different than in product businesses?
- Is there a methodology for assuring an optimal product/service mix? In other words, what drives the product/service mix?

Summary of Product/Services Research

Product research has had a significant amount of effort devoted to the new product area. Cooper and colleagues have had a twenty year research program that has provided a great deal of insight into factors that impact on the success or failure of industrial products as a whole. His recent stage gate model suggests that different factors are going to vary in importance at different stages of the process and that the rules for moving from one stage to the next differ. This suggests additional research is needed to examine the linkage of factors to process stages.

Timing and new product introductions is another area that has received some attention, but is an area from which few conclusions can be drawn. A basic question companies face is whether to be first in the market. There has been some excellent and important work in the area, but further refinement is needed to provide normative advice to managers.

Product management research has been even more limited. And although there are many areas that could benefit from additional research, three in particular, stand out. The first is that of product life cycles, especially as it relates to product elimination. Given the recent environmental concerns as they relate to many products, this area clearly warrants additional attention. The second area that would benefit from additional research is the bundling and unbundling of products and services. Work is needed to understand bundling and unbundling as it relates to buyers' assessments of the value of a firm's market offerings. Finally, the third area centers on the general value of branding, brand names, and brand equity in business markets. This area has been fruitful in consumer products marketing, where the value and the changes in the value of brands and brand names is clearly evident. As noted above, other than a few studies, this entire area remains unexplored in business markets.

Services as an area of research has had a strong movement toward becoming a separate field of marketing study over the past fifteen years. Much of the research, however, has focused on consumer services and marketing to consumers.

The business marketing literature on services has seen some attempts at theoretical development but most of the empirical work has been primarily descriptive. As noted in the discussion above, service measurement seems to be fairly well refined to the extent that industrial buyers have developed formal supplier evaluation schema and many of these have service measure components. However, given the increasing importance of augmented products and the move to a more service-oriented economy, much more research is needed in this area.

PRICING

Pricing issues continue to be a major concern for many firms in business markets. Yet the pricing area has received relatively little research attention. Only 73 articles have had some sort of pricing orientation. In this section, selected empirically-based articles are examined first followed by a discussion of selected normative efforts.

Empirical Studies. The price/quality has been the focus of a limited number of studies. White (1978) examined how purchasing agents viewed the price-perceived quality relationship. In a similar vein, Lambert (1981) examined price as a quality cue in organizational buying. He found, as did others before him, that no such clear relationship exists. However, one wonders if the same results would be obtained in today's business market environment considering the movement toward single source buying, strategic buyer-seller alliances, and much more proactive and better trained buying teams. Increasingly the comment is being heard in the trade journals that quality in today's business environment is a must in order to even be considered by a vendor.

In terms of pricing setting issues, Long and Varble (1978) studied purchasing's use of flexible price contracts. Jackson and Ostrom (1979) looked at life

cycle pricing, a practice that one would expect to be more prevalent today. An interesting study by Plinke (1985) examined the pricing decision for capital goods, with specific emphasis on modeling the psychological variables as well as the cost accounting approach. Morris (1987) assessed the use of separate prices as a marketing tool. More recently, Shipley and Bourdon (1990) explored how distributors price products in competitive markets and Morris and Fuller (1989) examined the pricing of an industrial service, specifically the pricing of CPA accounting services.

Global pricing issues have been explored in three empirical articles. Abratt and Pitt (1987) examined pricing practices in two industries in South Africa. However, the external validity of their findings to other countries and industries has not been demonstrated. In another interesting international effort, Farley, Hulber, and Weinstein (1980), in a case-based study, looked at price setting in two European industrial companies.

Competitive bidding, an important pricing topic, has received few empirical efforts. Boughton (1987) provides a general look at the overall competitive bidding process. Williams and Sagarbakhshi (1988), taking a slightly different focus, examined competitive bidding in both the department of defense and in the private sector. They found a number of differences in the processes across the two business sectors.

Normative Studies. The number of normative pricing articles far exceeds that of empirical articles and covers a broad variety of pricing issues. Jain and Laric (1979) and Canum and Morgan (1991) provide a general framework for making strategic pricing decisions. A piece by Laric (1980) tried to define pricing strategies.

A number of studies have focused on the customer in price setting. Shapiro and Jackson (1978) and Jackson (1980) examine the process of pricing from the perspective of meeting consumer needs and the risk element that pricing represents to the parties. Forbes and Mehta (1981), in a classic article often quoted in segmentation work, examined the notion of value to the customer and pricing from a value to the customer perspective. In a more recent work, Thompson, Coe, and Lewis (1994) provide more detail on value computations while Kortge and Ikonkwo (1993) offer additional insights into perceived value and how to use it in pricing.

Specialty pricing situations have also received some attention. Boughton (1984), for example, examined closed bid pricing. Cavusgil (1988) examined export pricing. Weekly (1992) discussed the nature of pricing in foreign markets. The nature of pricing in the high technology product and service market is looked at in Grunenwald and Vernon (1988). Aranoff (1995) discusses the issue of transfer pricing problems, with specific discussion of the impact of demand on the actual transfer price. He basically contends that

transfer pricing between divisions is a peak load problem and thus pricing is subject to the demand state. This is the only discussion of transfer pricing.

Since the early classic on lease pricing by Anderson and Lazer (1978) and Anderson and Bird (1980), there has been little documentation on the use of leasing in business markets, a practice that is heavily used. Smith and Nagel (1994) provide an interesting and useful article on the finances of leasing and examine the use of financial analysis as a tool in developing lease prices that meet profit objectives.

From a normative standpoint, three additional articles are worth mentioning in detail. First is one by McGrath (1991) who provides a list of ten timeless truths about pricing. He argues pricing is only one part of the overall revenue generating strategy and has to be carefully tied to market share strategy. He notes that pricing always involves cost, is always related to performance, must be segment based, and is related to the investment in brand equity. He also notes that pricing must take into account distribution dynamics, can't be overly complex, that its impact must be measured, and that the implementation of pricing plans requires salespeople with good negotiation skills.

The second, by Woodside (1994), provides the first attempt at developing a pricing process map. This causal map examines the factors that drive the pricing decision as well as the impact of price on the company, market, and competition. Woodside argues that using such a model allows the user to understand multiple pricing goals, factors that impact directly and indirectly the setting of price, feedback loops and their impact on performance, and organizes the pricing process so continuous learning occurs. He then provides a case study on pricing a new industrial product in New Zealand and how the use of the model increases our understanding of the process.

The third article of note is by Kijewski and Yoon (1990) who take the idea of a price performance curve and broaden it to a market-based price performance analysis. This is essentially value-based pricing and they demonstrate the algorithm using hypothetical data from the computer microprocessor industry. Finally, it should be noted that several very interesting articles by Irv Gross have addressed value pricing and are available from the Institute for the Study of Business Markets at Penn State.

Summary of Pricing Research

In summary, pricing continues to be an area in need of research. Historically most of the writing on pricing has come from the economic literature and been theoretical in orientation. Much of the literature on consumer pricing in business journals is behavioral and perceptual in its approach to understanding pricing. On the other hand, organizational buyers and buying processes are typically thought of as more rational. However, that rationality is not always

economic in nature or completely financially-based. In fact, understanding the concept of value, both from an academic perspective as well as a practitioner perspective, is one of the major struggles all people involved in business marketing face. The few studies that have been process- and case-based (Farley, Hulbert, and Weinstein 1980; Woodside 1994) have shown this.

A major trend in business is value-based pricing (e.g., Anderson, Jain, and Chintagunta 1993). The value being discussed, however, may not be just for the buyer or seller, but for the entire supply chain The supply chain can be viewed not only as a logistics concept or as another term for value chain but as a strategic concept where competitive advantage comes from the members of the supply chain, not the individual firm. This, however, is a difficult concept in practice for most firms. Ethnographic process-oriented approaches to this problem seem to be the most appropriate research perspective at this time, not only to understand how it might work, but also how to get companies to think in those terms. This trend appears to be just beginning.

Work also has to be done within a process framework to understand special pricing problems, such as how to use leases, how to bid, and what the unique problems are in pricing in specialized markets. Pricing is a strategic undertaking and the process needs to be better understood. The notion of processes is rapidly becoming the way practitioners think about how they do their jobs and the newest text in business marketing (Anderson and Narus 1999) has a decidedly process and value framework.

Pricing processes and the impact of price as it relates to organizational buying processes is critically under researched. The organizational buying literature has typically given buyers a listing of attributes and asked them to order these attributes in terms of importance (see Wilson 1994 for a review) and, in most cases, pricing has not been the most important factor. For example, Dickson (1966), Lehman and O'Shaughnessy (1974), Dempsey (1978), Lehman and O'Shaughnessy (1982), Evans (1982), and Wilson (1994) have all examined price as an attribute and found it not to be the most important. Wilson, based on her data, even suggests price is becoming less important. However, recent quasi-experimental research reported by Donath (1998), on research conducted by James C. Anderson and James Thompson, indicates that buyers still use initial purchase price as a major determinant of their decision making. The issue, of course, is what are the value mechanisms buying group members use and how does that relate to how pricing should be conducted by the firm. As noted by Anderson, Jain, and Chintagunta (1993), all value thinking eventually is reduced to monetary terms, the question becomes how is that computed. Wilson (1994) is probably correct that purchase price may not be a very important factor in many cases, however, Donath (1998), reporting on Anderson and Thompson, is obviously also

correct in that there are many situations where price is the primary factor. Future research has to determine how value is computed and when purchase price is likely to be the surrogate used for value.

We suggest that it is reasonable to assume that price, both in the short or long term, can serve as an underlying fundamental definition of value for purchase situations. However, the exact way in which a particular firm calculates values may take many forms. Companies may also consider all direct and indirect costs, short term and long term, to determine value (value in use or lifetime overall cost). They may also focus on some other attribute, such as quality for instance, that is not necessarily a price-related variable. They may also choose to take a supply chain perspective.

Among the many questions and issues related to pricing in business markets that need to be examined, the following offer some useful avenues for further research:

- How can and should companies react to target pricing initiatives?
- How can marketers change the price objective of the customer from initial price to long term overall price or life cycle cost?
- How does consideration of supply chain partners affect the pricing process in a firm?

DISTRIBUTION

This section is divided into two parts. The first will deal with channel management-the management of the buying-selling system-in business markets. The second will deal with logistics in the management of physical distribution systems.

Channel Management

The channel management literature has four main thrusts. One focuses on industrial distributors, a second smaller one focuses on manufacturers' reps and agents, and the remaining two deal with the behavioral aspects of channels and general channel management.

Distributors. The work on distribution as an institution and the management and problems of distribution in business writings is limited. Michman (1980) pointed out a number of general trends including evidence of consolidation in distribution. The author also noted changes in selling, service requirements, and the problems of small distributors in competing in some markets. In an empirical piece, Narus, Reddy, and Pinchak (1984) identified typical problems industrial distributors face. Inventory return policies were the biggest and most consistent manufacturer-distributor problem. In a similar but more narrowly focused empirical piece, Shipley (1987) examined problems that distributors of engineered products in England have with their manufacturer partners. He found the biggest problems involved deliveries, pricing policies, the existence of house accounts, competition, poor planning and working relationships with the manufacturer, and poor sales support by manufacturer salespeople. A more recent case study in the British Chemical Industry examined the advantages and disadvantages of distribution (Brown and Herring 1995). The authors suggest that the advantages outweigh the disadvantages except for high technology and/or high volume customers and with a small number of customers buying commodity products. Such advice

appears pretty consistent with what is generally practiced. While there are other contributions, most are very narrow in focus and tangential to the problems of distributors.

Manufacturers' Reps and Agents. The work on manufacturers' reps or agents is even more limited. An early work by Sibley and Teas (1979), based on responses from 202 manufacturers' reps who belonged to state associations of manufacturers' reps, examined factors differentiating good from bad relationships between a manufacturer's rep and their principle. The authors found that the most important variable was sales support on the part of the manufacturer followed by communication and organization by and between the representative and the principle. Bellizzi and Glacken (1986) describe how a manufacturer can build a better rep organization. They provide guidelines which include developing a long term commitment, providing good training and orientation, making it easy for reps to make money, and being honest with reps among others. In a similar but more narrow piece, Mehr (1992) provides advice about how to find reps, suggesting a matching process and using customers or potential customers to help identify the best potential representatives.

Behavioral Issues. The behavioral aspects of channels has a long and rich history dating from the 1960s and the work of Louis Stem and his doctoral students. Much of the early work focused on conflict and its resolution as well as power and its use and abuse. More recently, Frazier (1983) has suggested more of a process framework suggesting that interorganizational exchanges can be framed in terms of an initiation process, an implementation process, and a review process. The Dwyer, Schurr, and Oh (1987) relationships model takes a somewhat similar perspective.

While behavioral literature and empirical testing has continued to expand, the focus has shifted to the increasing complexity of the models tested rather than new theoretical perspectives or constructs. The work is characterized by a broad variety of sampling frames and contexts. Ford (1978) used scenarios to examine what factors led to stability in channels. He found that power and clear role expectations were the biggest contributors to channel stability. In another early study, Sibley and Michie (1981) using a sample from the farm equipment industry, found that using non-coercive sources of power were much more likely to result in high dealer performance than using coercive power. A more recent study by Frazier and Rody (1991) suggested the use of reciprocity in terms of influence and found support for different sources of power. A study of franchisees and franchisors in the fast food business (Dant and Schul 1992) indicated problem-solving to be the most general model of conflict resolution. Purohit and Staelin (1994), utilizing a student sample in a simulation, found support, in terms of power usage, for a relational model of

behavior with asymmetrical power relationships and increased usage of rewards, promises, and information as non-coercive strategies.

New types of models are also being developed. Weitz and Jap (1995) state that relationship management in distribution channels is no longer a power and conflict issue as such, but more of an issue of relationships between firms based on contractual and control systems. These authors suggest a set of factors that lead toward the changes in interest and propose a schema for researching channel relationships based on contractual and normative control mechanisms.

Distributor motivation has also received some attention. Rosenbloom (1978), in a normative piece, suggests how to motivate distributors by identifying their needs, offering support, and providing leadership. Such advice is probably as true today as it was then. Shipley (1984), in an empirical study, found more similarities than differences in the motives of U.S. versus U.K. distributors. McGrath and Hardy (1989) provided case studies of how to support and motivate distributors. The authors found that different sizes of distributors had different needs and wants and therefore should be motivated differently. The differences were very significant. For example, the larger distributors neither needed nor desired manufacturer training or lead generation, whereas smaller distributors valued these factors highly.

There has also been some work in channel partnerships. The most important is by Anderson and Narus (1990), who developed a complex model of working partnerships. They found that higher levels of communication and cooperation among the partners lead to more trust and reduced conflict, thus increasing the parties' satisfaction with the relationship. Much of the research on buyer-seller relationships, while not in the context of a principal and their intermediary, applies to work in the channels area. And, in fact, while we have not been explicit in our discussion of buyer-seller relationships in that section, the work of Weitz and Jap (1995) is applicable to how those relationships, i.e., supplier to a manufacturing company supplying a production part, may be categorized also. Obviously there are a number of competing theoretical paradigms.

Channel Management. The general channel management literature has been fairly prolific. There have been several discussions of channel design and management (McGrath and Hardy 1987; Powers 1989) and problems that can arise (e.g., Hlavacek and McCuistion 1983; Moriarty and Moran 1990; Cespedes and Corey 1990; and McGrath and Hardy 1992).

Three articles are of particular note. Rangan, Menezes, and Maier (1992) provide a comprehensive set of guidelines for channel design. They list eight generic channel functions (product information, product customization, product quality, lot size, assortment, availability, after sales service, and logistics) and discuss the importance of each function within direct or indirect chan-

nels. They also stress two other issues, adaptability and constraints, which are critical in channel design. A second interesting and valuable article, especially for managers, is one by McGrath and Hardy (1987). They identify six critical pitfalls (bypassing channels, over saturation, too many links in the chain, new channels, cost-cutters, and inconsistencies) that almost always lead to conflict and suggest ways to avoid each pitfall. The final paper of note is by Mohr and Nevin (1990), who develop a theoretical approach to understanding communication in marketing channels. They postulate that channel structure, climate, and power conditions, when combined with communication strategies, lead to qualitative outcomes such as coordination, satisfaction, and commitment, as well as better performance.

Summary of Channel Research

Progress has been made in understanding channels in the past twenty years, but there remain a significant number of unanswered questions. While there is evidence that behavioral models have increased in complexity, the empirical research continues to be fragmented; there is little evidence of multiple context studies. Behavioral measures have improved, but there is little research to show for it. The recent work in partnerships appears promising and reinforces findings from previous studies such as, for example, the finding that communication and non-coercive power are conducive to trust among the parties and leads to more satisfaction on the part of both parties.

There is limited work on distributors or other marketing intermediaries and almost nothing on manufacturers' reps. There are some good managerial discussions on channel management, but a limited amount on the selection of channel partners. Again, as with the behavioral stream, much of this is informative, but so fragmented as to be difficult to offer much guidance to managers.

Channel management still requires a great deal of descriptive work. Work in the area of defining distribution partners, such as distributors and manufacturers' sales agents, is minimal. The behavioral issues are well researched, although as noted earlier, are narrow in scope and context. The work on partnerships provides interesting insights about the make-up of channel relationships. There is good normative material on how to think through the channels of distribution problem, but little empirical work which actually supports the issues raised.

Among the additional questions in need of research are the following:

- How have channel responsibilities among channel members evolved over the past decade and how are they likely to continue to evolve?
- How will the continuing use of technology, such as Enterprise Resource Planning (ERP) programs and Internet efforts, impact on traditional channel relationships?

- What kinds of conflict within distribution channel relationships are negative and are there any positive aspects to channel relationship conflict?
- Who does use and abuse of power in distribution channels lead to both intermediate outcomes such as trust between partners and how does that impact on the quality of the relationship and the ultimate satisfaction of the parties in the relationship?
- Should principle-distribution relationships be empirically defined differently than buyer-seller relationships?

Logistics and Physical Distribution

As noted earlier, logistics and physical distribution are more specialized fields of inquiry and have a number of targeted journals that tend to be the primary outlets for this research. Consequently, not much is published in the general business marketing literature. Of the eighteen articles on this topic found in the business marketing literature, six provide some particularly useful insights. Terplitz (1982) provided an early look at the shifting of inventories from manufacturer to middleman and suggested a system view to determine location and amount of inventory. Stock and LaLonde (1978), in an interesting buyer behavior-oriented research study, examined how shippers buy from amongst transportation alternatives. The authors provide a switching model for changing from common to contract carriers. The work definitely is a forerunner of the more contemporary outsourcing and third party supplier idea. While not explicit, the notion of switching costs was inherent in their work. In a study of transportation brokers, Johnson and Schneider (1995) examine the outsourcing of logistics and argue for the general importance of this type of service. There are many companies, typically referred to as third party logistics companies, who will provide a variety of services within an outsourcing framework. In a more specialized work Mentzer (1986) provides normative advice on how to systematize problems associated with empty backhauls to produce less empty backhauls and thus lower total logistics cost. This is an historic problem in transportation, a firm ships a truckload out and then has to get the rolling stock (tractor and trailer) back. Obviously, the firm wants to generate revenue on that return trip.

In a different vein, Tinsley and Ormsby (1988) provide the first and only article in the business marketing literature on the nature of DRP (Distribution Resource Planning) and its importance to business marketers. The authors explain the interface between manufacturing, distribution, and marketing and discuss linkages to MRP systems. In the recent academic and practitioner literature in computing, a major focus has been on the development and use of so-called enterprise software packages, i.e., software that provides the backbone for all other software to integrate into. DRP is more generally a part

of ERP (enterprise resource planning). A major goal of the software is to assist in this process within the company and often across the supply chain. On a broader level, Hise (1995) examined international logistics strategies as elements for competing in time compressed environments. Clearly with the obvious rise of more international competition and more companies doing international business, logistics takes on a decidedly international and strategic orientation in order to be competitive.

Summary of Logistics and Physical Distribution

As noted earlier, most work in this area appears to be published in specialty journals. However, the work noted above clearly indicates the importance of this area of marketing. Time and place utility for most consumers comes from the logistic activities of firms. It appears that information technology and other types of technology have had a tremendous impact on the logistics activities of many firms and this is reflected to some extent in the literature reviewed here, but is much more evident in the specialty academic and practitioner outlets for logistics.

The following are likely research questions that may be of interest to business marketing professionals and researchers:

- How can logistics thinking help create synergy in buyer-seller relationships?
- How can logistics activities and planning best be integrated into business marketing planning?
- How can creative marketers use logistical advantage to create competitive advantage?
- How can third party logistics activities best be coordinated to achieve superior supply chain integration?

Summary of Distribution Research

While distribution is an important issue in marketing regardless of whether it is consumer or business-to-business, it has generally had less coverage in business marketing literature than other topical areas. This is perhaps due in part to the availability of specialty publications in this area.

Behavioral channel issues, of which there has historically been much research, have progressed only slightly since the early work dating back to the 1960s and 1970s. Some more complex models have been presented and newer measures developed, but the research has continued to be fragmented. Most promising in this area is the work on partnerships. An additional theoretical perspective, that of communication and its role in the channel, has

room for much development and testing. Conflict, and subsequent good and bad outcomes, needs more study, as does the role of power, sources and types, in channel relationships. Literature on motivating partners from the perspective of the manufacturer is also somewhat fragmented.

Literature on logistics in business marketing publications is minimal, but much progress has been made in identifying best practices. Over the past twenty years much has changed in how leading edge companies handle their inventory issues, how they handle materials, how they use transportation, and how logistics functions are integrated within the firm and between firms to form a more competitive system. Logistics is moving rapidly toward a supply chain or value chain framework as more companies recognize the value of integrating their time and place utility activities with those of their supplier and distribution partners. The concept of supply chain management has the ability to integrate distribution and logistics, but even that concept has several different perspectives which are not in agreement.

MARKETING COMMUNICATIONS

This final review section deals with the topics within the area of promotion. We begin by examining the work done in advertising, sales promotion, public relations, and general promotion. We then examine the selling and sales management literature which has been done in a business marketing context.

Advertising

The topic of advertising includes work which generally encompasses the use of some paid medium other than salespeople to deliver messages. Not surprisingly, the work in this area follows much of the work done in consumer advertising studies. The research in advertising appears to be somewhat sparse and not at all programmatic. Several basic streams of work are evident in advertising research.

Advertising performance/effectiveness is the basic theme of about four-teen articles-almost all empirical. This work is only minimally programmatic with many issues being addressed including copy and layout (e.g., Bellizzi and Mohr 1984; Soley 1986, 1990; Chambley and Sandler 1992; Bellizzi, Minas and Norvell 1994), comparative advertising (e.g., Stevenson and Swayne 1984, 1988; Swayne and Stevenson 1987), headline type (Soley and Reid 1983), print advertisement readability (Clark, Kaminski, and Grown 1990), humor in business advertising (McCullough and Taylor 1993), use of color in print ads (Huang 1993), advertising in supplier directories (Lehman

and Steckel 1985), and advertising in high technology industries (Traynor and Traynor 1989). Of the above work, that by Stevenson and Swayne and Soley and colleagues is clearly the most programmatic.

Advertising budgeting practices have been studied by a number of authors (e.g., Blasko and Patti 1984 and Lynch and Hooley 1987, 1989). This appears to build, at least in part, on work done by Lilien and colleagues (e.g., Lilien et al. 1976; Lilien and Little 1976, and Lilien 1979) on the ADVISOR budgeting and performance model. This particular model is unique to the business marketing arena, but follows in principle similar models developed over the years for consumer advertising budgets.

Ad testing has also been addressed in business markets. Work by Abeele and Butaye (1980) dealt with pretesting; Wilson, Bennett and Couchman (1985) looked at the overall effectiveness of advertisements; and Zinkhan (1986) discussed the various methods of copy testing. The paper by Zinkhan is most notable for its normative perspective. The author argues that the type of commercial, degree of risk and objective of the commercial dictate the appropriate copy test. While consumer copy testing techniques cannot be used without caution, research seems to indicate there is some overlap, such as attitude toward the ad and the context.

Normative papers include work by Burke et al. (1990), who discuss the development of expert systems in advertising design; Bellizzi and Hite (1986), who talk about how to improve copy; Hunmer and Ruppert (1988), who discuss how to select an advertising agency; Maizel (1988), who specifically examines how to use cooperative advertising in commodity markets; and Bellizzi and Lehrer (1983), who generally discuss how to get more from business advertising investment. Probably the most comprehensive statement on creating business advertising is that of Rogers (1995). This particular article not only provides an excellent pragmatic normative overview of advertising creation, but also offers testable hypotheses. Unfortunately, most of these remain untested. The most recent and comprehensive normative statement and review of various advertising issues is offered by Lichtenthal and Ducoffe (1994). Again, this article provides some excellent material for developing and testing specific hypotheses relating to the advertising process in business markets.

In addition to the above work, only limited attention has been given to women and minorities in business-to-business advertising (e.g., Easton and Toner 1983; Stevenson 1991). One area that has received surprisingly limited discussion is that of advertising strategy. Only one paper by Glover, Hartley, and Patti (1989) examines the issue-their paper takes a very narrow scope and looks specifically at how advertising message strategies are set.

Summary of Advertising Research

In summary, the work in the area of business advertising lacks any clear programmatic direction. While some work has been done in the area of advertising effectiveness that has provided normative direction, there is very little that could be considered a cohesive stream of research. Most advertising research continues to be focused on end consumers. While there have been several papers which furnish some normative insights into the practice of advertising in business markets, little is known, even from a descriptive perspective, about how the work is actually done. One wonders, as Paustian (1996) so aptly put it, why business-to-business advertising is the black sheep of marketing communications. This is especially puzzling given that it is estimated that in 1995 total marketing communications expenditures were \$138 billion. Of that, business-to-business advertising is estimated at \$51.7 billion or 37.4% of the total expenditures (Paustian 1996). Kosek (1996), providing more detail, notes that the average business-to-business advertising budget was \$4.6 million, although the figure ranged considerably by industry. Given these expenditures, the research and publication activity in this area is clearly insufficient. At a minimum, given the level of business-to-business advertising expenditures and the pressure to justify marketing expenditures, research is needed in assessing the contribution of business advertising expenditures to the goals of the organization and their impact/fit with other promotional efforts such as selling.

Of interest is the recent growth in what is called integrative communications. While this work strictly focuses on advertising and mostly in consumer markets and generally ignores the sales communication process, the concept of integrating all communications makes sense from a pragmatic perspective. Some interesting research questions dealing with advertising in business markets might include:

- Using experimentation, what are the costs and benefits of integrative communications in business markets?
- How can business-to-business advertising be made more efficient and how can we better measure efficiency and effectiveness?
- How can we better integrate advertising and selling in business marketing efforts?
- How is electronic commerce likely to impact on both the role of business advertising and how it relates to the rest of the marketing mix?

Sales Promotion

Sales promotion is typically considered a supplementary promotional tool covering a wide range of activities such as trade shows, catalogs, personal inducements, contests, ancillary materials, and trade advertising. Standard consumer sales promotion tools such as coupons and tent sales are rarely, if ever, used by business marketers and have limited applicability (Plank and Fernandes 1985; Cooke and Marian 1992).

The work in sales promotion focuses on two primary areas: personal inducements and trade shows. Personal inducements refers to the practice of using business lunches, advertising specialties, sporting and entertainment tickets, gifts, and other items to support buyer-seller relations (Dempsey, Bushman, and Plank 1980). Work in this area derives from, among others, Webster and Wind (1973), who called it aggrandizement, and Halvorson and Rudelius (1977), who specifically examined business lunches. Much of the work in personal inducements has been descriptive with only limited instances of work of a prescriptive nature. Madden and Caballero (1987) and Cooke, Smith, and Van Doren (1989), for example, have both examined and prescribed how to use specialty advertising. Finn and Moncreif (1985) empirically examined entertainment, while Hite and Bellizzi (1987) examined entertainment and gifts. Trawick, Swan, and Rink (1989) and Bird (1989) examined aspects of gifts and gift giving. Plank and Greene (1987) examined the usage of inducements from the perspective of the giver (i.e, the sales person/management) rather than buyers. Plank and Greene (1990) subsequently argued that this practice needs to be incorporated into theory development in organizational buying/selling. Later work by Plank, Reid, and Greene (1992) also reviewed the literature and offered managerial suggestions for both sides of the exchange.

Plank, Reid, and Greene (1992) estimate \$60 billion of personal inducement usage within the United States, suggesting that these activities are fairly pervasive. The current status of personal inducement activities is probably best indicated by Pye (1995). Her analysis points to increasing resistance to these activities, but plenty of usage just the same. There are few theoretical articles dealing with personal inducements. Strutton, Pelton, and Lumpkin (1995) have examined the notion of inducements as ingratiating behaviors in sales, building on one of the influence mix categories developed by Spiro and Perreault (1979). This particular line of research provides a theoretical perspective for understanding this activity as was noted by Plank and Greene (1990). However, in spite of the obvious research activity, there has been little theoretical linkage of these activities to organizational buyer behavior theory or to buyer-seller relationships. In fact, business marketing textbooks generally do not discuss this area of sales promotion or these issues.

Trade shows, like personal inducements, received virtually no academic study prior to the 1980s. However, there are now over 25 references to research on trade shows. The research increase parallels statistics from the Trade Show Bureau that show usage increasing as companies realize the

value of the medium (1994). The literature on trade shows generally consists of either empirical pieces, primarily descriptive, or prescriptive pieces dealing with how to use trade shows. Most of the literature is primarily U.S. based, but a significant number of pieces have been written about doing trade shows in foreign locations or for exporting (e.g., Bello and Barksdale 1989; O'Hara, Palumbo, and Herbig 1993). Examples of prescriptive pieces include Bonoma (1983); Hawes (1984); Bellizzi and Lipps (1984); Sahsi and Perretty (1992); and Shoham (1992). These prescriptive pieces all suggest that trade shows are very useful promotional devices for business marketers when properly managed.

A number of empirical articles stand out for their contribution to our knowledge about trade shows. Young (1987) provides a good picture of the breadth of trade show practice. Work by Kerin and Cron (1987) examined aspects of financing and the performance of trade shows, while Gopalakrishna and Williams (1992) examined the planning and performance assessment of exhibitors. Kijewski, Yoon and Young (1993) provided evidence on how exhibitors actually select trade shows. Lilien (1983) empirically derived the trade show decision process. Bello and Barksdale (1989) examined how companies use trade shows for export. Bello (1992) also examined trade show buyer behavior and provided managerial implications based on his findings. Tanner and Chonko (1995) examined the development of trade show objectives and how shows are managed and staffed. In addition, there have been several review-oriented papers (e.g., Witt and Rao 1989; Kijewski 1990; Rosson and Seringhaus 1995).

Trade show research to-date has provided researchers and managers alike with numerous normative and prescriptive insights. The research clearly demonstrates that trade show usage is broad and comprehensive, crossing all industries, and is used by both large and small companies. The art of selecting and operating during trade shows appears to be well developed by the larger firms and those firms with a great deal of experience.

Few companies seem to have a handle on the value or return for their dollars spent at trade shows. This appears to be because of the difficulty of identifying and tracking the impact of the impressions made during the show and the lack of cooperation among various members of the firm in getting this done. However, Gopolakrishna and Lilien (1995) and Gopalakrishna, Lilien, Williams, and Sequeira (1995) have developed modeling techniques which provide tremendous insight into the value of trade shows. In fact, Gopolakrishna, Lilien, Williams, and Sequeira (1995) provide a method to compute the ROI for a single product in a single trade show, considering both direct and indirect effects. Their methodology, while not inexpensive, provides a model for trade show managers to use in assessing their own trade shows' effectiveness.

Beyond the areas of personal inducements and trade shows, three other

sales promotion articles are also of particular interest. The first, Glover (1991), examines the attitudes of medical supply distributors toward manufacturer promotions. Although narrow in scope, the research points out that in choosing forms of sales promotion both the customer and the distribution partner need to be considered. Two other articles examine the value of direct mail promotions. One, by Chakrabarti, Feinman, and Fuentevilla (1981), is a normative piece that discusses the targeting of technical information to organizational positions, i.e., people in the buying center by title. The other, by Vredenbury and Droge (1987), discusses the value of company newsletters and magazines.

Summary of Sales Promotion Research

In summary, research into sales promotion has dealt heavily with both the use of trade shows and personal inducements as techniques. Our knowledge of trade shows is becoming well developed both descriptively and prescriptively. Little or no research has examined the value and impact of brochures and such common techniques as spiffs used in distribution sales, or the general use of sales incentives to either company or distributors' salespeople. Theory development and linkages of business-to-business promotions and the notion of integrated marketing communication is minimal. The use of personal inducements is well documented, but little or no work has really examined whether or not they are useful and why. While some progress has been made in the area of sales promotion, in general, theoretical linkages and theory building are in their infancy. Some interesting questions might include:

- What effect will the new technology have on traditional sales promotion activity such as catalogs?
- What are best practices of business marketing companies in using electronic commerce for sales promotion activities?
- What is the value of trade shows, under what conditions, and how can we get more value from this activity?
- How can we better integrate and measure the added value of sales promotion activity?

Public Relations

Virtually no work has been done in assessing the role of public relations as it relates to business marketing. There is one non-empirical descriptive article by Williams (1983) and a major review piece by Williams and Gopalakrishna (1994), but no attention has been paid to how it does or should fit into the overall promotional mix in business markets. Some research on corporate

image has been conducted. Dowling (1986) wrote a general piece on how to manage corporate image. Vos (1987) is somewhat more explicit, describing how to build an image for a service firm. And Sims (1979) has the only empirical piece which deals with measuring the image of a firm and is a good example of how to conduct research in this area.

Three other articles are of interest. The first, by Tongren (1979), examines the use and power of public relations in the selling of nuclear power. The second, by Rabino and Moore (1989), discusses the management of new product announcements in the computer industry. And finally, in a more general piece on products, Williams (1988) writes about the benefits of product publicity.

Summary of Public Relations Research

In summary, little is known about how business marketers handle their public relations, and little theory building in this area. Basic issues of similarity/difference with publicity in consumer markets and what, if any, emphasis is put on the use of public relations techniques have not been explored. Perhaps this is a reflection of marketing in general, which seems to treat public relations, at best, as a distant cousin. In fact, public relations is seldom the major thrust of articles in marketing journals, is rarely part of any marketing curriculum, and seems to have been ceded to communication or journalism departments at many universities. How much money business marketers spend on public relations, how important it is to them, and how they integrate it into their promotions mix are mostly unknown. Clearly, this is an area in need of further research. Some interesting questions might include:

- What are the costs and benefits of public relations campaigns? How
 does one measure those costs and benefits?
- How should public relations be integrated into overall promotional planning in business markets?
- What is the current state of public relations best practices among business marketing companies?
- What is the role of the public relations function in handling crises?

General Promotion

General promotion includes promotional techniques as well as discussions of promotional strategy and the integration of various promotional techniques. These articles typically address multiple promotional elements as opposed to the previous promotion articles that addressed one particular element. Several small thematic areas of research are evident.

The first and most commonly researched topic here is telemarketing. Coppett and Voorhees (1983); Moncreif, Lamb, and Dielman (1986); and Moncreif, Shipp, Lamb, and Cravens (1989) provide normative advice on how to use telemarketing to supplement the sales force, while Marshall and Vredenburg (1988) and Zibrun (1987) provide empirical support for how to do that.

The next area focuses on comparing the effects of different promotional elements. Indicative of this research is Parasuraman (1981), who did an early comparison of the relative importance of different promotional tools. He found peer recommendations and personal selling to be the most important, followed by trade shows. Park, Roth, and Jacques (1988) examined, within a single company advertising program, the impact of advertising and promotion from the perspective of direct communications effects and indirect salesfacilitating communication effects. Their findings suggest that direct communication effects are perceived to have the smallest market impact. From a more normative perspective, Powers (1989) discussed conditions under which increasing sales promotion versus adding salespeople is the most appropriate strategy. Ghingold (1988), in a normative work, attempted to bridge theory and practice in the sales/promotion allocation decision.

There have been two general theory/review articles. Schurr (1982) suggested ways to develop marketing communications theory. Galper and Lilien (1982) presented a review of the field with suggestions for future research.

Interestingly, word of mouth has only been addressed by Wheiler (1987), who specifically looked at referrals between professional service providers. Other than the articles mentioned, using and managing word of mouth has not been addressed during the time frame included in this review.

Two other neglected areas are lead tracking and direct mail. Despite its importance, only Gwynn (1987) has discussed lead tracking. His paper demonstrates how to use a survey methodology to develop and handle sales leads. Only Sims and Brown (1979) who talked about increasing the role of direct mail in marketing strategy, and Hozier and Robles (1985) who examined direct mail response factors for an industrial service, have dealt with direct mail. Only Lichtenthal, Sikri and Folk (1989) have examined teleprospecting.

An important piece of work that defies easy categorization is one by Yoon and Kijewski (1995) on the brand awareness to preference link. While this study was done in a very narrow industry, semiconductor manufacturing, it provides the first empirical work on linking how much awareness is necessary (about 10%) before meaningful additions can be made to brand preference. Their rather simple model basically states that communication activities lead to brand awareness which lead to brand preference and finally brand choice. The findings suggest the minimum amount of awareness building that must be done prior to any significant sales results. Another important, although controversial finding, is that brand awareness programs tend to

yield increasing returns to scale over time, not decreasing as is normally found. Perhaps this was because brand awareness in general was so low for most brands studied.

Summary of General Promotion Research

In summary, it appears that while widely accepted, the idea of integrated communications has attracted little research attention. For example, the only major empirical piece that examines the synergy of the various promotional activities is Moriarty and Spekman (1984). They found that different information sources have more or less value and importance at different stages of the purchasing process. In addition, they found interactions among the sources which as they note "provides compelling evidence for a comprehensive promotional plan that includes several different communications vehicles." While there have been some discussions of various additional communication/promotion issues, the coverage has been limited on several important topics such as the use of telemarketing and completely missing on others such as direct mail as a communication tool. Theory building articles in this area are virtually nonexistent. As with almost every other area, there appears to be no programmatic research.

Interesting questions for future research include:

- What have we learned about telemarketing that may be applicable to the new forms of electronic commerce?
- What are best practices in lead tracking and how does it contribute to better selling and company performance?
- When is direct marketing, in any of its forms, appropriate and how is it best done?
- How do the various promotional elements in a business-to-business marketing communication mix interact?
- Under what circumstances do certain combinations of promotional elements provide better responses and better meet promotional goals?
- How powerful is word-of-mouth activities in business-to-business activities, where does it occur and how can it be harnessed to get positive benefit and minimize negative effects?

Personal Selling

The literature on personal selling in business markets, as in consumer markets, is extensive. The most frequently researched area in sales over the past twenty years has been that of sales performance.

Sales Performance. Based on the framework of Walker, Churchill, and

Ford (1977), Churchill, Ford, Hartley, and Walker (1985) provide a metaanalysis of some 116 studies on sales performance. They examined empirical findings on the impact of aptitude, skill, motivation, role, personal factors, and organizational environmental factors on performance-identifying 1653 separate findings in the six categories relating to sales performance. Many of these findings were based on industrial sales data. However, the percentage of actual business-to-business selling studies examined was not provided. While the authors are careful to point out the limitations of meta-analyses, the findings indicate that no single variable accounts for a very large proportion of the variance in performance. Role variables had the strongest association; organizational and environmental factors the weakest. However, when accounting for sampling error, the *real variation* rankings were personal factors, skill, role variables, aptitude, motivation, and organizational/environmental factors.

A second major stream of research on sales performance is based on the modeling work of Weitz (1981), later expanded by Weitz, Sujan, and Sujan (1986). Their theoretical perspective, commonly referred to as adaptive selling, emphasizes the importance of the sales process and argues for adaptiveness as a framework for examining the process. Weitz and his colleagues suggest a contingency framework and define sales effectiveness across customer interactions as a function of the salesperson's resources, the nature of the buying task, the customer-salesperson relationship, and interactions among these variables. A follow-up conceptual article (Weitz, Sujan, and Sujan 1986) reconceptualizing adaptive behavior and its relationship to knowledge and motivation led to some significant empirical work on the impact of knowledge on both adaptive selling and sales performance. Empirical adaptive selling research has examined psychological adaptiveness (Goolsby, Lagace, and Boorom 1992), counselor selling or overall adaptation (DeCormier and Jobber 1993), communication style (Miles, Arnold, and Nash 1990; Mayo, Lee, and Reck 1991; Bowers and Rich 1991), and the impact of organizational characteristics on the adaptiveness of the sales force (Vinh and Verbeke 1993). However, an overall conceptual framework for what is meant by adaptiveness is still not apparent from the literature.

Sales behaviors have been studied for their link to sales performance. Lamont and Lundstrom (1974), Moncreif (1986), and Weilbaker (1990) used the types of sales behaviors performed to differentiate sales positions, while Behrmann and Perreault (1982) developed a behaviorally-oriented measure of sales performance. A number of authors (e.g., Chonko 1986, Bartkus, Peterson and Bellinger 1989, Lavenka and Jung 1991, Roberts, Lapidus, and Chonko 1994) have examined salesperson effort as it relates to aspects of sales performance. Roberts, Lapidus, and Chonko (1994), in particular, found strong evidence that sales effort impacts on sales performance. Their mea-

surement of sales effort was a general three item scale measuring the quantity of the work performed. Research on sales performance by Plank and Reid (1994) expanded on the concept of sales behaviors as playing a pivotal role in understanding sales performance. They identify two major types of sales behaviors, customer interaction and noncustomer interaction, and note that the quality of performance of those sales behaviors may be more important than how often they are performed.

Trust has always been thought to be a very important factor in sales performance. Prior to the 1980s no empirical work had investigated the relationship between trust of the salesperson and sales success. The last twenty years, however, has seen work by Schurr and Ozanne (1985); Swan and Nolan (1985); Swan, Trawick, and Silva (1985); Swan and Trawick (1987); Swan, Trawick, Rink, and Roberts (1988); Hawes, Mast and Swan (1989); Henthorne, LaTour and Williams (1992); and Bejou, Wray, and Ingram (1996)-all examining various aspects of trust within the buyer/seller dyad. Findings from this research clearly demonstrate the importance of trust in effective buyer and seller relationships. It should be noted that the trust literature spans at least ten disciplines and that much of the work in other disciplines, such as management and social psychology, overlaps and adds to what we know about trust in the selling environment. Interested readers should review a special issue of the Academy of Management Review (Vol. 23, No. 3 1998) for additional literature on trust within and between organizations and for examples of the linkages suggested above.

Learning/Knowledge. Work in the area of salesperson learning/knowledge includes scripts (Leigh and McGraw 1989), declarative knowledge (Szymanski 1988), client evaluation cues (Szymanski and Churchill 1990), customer knowledge acquisition (Weitz 1978; Lambert, Marmorstein, and Sharma 1990; Gordon, Calantone, di Benedetto, and Kaminski 1993), and knowledge of the customer's customer (Smith and Owens 1995). The findings from these studies suggest that salespeople with more knowledge, broader scripts, and more developed evaluation schema are more successful.

Work has also examined the notion of working smarter versus harder and efficiency and effectiveness from a knowledge perspective (Sujan, Weitz, and Sujan 1988; Sujan, Weitz, and Kumar 1994). Only limited work, however, by Gengler, Howard and Zolner (1995) and Plank and Greene (1996) using personal construct theory as a theoretical basis has looked into the why of knowledge development. Knowles, Grove, and Keck (1994) on signal detection theory, another theory of perception, and by Nickels, Everitt, and Klein (1983) on neurolinguistic programming (NLP) may also prove useful in understanding the role of learning/knowledge.

Research (e.g., Johnston, Hair, and Boles 1989; Ingram, Schwepter, and Hutson 1992; Morris, LaForge and Allen 1994) has also studied the reasons

salespeople fail. Both Ingram, Schwepter, and Hutson (1992) and Morris, LaForge and Allen (1994) found overlapping behavioral causes of failure. Despite its obvious value, this area remains relatively unexplored.

Influence and Persuasion. Despite its obvious importance, surprisingly little work has addressed the general topic of influence and persuasion in business-to-business sales and, specifically, their impact on sales performance. The most significant research on influence was by Spiro and Perreault (1979). They identified types of influence strategies (specifically, expert, legitimate, referent, ingratiation, and impression management) and examined the mix of specific types used by salespeople in different situations. The research indicated that salespeople used different combinations of these influence types and that other situational variables, such as personal relationship, type of product/service, and purchase type, influenced how the influence types were combined. While offering interesting opportunities for additional research, this area has failed to attract any further research efforts.

Work on persuasion has not fared much better. Funkhouser (1983) presented a theoretical perspective referred to as the action theory of persuasion which was defined as "a process of information management aimed at engineering those decisions," the decisions being the actions by the persuader. Schmitz (1995) suggested the elaboration likelihood model. The elaboration likelihood model argues that high or low consumer involvement dictates or drives the degree of elaboration of processing a consumer is likely to use for purchase decision making. This particular model has been extensively used in consumer behavior studies, but only Schmitz applied it to business marketing situations. In general, the impact of persuasion and influence has been assumed, but has not been the focal point of sales research.

Integrative Selling. Recent research in business-to-business sales has focused on sales teams, teamwork, and coordinating sales efforts in general. Cespedes (1992) argued that the increasing use of key account selling, team selling, and the like, makes coordination an important issue. Based on a cross sectional study of salespeople and managers in four companies, he found that factors such as the complexity of the sale and the length of product life cycle drive coordination issues. He suggests three sets of sales coordination issues that deal with the sales/account personnel, the nature of the control systems, and the environment of the sale. Cespedes, Doyle, and Freedman (1989) provide some case histories on team selling and the general problem of coordination. El Ansary, Zabrishke, and Browning (1993) have also empirically examined teamwork. Their work, done with paper wholesaling sales forces, found two significant dimensions: strong salesperson manager participation and strong customer support. Both Smith and Barclay (1993) and Moon and Armstrong (1994) have ongoing major research efforts into team selling based on conceptual models they have developed.

It should be noted that team selling and teamwork can have somewhat different meanings. Team selling can merely refer to the salesperson as the quarterback of the sales team or selling center of the organization. This view is reflected in work by Hutt, Johnston, and Ronchetto (1985), who develop the concept of a selling center and its relationships with the customer buying center. Sales teams can also refer to the teaming of salespeople in different companies to formulate a solution for the customer, a practice that has a long history in the computer business. Key or major account selling is also often associated with team selling research.

Key account systems, where major or key accounts are assigned to specific salespeople or groups of salespeople, are fairly common. However, while clearly important, key/major accounts have received little research attention in the academic journals. In business markets, both Barrett (1986) and Pardo, Salle, and Spencer (1995) have examined key account selling, the former making a case for the customer-driven nature of why key account selling works, namely that customers require it, and the latter in a case study format showing how it may be effective. Interested readers should be aware of the work done in Europe, specifically Great Britain, in this area; a good starting point is Milman and Wilson (1995).

In summary, it is clear that coordination, team selling, teamwork, and key account research is still in the early stages of development. Other than some descriptive work, some very imaginative and potentially fruitful theorizing, and a large amount of anecdotal data from industry journals, little is known about what works or why. As a consequence, little normative guidance is available.

Sales Theory Development. In addition to the above, there have been a number of proposed models of selling. Williams, Spiro and Fine (1990) extend and rethink a communication interaction model first developed by Spiro, Perreault and Reynolds (1977). This model notes that most communication research in sales has emphasized content, but that communication code (verbal and nonverbal expressions), communication rules (pertaining to structure and content), communication style, and matching and adapting to the buyer are also important. Plank and Dempsey (1980) adapted the Webster and Wind (1972) organizational buying behavior model and applied it to organizational selling, arguing that salespeople needed to understand facets of organizational buying behavior in order to sell to organizations. Finally, a model by George, Kelly, and Marshall (1986) focused on the selling of services.

There has been little written on the relationship of sales planning and similar activities to sales performance. In their conceptual model of sales performance, Plank and Reid (1994) note noncustomer interaction sales behaviors, including planning and managing time, are very important to sales

performance. Yet, empirical work in this area is extremely limited. Only Weeks, Chonko, and Kahle (1990) provide some indication of the impact of salespeople's time use on performance.

Women in Sales. Women in business-to-business sales has also been the subject of several studies. Traditionally, industrial sales has been a male dominated profession, however, research by Swan and Futrell (1978), Kennedy and Lawton (1990), Schul and Wren (1992), Jolson and Comer (1992), and Siguaw and Honeycutt (1995) have documented an increase in the number of women in industrial sales as well as some gender differences in performance.

Other Personal Selling Research. Perhaps because of the supposed "rational" buyer view of organizational buying behavior, only limited research has examined emotions and the use of emotion in business-to-business sales. Shoham and Friestad (1993) discuss this in a more abstract fashion while Wagel (1985) is more explicit in a normative piece on using humor in selling.

Finally, Narus and Anderson (1986) provide an interesting and informative empirical piece on industrial distributor selling, examining both inside and outside salespeople. Their findings indicate the inside salesperson, as anecdotal information suggests, is very important and used in many industries.

Summary of Personal Selling Research

The literature on personal selling is extensive and diverse. At the same time, research in this area is changing. While sales performance continues to be an important topic the focus is moving toward examining sales processes and linking the behaviors involved to performance. A salesperson-oriented, single actor methodology, rather than a dyadic one continues to dominate in the research. However, there is increasing literature on the dyadic approach. In addition, analysis has moved from simple linkages of personal variables such as skill and personality to performance to analysis that recognizes the role and importance of mediating and moderating variables such as sales situation and sales behaviors.

Another change is the growing use of integrative selling. Such issues as selling centers, teamwork within the selling center, and the forging of teams of competing companies to better meet customer needs, are clearly ones which managers are grappling with in today's business markets. While some early and important descriptive work has been done, as well as a few normative efforts, programmatic research in this area remains to be seen.

There have been some important advances in theory development. The basic models of Walker, Churchill, and Ford (1977) and Weitz (1981) and colleagues have set the stage and recent efforts to integrate these models have provided additional insights into the behavior-performance relationship. Theory building has also emerged in the areas of scripts and knowledge and

their relationship to performance. While there are many issues covered in this research area, there are some very basic questions that still need examination. Adaptive selling is an important construct, but it has never been comprehensively defined. At a macro level, it can be described as the ability of the salesperson to adapt to the needs of the person or firm they are selling to. At a micro level, however, the answer is not as clear. For example, what is it that is being adapted-is it communication content, communication style, formulation of the benefit package, some combination, or something else? A clearer theoretical definition of adaptive selling should also result in better measures of the construct.

Research is also needed in defining what is meant by a relationship and the level at which it is being viewed (e.g., salesperson-buyer level or company-company level). For example, a salesperson can have a relationship with the buyer, for example, and the two companies as well can be said to have a relationship. Recent empirical work by Iccobucci and Ostrom (1996) represents a first effort at addressing these issues. Work is also needed to address the stages involved in relationship development (Dwyer, Schurr, and Oh 1987; Wilson 1995) and how they impact sales performance.

One other issue which seems appropriate to address is the notion of value selling, value-added selling that are so common in the managerial trade literature. The notion of value and how buyers judge the value of an offering, is the most critical component for the marketing of business-to-business goods and services. Value-added selling, in our estimation, addresses how do we convince the buyer that things other than the basic product or service have value and should be considered by the buyer when purchasing the product or service. At a very simple level, the salesperson can sell based on price, the basic product or service, attempt to upgrade the buyer's perception of value by selling additional services, or by pointing out other issues that provide value to the buyer. This kind of conceptualization may be valuable in future sales performance research since the skills and behaviors needed to bring to the situation may differ.

Some interesting questions might include:

- What traits, abilities, and skills link to the behavior-performance model and thus can predict sales success within that theoretical perspective?
- How does the relationship between buyer and seller moderate or otherwise impact on what it takes for successful selling?
- What kinds of behaviors, rather than traits, are most predictive of selling performance?
- How does the channel arrangement, direct or indirect, impact on the overall sales effectiveness of a company sales force?
- What is the role of creative thinking in sales performance?

 How can salespeople best identify both the value orientation of the buyer and the most effective value proposition to present to the buyer?

Sales Training

Sales training as an area has had only limited coverage in the academic literature. Most of the work on sales training has been done by non-academics and has been published in two managerially-oriented, non-academic journals (*Training and Development Journal* and *Training*) that, as previously noted, are not included in this review. The academic work in this area can basically be grouped into descriptive empirical studies and prescriptive non-empirical studies.

Descriptive empirical studies are quite common. Erffmeyer, Russ and Hair (1991) documented how companies assess their need for training and how they evaluate the training results. Honeycutt and colleagues (e.g., Honeycutt, Ford, and Tanner 1994; Honeycutt and Stevenson 1989; Honeycutt, Howe, and Ingram 1993) assessed who does sales training, how sales training programs are evaluated, and the shortcomings of sales training programs. Peterson (1990) examined sales managers' perceptions of the effectiveness of various sales training methods. He found that well conceived objectives, relevant content, appropriate techniques, trainer skill, and who is trained were all factors that led to successful sales training. Russ, Hair, Erffmeyer and Easterling (1989) examined the usage and perceived effectiveness of high tech approaches to sales training. In a slightly different twist, McQuiston and Walters (1989) looked at the evaluative criteria of industrial buyers and drew implications for training from that analysis. Finally, Puri (1993) identified managements' perceptions of where sales training is weak. Implications of these findings for sales training were: (1) the need to establish formal sales training programs, (2) training programs must be geared to customers, (3) managing time and territory is critical, (4) relating to customers is important, and (5) product knowledge, while important, needs to be integrated with sales situations. With respect to the fifth point, what Puri seems to be suggesting is that knowledge is not much use unless salespeople are trained in how to use it.

There are only a few prescriptive non-empirical articles on sales training. Dubinsky (1981) addressed the impact of sales training on sales performance. He suggested that the psychological impact of sales training needs to be investigated as well as the salesperson's productivity. Kaminski and Clark (1987) addressed the readability of sales training manuals while Kortge (1993) made an argument for linking sales training to the product life cycle.

Summary of Sales Training Research

The academic business marketing literature does not adequately reflect the importance of sales training. This is a research area that needs more attention.

There have been no attempts at theory development or establishing linkages between sales training and other aspects of sales or the promotion/marketing mix. Well documented case studies are also lacking. The major storehouse of literature is contained in the yearly papers written by members of the Professional Society for Sales and Marketing Training (SMT), which documents some aspect of training among member companies. Currently those reports are stored in the Business Research Library at Indiana State University. Not only is this material useful in terms of understanding the training function as it occurs in industry, but many of the techniques and ideas discussed are applicable to academic classrooms. Given the state of affairs, the following questions warrant further consideration:

- What do we mean by effective sales training?
- How do we define and measure sales training goals?
- What are current best practices in sales training?
- What kinds of sales training bring the most dividends to a company and when and under what conditions?

Sales Motivation and Rewards

Most of the research dealing with motivation and rewards in sales/sales management is based on the theoretical framework developed by Walker, Churchill, and Ford (1977). Their work was based on that of Campbell, Dunnette, Lawler, and Weick (1970) who built on the expectancy motivation theory developed by Vroom (1964). Thus, the major theme throughout this literature is the use of expectancy motivation theory as the motivational base.

The original work by Walker, Churchill, and Ford (1977) argued that motivation was linked to performance, which was linked to rewards, which, in turn, affected the satisfaction of the salesperson. Satisfaction, as well as the performance-reward relationship, subsequently feedback to motivation. Motivation, as they saw it, began with effort expended by the salesperson which was predicted by an expectancy theory framework. The authors developed a series of propositions relating to the various aspects.

Most of the propositions developed by Walker, Churchill, and Ford (1977) have subsequently been tested, at least in part, within the context of business-to-business sales. Sager and Johnston (1989), Ingram, Lee, and Skinner (1989), and Bushaw and Grant (1994) have all examined the notion of work or organizational commitment within the Churchill, Walker, and Ford (1977) framework. LaGace (1990) dealt with salesperson socialization, while Kohli and Jaworski (1994) examined the idea of coworker feedback and its impact on role perceptions, performance, and satisfaction of salespeople. Comer (1985) examined sales managers within the framework. Dubinsky, Yammerino, and Jolson (1994), on the other hand, looked at the impact of closeness of

supervision on salesperson performance within the framework. Finally, Futrell (1980) examined differences between salesmen and saleswomen in relation to job satisfaction. The few studies that have deviated from expectancy theory perspective include Berl, Powell, and Williamson (1984) and Shipley and Kiely (1988) who have examined sales motivation and rewards using the Hertzberg two-factor theory of motivation. Berl, Williamson and Powell (1984) used Maslow's hierarchy to understand motivation in the sales setting.

A number of authors have attempted to provide normative advice on motivation practices. Demarjian (1984), for example, argued for a multidimensional approach. He develops what he refers to as the MADAM-T model to provide sales managers with a monitoring device to evaluate their subordinates' state of motivation in a dynamically changing environment. The argument is that the sales manager can then tailor motivation techniques on a more individualistic basis rather than relying on a single technique to motivate all salespeople. Berry and Abrahamsen (1981) discuss how motivational techniques should vary across three different types of salespeople. Their argument is that all salespeople fall into three groups and that within these groups, salespeople motivated in the same manner. Related to motivation, Abratt and Smythe (1989) surveyed a small sample of companies and came up with a description of sales incentives programs in use.

There has been a number of discussions on the nature of compensation or reward systems. A number of studies have examined compensation plans within the framework of either reward valences or monetary incentives (Churchill, Ford, and Walker 1979; Dubinsky and Ingram 1983; Tyagi and Block 1983). Darmon (1982) argued for the need to link compensation plans to the objectives of both management and salespeople. Cespedes (1990) discussed the design compensation plans. Wotruba, Macfie, and Colletti (1991), building on Cespedes, empirically examined various types of sales force recognition plans.

Summary of Sales Motivation and Rewards Research

Much of the work in the area of sales motivation and rewards has not been done within the context of business-to-business sales, and thus is not within the boundaries of this review. It is clear from the literature that salespeople need to be motivated to increase effort, that the motivation is or can be controlled by sales management to some degree, and that the resulting improvements in performance and satisfaction lead to lower turnover rates, reinforced motivation, and increased effort. One neglected area is research that assesses and addresses the quality of the salesperson's effort. Both Sujan, Weitz, and Sujan (1988) and Plank and Reid (1994) have argued that effort, in and of itself, is not sufficient and that quality of effort is likely to have a greater impact on effectiveness. The recent research by Kohli and Jaworski

(1994) on impact of coworkers' is important for the new team selling orientations that are taking place. Overall, we know a lot more about motivating and compensating salespeople effectively than we did twenty years ago, but there is much to be dealt with.

This area has been well researched, mainly from the perspective of expectancy theory. A number of areas such as role conflict and role ambiguity and the problems with those issues (e.g., stress and propensity to leave) have been explored in considerable detail. However, as with other sales research, this area also suffers from a lack of a process perspective. A classic work by Cron (1984) on the sales career life cycle and work on stress and burnout by Sager (1994), Singh, Goolsby and Rhoads (1994), and Verbeke (1997) provides insight into the time and process aspects of the phenomenon.

Compensation is still an issue for most companies-how much to pay salespeople, what is too little and what is too much, and how much does one have to pay to attract the kinds of people who will do the job well. There is a tremendous literature in management and psychology that deals with this issue in various contexts, but the anecdotal literature from the trade press still indicates that there are more questions than answers. Only limited research has been done on how we reward teams and when is it appropriate. But as sales becomes more complex, more team selling is bound to evolve, making this a very relevant question. Additional issues in need of research include:

- When is a team approach appropriate, what are best practices with regards to sales teams?
- How effective and appropriate are various types of sales contests in the longer run and what are best practices?
- How can job analysis and job descriptions reduce role conflict and ambiguity and how could they, how are they, and how should they be done?
- What kinds of guidelines should be used to determine the most appropriate forms of compensation to use in specific situations?

General Sales Management

General sales management includes work addressing the planning, organizing, directing, and controlling of a firm's sales force. One general review exists, that of Johnston and Boles (1994), and readers are urged to review that as it is insightful. Topics discussed by Johnston and Boles include the link of organizational buying to sales management, selection and training, evaluating and compensating salespeople, effects of supervision, primarily on role perceptions, and a brief review of sales performance and the buyer-seller interface.

Salesperson Performance and Evaluation. A major topic of study in sales management has been how to evaluate the performance of salespeople. There

have been essentially two areas of inquiry. One is the empirical examination of how sales management is conducted and what impacts on how it is done and the other is prescriptive work aimed at providing guidance to practicing sales managers.

The primary empirical contributions revolve around the work of Anderson and Oliver (1987), Oliver and Anderson (1994, 1995), and Cravens, Ingram, La Forge, and Young (1993), who examine the issue of evaluating sales performance using outcome or behaviorally-based evaluation systems. Their work is in line with the increasing trend in sales performance to focus on behaviors as mediators of sales performance. While their work primarily represents descriptive or theory driven efforts to understand the system types and when they are used, it is also potentially very prescriptive. Their findings indicate that decisions about evaluation, supervision, and compensation are all interrelated. Obviously, the cultures of companies are both impacted by and/or represented by the evaluation systems. Some companies are outcome control-oriented, others are behaviorally-oriented, and many are hybrids of both types. It is reasonable to suspect that hybrid systems are likely to be the most effective for many firms.

As would be expected, the evaluation system, coupled with supervision and compensation, has an impact on the amount and character of effort expended. The choice of evaluation systems, combined with supervisory styles and compensation plans, also clearly impacts the salesperson selection process, as different people are likely to prefer different processes and work better in one or the other. Oliver and Anderson (1995) stop short of suggesting any particular system or combination, and instead suggest that many variables are likely to moderate the effectiveness of the performance evaluation system used. While this is true, normatively, those factors may be grouped around the notions of efficiency and effectiveness. As has been shown by consulting company research, some businesses are more responsive to efficiency and others are more responsive to effectiveness (DeVincentis and Kotcher 1995). This is, in fact, in line with and supported by recent work on sales culture and managing that culture by Jackson and Tax (1995).

In addition to the work specifically dealing with evaluating sales performance, there have been a number of articles that have taken a broad perspective of sales management as it relates to evaluation. Jackson, Ostrom, and Evans (1982) looked at evaluating business marketing activities that included some basic sales management functions, while Johnston and Shields (1983) examined specifically the evaluation of new salespeople. A descriptive view was also provided by Jackson, Keith, and Schlacter (1983) who looked at current sales evaluation practices across various types of companies. In an early article, Futrell and Schul (1978) examined the relationship of sales management control to performance. Later work by Futrell, Parasuraman and

Sager (1983) examined sales force evaluation through an expectancy framework. Taking a slightly different perspective, Patton and King (1985) examined the use of human judgment models in the evaluation process. More recently, Jackson, Schlacter, and Wolfe (1995) reexamined the findings of the study done by Jackson, Keith and Schlacter (1983). They found substantial differences, namely, lesser use of sales as a base, more use of profit, and some substantial decreases in the use of qualitative factors such as planning ability or time management. Their study also incorporated measures that were not included in the previous study such as selling expense versus budget, overall expenses, resourcefulness and team player which had substantial indications of usage in the evaluation process.

As one would expect, there are a number of primarily normative papers. Berry (1987), for example, provides guidance for computing performance ratios. While Boles, Donthu, and Lohtia (1995) provide an example of how to use Data Envelopment Analysis (DEA), a newer statistical technique to perform sales force evaluation. DEA is an operations research methodology that computes a single efficiency rating from multiple inputs and outputs. In effect, it allows the creation of a single comparative efficiency measure within the bounds of Pareto optimality. The authors show how the technique can be used to compare a group of salespeople against one another and, using the concept of sensitivity analysis, show how managerial recommendations can be developed. Muczyk and Gable (1987) provide a comprehensive discussion of the development and use of a performance appraisal system. Locander and Staples (1978) provide an excellent discussion of using behaviorally-anchored rating scales, an important methodology in behavioral performance systems.

Other Sales Management Issues. Another interesting stream of research concerns the allocation and the use of resources. Included are topics such as routing salespeople, determining sales force size, allocating sales calls, defining sales territories. Historically, there has been a lot of literature on defining the size of the sales force and routing consumer goods salespeople. These topic areas have been subjected to numerous model building exercises. Yet, very little research on those topics has been in business marketing (Ferguson 1980; Meridan 1982). However, led by David Cravens, Raymond LaForge and their colleagues, there has been an extensive discussion of the general problem of sales force deployment (LaForge and Cravens 1982; Cravens and LaForge 1983; LaForge, Young, and Hamm 1983; LaForge, Cravens, and Young 1986; Cravens and LaForge 1986; and Cravens, Moncrief, Lamb, and Dielman 1990). This work has suggested four types of models-single factor, portfolio, judgment-based, and empirical-as methods for account effort allocation. Models which incorporate multiple factors would seem to be most useful. The movement toward more behavioral kinds of performance analysis, most of which has never been incorporated in most quantitative models, argues in favor of the multiple factor models.

Very little has been done in the areas of hiring and firing of salespeople. Given the attention this topic receives in the trade/managerial journals, one would expect a large researched base. Most of what has been done appears in the personnel journals and in many of the mainstream psychology journals rather than marketing-oriented journals. Of the work appearing in the business marketing journals, early discussions by Darmon and Shapiro (1980) suggested that recruitment of salespeople was important. Johnston and Cooper (1981) looked at the sales force selection process using a case study approach. They found that, using conjoint analysis, they could model the rankings of the specific sales manager with some accuracy. They also found that at different phases of the hiring process, different factors were emphasized and that hiring was an iterative, not perfectly sequential, process. On an international note, Avlonitis, Boyle, and Kovremenoc (1986) empirically examined the matching of salespeople jobs using a European sample. Glisan and Hawes (1990) recognized the importance of creativity in selling and discussed how to select creative salespeople. Using a fairly diverse sample, Dubinsky and Ingram (1983) examined first line management qualifications. An interesting discussion from the management side was offered by Guest and Meric (1989), who examined the selection criteria used for promotion from selling to first level sales management using a sample of Fortune 500 firms. Other articles of interest include one by Munson and Spivey (1980) on selection processes that meet the federal guidelines for employment practices and a recent piece by Swift, Wayland, and Wayland (1994) on the impact of the ADA of 1990 on hiring and supervision practices of sales managers. Finally, Sager (1990) provides an empirical piece on the topic of retaining salespeople.

While currently a popular topic, the relationship between sales and leadership has received limited attention over the years. Early work by Lysonski and Johnson (1983) used role theory to examine boundary spanning by the sales manager. Hite and Bellizzi (1986); Hite (1990); Butler and Reese (1991); and Dubinsky, Yammarino, Jolson, and Spangler (1995) have looked at one or more leadership theories and empirically tested the fit. The previously mentioned conceptual piece by Jackson and Tax (1995) on managing sales culture also provided some insights into the limited sales leadership literature.

Summary of General Sales Management Research

The sales management area encompasses a great many topics that have received varying levels of attention. Evaluation systems have received broad coverage. The study of behavioral versus output systems continues to be an interesting and important research stream. Sales force deployment has moved in a new direction with the recognition of the overlap of many issues. Howev-

er, many areas remain under-researched. There has been little done in the employment area or in the various aspects of sales management performance. Very little has been done using international perspectives or international samples. Exceptions are Hill and Allaway (1993) who empirically show how companies manage foreign sales forces, Honeycutt and Ford (1995) who provide some normative guidelines for managing an international sales force, and Edwards, Cummings and Schlachter (1984) who discussed employment appraisal from an international perspective. However, Cravens and colleagues have done some work in the area of international sales management, mainly testing concepts developed in the US in other countries, and continue to do so (e.g., Cravens et al. 1992; Babakus et al. 1996). First level sales skills and behaviors have received almost no research, other than some empirical work on what companies look at for promotion. Issues involved in restructuring the sales force, something that is becoming far more common as the pace of change in the marketplace has increased, have been mostly ignored. The impact of the whole quality movement has also been ignored in the sales literature. Only one general paper (Ellis and Raymond 1993) has discussed sales force quality and there has been nothing to date on TQM and selling (it should be noted that at the time this article was being written a special issue of The Journal of Marketing Theory and Practice was being planned on this topic). Sales force automation, seemingly very important, has had some limited discussion in the general sales literature, but not to any extent within the context of business markets. Of the few articles on sales force automation, Hill and Swenson (1994) looked at the impact of electronic data exchange on the sales function and several articles dealt with expert systems. Despite the vast amount of literature to date on general sales management, there continue to be numerous research opportunities in this area. The following questions should be of interest to researchers:

- What are current best industry practices in sales performance and effectiveness evaluation?
- How do significant others such as inside sales and technical people affect the sales process and how should they be integrated into the sales management process? Any best practices?
- What leadership models are being used by business marketers in the sales management function and how much thought has been given by the firm in this area?
- How does the field sales manager and senior sales management best institute change?

Summary of Marketing Communications Research

As would be expected, given the importance and the amount of money spent on sales, communication issues in business marketing have tended to focus around the sales function. Progress has been made in understanding sales performance, clearly a very difficult area. Progress has also been made in understanding the motivation of salespeople and, to some extent, managers (at least within an expectancy theory framework): The remainder of the sales and sales management field is much weaker. There has been almost no research in the areas of sales training, TQM and the application of the quality philosophy to sales and sales management. Work in sales and sales management has not been process-driven, either in academic research, or business practice.

Work in public relations, as previously noted, is basically nonexistent. Advertising and sales promotion have received some attention. Both topics provide rich descriptive work, if not theory. Sales promotion research has focused primarily on trade shows and the use of personal inducements in the sales process. Advertising, while studied more broadly, suffers from a lack of programmatic research.

While progress has been uneven, marketing communications research has made substantial contributions to our understanding of business marketing. The vast number of descriptive works have provided a solid foundation upon which to build theory.

SUMMARY

Over twenty years have passed since Frederick Webster (Webster 1978) asked the question "has industrial marketing come of age?" Our answer, were he to ask this question today, is a resounding yes! Business marketing now has three journals devoted to the field, two more than was the case in 1978. Major conferences now regularly have dedicated tracks on business marketing. In addition, there have been several special conferences devoted exclusively to business marketing and business marketing has its own Special Interest Group within the American Marketing Association. The number of people publishing has also increased, with over one hundred authors that have published at least three articles in the field. The increased research has also increased the subject's stature and presence in undergraduate and graduate course offerings at many colleges and universities.

As with marketing in general, business marketing spans many topical areas. Throughout our analysis we have provided suggestions for future research and made comments on the state of research on business marketing. Table 5 summarizes the field's shortages and surpluses based on the literature reviewed and the authors' interpretation of that literature. As shown in the Table we feel there are far more shortages than surpluses in our understanding of business marketing, despite the significant advances made in the field in the past twenty years. We do not believe that we are generally at the stage where we have tested one or more particular theories extensively enough that further research could not yield additional insights and knowledge.

While there is considerable breadth in extant research, the limited amount of programmatic research has left many areas vastly underexplored. Even in those areas where there has been considerable programmatic research, such as expectancy theory in sales management, topics such as role issues and sales behaviors continue to have many unanswered questions.

Research Issues

The field has clearly taken many great strides since 1978. In compiling the database of business marketing literature for this study, a total of 2,194 articles were identified, and of those 1,288 were found to be empirical. With respect to empirical research, a number of methodological issues need to be addressed. For example, despite repeated calls over the years for more longitudinal studies and varied data collection methods, empirical research continues to be dominated by cross-sectional survey designs, mostly collected using the mail questionnaires. Few efforts have been made in using or developing other methods of obtaining data or conducting research. Also, much of the research has assumed a "black box" or input-output type of perspective when in fact a time-based, process perspective may have more accurately captured the true nature of the phenomenon being studied. Little headway has also been made in the area of multiple respondent data collection and analysis that is so crucial to expanding our understanding of organizational buying behavior and buyer-seller relationships. Over the years, the reviews of OBB, in particular, have repeatedly pointed out various methodological problems. The problems identified have been remarkably similar from review to review. Yet most of these problems, as their continuing reappearance in the reviews over the years would suggest, have not been addressed. Existing research notwithstanding, it can certainly be questioned whether one truly understands how a firm made its purchase decision, when several people were involved, but only one person's perceptions were obtained for the study. Similarly, can we truly understand buyer-seller relationships by only talking to one of the parties involved in the relationship? What is the effect of this "missing information" on the results we have obtained to date? This situation is further exacerbated by the lack of replication efforts which makes these questions extremely difficult to answer and also makes it difficult to draw many cause and effect inferences with any degree of confidence. And while many acknowledge these points, the fact remains that these issues continue to be ignored. These are challenging issues but certainly issues that once addressed will have a significant impact on the advancement of the field of business marketing.

It was somewhat surprising and frustrating that many of the earlier empirical articles we examined failed to adequately report specifics on the sample frame and respondents, thus making it difficult, if not impossible, to judge the external validity of the particular research. Scaling problems were also pres-

TABLE 5. Research Shortages and Surpluses

Shortages

Methodological Issues

Programmatic research
Longitudinal research
Experimental research
Multiple sample research
Sample reporting
Validation of measure reporting
Process oriented research
Middle range theory testing
International research

International research methodology

<u>Surpluses</u>

Methodological Issues

Static cross-sectional research
"Black box" research (in general)
Organizational buyer behavior models
"Black box" sales performance research
"Black box" new product/service research
Mail survey response

Topical Issues

Industrial response modeling Strategic alliances Intraorganizational coordination Interorganizational coordination Best practices in countertrade International ethics perspectives Teaching business marketing JIT II, barter, and target pricing

Impact and effectiveness of integrated supply

Best practices of supplier evaluation

Defining buying value

Defining business-to-business relationships Value definition for services and service

Using segmentation

Evaluating segmentation alternatives

Using alternative survey collection techniques

Sales automation

New product process

People aspects of product management

Value and pricing Pricing process

Supply chain management

Distribution alternatives

Empirical support of distribution alternatives

Impact of advertising

Integration of advertising and other promotion

Public relations

Impact of catalogs and other sales promotion Marketing budget to performance relationship

Behavioral aspects of sales performance

Sales training impact and process Linkage of skills to sales behaviors to performance

Best practices in sales compensation

Using technology to market

Team selling and teamwork in selling

Sales leadership

Integrated aspects of sales management

Topical Issues

Trade show descriptives Countertrade descriptives ent and continue to persist. Many multiple item scales are used without adequately addressing reliability and validity issues beyond coefficient alpha, and in some cases even that information is not provided. Thus, the reader has no way of assessing the validity of the scale or whether it is actually measuring the same construct(s). Such problems make comparisons between studies questionable. Recent work has been much better and, as was noted, may be due to the large increase in the use of structural equation modeling reported in the last ten years that deals with reporting scaling results.

Theory building efforts have also been mixed. Only limited success has been achieved in developing mid-range theory, which essentially offers a theoretical perspective that provides for prediction and explanation of a limited, but well defined range of phenomena (e.g., Walker, Churchill, and Ford 1977). In some areas, such as organizational buying behavior, we have seen numerous models and theoretical perspectives proposed but few that have received any significant empirical testing. However, in other areas, such as advertising, the work has been mostly descriptive and/or normative in nature.

Perhaps one of the most serious problems in the field, in general, is the lack of programmatic research. Much of the research to date consists of "one shot" studies, with little or no follow up work, and few linkages to other areas. Of course, notable exceptions do exist, such as Robert Cooper's and colleagues' work in new products, George Avlonitis' work in product elimination, the IMP's work in buyer-seller interaction, and the work by many authors in sales management based on Walker, Churchill and Ford's (1977) model are models of what programmatic study should be.

Marketing Planning and Strategy

Planning and Strategy Research. Most of the work on business marketing strategy has been fairly descriptive. One of the most interesting and provocative pieces is the modeling done on industrial response by Choffray and Lilien (1978). In our opinion, expansion of this work is long overdue. The opportunity exists to use our improved modeling techniques gained over the past 20 years to expand and improve on that model.

Strategic alliances have been increasing in both number and scope. The literature on strategic alliances, in general, is growing rapidly. Results from this research need to be integrated into the business marketing literature since many of the strategic alliances occurring are in business markets.

Marketing and Other Functions Research. This area has traditionally examined the relationship of the marketing function with either production, engineering, or R&D in attempting to market a product/service. Much of this research has been done in the area of the new product development process. There is also a developing stream of research in management that has taken a broader, more general view, of cross-functional issues. This work needs to be

further developed in the context of business markets and marketing. Much of the research in other disciplines, notably management, deals with the issues of integrating business functions. As technology, such as EDI, continues to expand in use the need to examine how work gets done within and across organizations will increase. The increase in partnering type activities and closer working relationships between suppliers and distribution partners calls for a greater understanding of ways in which to coordinate work across functional boundaries, both within and between companies. These changes in the way businesses operate point to increasingly boundary-less companies as well as increasingly fuzzy boundaries between companies. All portend the need to better understand how to work across functions and to better integrate those functions within and across companies.

Ethics Research. Business marketing researchers should be commended for examining the ethics of buyers in detail. However, one of the major weaknesses in the ethics research to date is that it has focused almost exclusively on U.S. based samples and as such lacks a global perspective. There is a great deal of anecdotal data that suggests that doing business in different parts of the world requires, among other things, adherence to somewhat different ethical standards. Companies with a great deal of global experience have reported such differences in the trade press and the multitude of "doing business in" trade books clearly note the differences in ethical standards and rules in different parts of the world. Given the global nature of business marketing, more research is needed to document these purported differences and to examine how they impact businesses and their decision making.

International Research. Global marketing has taken on greater importance in the academic world over the past twenty years. This is evident by the increase in academic journals in the field. In fact, there are currently at least ten journals which are explicitly international marketing journals. Many more journals are actively seeking research dealing with an international issue or involving data collection from more than one country. However, there continues to be only a limited amount of research partnering across country boundaries by faculty in our discipline.

The business marketing literature has examined a wide range of international marketing issues. However, we believe future international research should focus on examining the differences in various aspects of the marketing process in differing international venues. For example, how is selling different in different societies and cultures? Is there a need to focus on different sets of behaviors to get the selling job done well, or is there a generalized set of behaviors, that when done well lead to selling success in all cultures? Additional areas of study might include new product acceptance, how organizations determine the value of an offering, and technology acceptance. The global nature of business markets means that important marketing

questions in the future need to be examined using a cross-cultural research framework. However, caution needs to be used in conducting this research as research processes may require significant changes due to the many problems, not only with language, but with country infrastructure, and other cultural and personal variables. Psychological variables may pose a special problem for this kind of research. Just because a variable is in the language does not mean that it is a concept understood by the respondent. Caution with scales used to measure psychological variables must be observed.

Marketing to the Government. As has been noted, this is an area that is almost barren of academic research. This is amazing considering that sales to the government represents a significant amount of business in business markets. Why then has this area been ignored? Is it because of difficulty in obtaining data or is it because the issues are ill-defined or not of interest to academic researchers? Given some of the unique aspects associated with marketing to government and governmental purchasing procedures, this area would seem to offer an unlimited number of research opportunities.

Miscellaneous Research. This category includes research that did not readily fit into a category. Included here is a very important area-educational issues relating to business marketing. Unfortunately, despite progress in getting business marketing classes offered by more colleges and universities, a question that still needs to be addressed, is how best to educate business students about the nature of doing business with other businesses. At most schools, the only exposure to business marketing is in the business marketing class. Most marketing classes continue to focus exclusively on consumer goods. Organizational buying behavior, if included, is still only a single chapter in the typical consumer buying behavior text. While several articles have discussed business marketing education issues, clearly more needs to be done.

As was noted previously, non-profit marketing has been almost completely ignored in the business marketing literature. A fundamental question perhaps is whether non-profit marketing in business markets is different from non-profit marketing in consumer markets.

Organizational Buying and Purchasing Research

Purchasing Management Research. One interesting observation about the purchasing management literature is that it has rarely been explicitly incorporated into the organizational buying theory literature. There are certainly examples of its incorporation, but for the most part integration efforts have been limited.

Our view of this literature is that most of the academic purchasing literature seems to be lagging the professional managerial literature. Reviewing the professional managerial literature provides the reader with a great deal of insight into the kinds of changes that are taking place in purchasing organizations-changes that have either not been addressed or receive limited discussion in the academic literature. Examples of these areas include integrated supply marketing, JIT II, barter, and target pricing. While leading edge organizations are adopting or experimenting with these areas, the academic purchasing management literature has had little or nothing to say about them.

Business marketers seem to be lagging their purchasing counterparts. Purchasing (or sourcing and supply management, as it is now being referred to) and purchasing practice appear to be more forward thinking. If business marketers are to keep pace, they need to understand not only how companies think through decisions from a behavioral perspective, but also the processes and mechanisms they employ. Understanding how the purchasing process defines value for the individuals as well as the organization is the crux of understanding how to market to an organization.

Organizational Buying Behavior Research. In line with Johnston and Lewin (1996), we feel that the field of OBB has enough models and that now the emphasis needs to shift to testing the models. Unlike most areas in business marketing, OBB has been reviewed a number of times over the years. Year after year, these reviews have pointed out similar problems that need to be addressed. What we need to do now is to finally address the issues/problems that the reviews have consistently pointed out.

As with most areas in business marketing there is little programmatic research and even less replication. Examining buying, within the context of buying, rather than within a buyer-seller dyad or even network perspective, has value and will continue to have value.

Research needs to focus on the definition and determination of value by the buying party. At best, value has been indirectly examined in all of the research done on how organizations buy. Our argument is that it needs to be explicit and the focus of a research stream rather than the limited attention it has received to date. Reddy (1991) has suggested five ways of how valuing is done by customers: value analysis, value engineering, use value, value-inuse, and perceived value. He suggests that customers use one or more of these ways of valuing to ascertain the value of a particular offering. Anderson, Jain, and Chintagunta (1993) took a slightly different perspective and identified nine different methods of customer value assessment: internal engineering assessment, field value-in-use assessment, indirect survey questions, focus group value assessment, direct survey questions, conjoint analysis, benchmarking, compositional approaches to valuing, and importance ratings. They also provide some evidence of what companies actually do through a small sample field study.

It seems to us that all of the research in OBB, while informative of the process and providing insight into the how and the who of the decision, falls

short on the why. A focus on value may finally yield greater insights into the why of the purchasing decision.

Buyer-Seller Relationships Research. This is clearly the growth area in business marketing research. Numerous authors have over the years advocated the dyad or even the network as a unit of analysis. Unfortunately, the unit of analysis for most research continues to be only one piece of the dyad or network. With the growing emphasis on cultivating relationships rather than transactional exchanges, the use of dyads and even networks to understand marketing exchange is increasing.

The marketing literature, especially over the last few years, abounds with references to relationship marketing and its importance. However, exactly what the concept entails and what the marketing implications of it are remain less than clear. Definitions vary, with most people defining it simply as developing longer term relationships as opposed to transactional exchanges. Work is also needed in addressing the types of relationships that are commonly encountered and their implications for business marketers.

Marketing Sciences

Market Research

The business marketing literature has seen some significant effort in areas of market research. As noted previously, the primary area is that of increasing return rates for mail surveys. Since much of the work by both academics and practitioners concerns itself with surveys, the improvement of survey response rates is a laudable effort. The research, while mixed, does suggest methods to improve response rates and thus make samples potentially more valid and less biased. There have been a number of review articles which provide succinct guidance on getting better response rates and all have been quoted in this paper. However, there are a number of issues that have not been examined in depth that probably should be. For example, newer technologies such as the Internet and fax machines have not been explored in detail as to their usage as survey delivery mechanisms. Research in these areas is only just beginning and both media represent other methods besides mail questionnaires for getting survey responses.

There has been some discussion of how to collect data from multiple respondents. This has come about as researchers have recognized the complexity of organizational buying processes and have documented the notion of buying groups or centers, both formal and informal, which typically consist of more than one person. While we know we have a problem both conceptually and methodologically, there is no readily apparent solution. For example, if we collect data from multiple respondents using key respondents and exhaustive snowballing we run into non-response problems as well as

combination issues. If we go to a laboratory method and put the groups together prior to the decision and then have them participate in an exercise, external validity is suspect, regardless of whether the exercise is real or purely hypothetical.

Doing research internationally and dealing with the impact of culture on research methods, measures, and such needs to be better developed. There is very little guidance in this area for either the academic or practitioner. Some work has been done by Triandis, Bontempo, Leung, and Hui (1990) in the psychology literature and by Yu, Keown, and Jacobs (1993), who examined the cross-cultural implications of attitude type survey research. There are other examples, but the work is really fragmented. There is some agreement as to the validity of translation and back translation as a method, but recent work by Plank (1998) argues that may not be enough to guarantee measure validity. Finally, while not in the literature to date, the federal government is revamping the standard industrial classification (SIC) system. This will be of real interest to industrial market researchers.

Forecasting Research

As has been noted many times in the literature, forecasting is a very important process for most business marketing companies. However, most forecasting literature appears in specialty publications, and for the most part is not specific to problems and contexts with the business marketing domain. The general literature (e.g., Schnaars 1984) provides guidance on the effectiveness of forecasting methods in various situations. However, forecasting methods in general, have poorer success when change takes place, and/or the time factor is increased. This portends increased emphasis on this important area since change in business contexts is more rapid and the need to look further ahead, even in the short term, is more evident today than ever before.

Computers and Decision Support Research

As has been seen in this review, this area remains almost non-existent. There was a brief flurry on computer expert systems and some attempts at computer models such as CALLPLAN (Lodish 1971). Bettis-Outland and McFarland (1998) review in detail the research activity in this area, which encompasses sales force size modeling, resource allocation, sales force performance and compensation. Despite its importance, there is almost nothing on sales automation. While the academic literature says little about it, *Sales and Marketing Management* has provided many examples of how companies use computers for sales automation and a major trade organization exists which is dedicated solely to sales automation. Academic literature, however,

provides little descriptive or prescriptive information, much less assistance, to firms in helping them determine when and what they should do in their sales automation activities.

The area of market segmentation has seen some significant and important work, driven by reviews (Wind 1978; Plank 1985). The linkage of the segmentation technology to how companies actually become more efficient and effective needs to continue to be developed. It is curious, but not unexpected, that experimental work has not been done in this area. Field experiments would provide a great deal of knowledge to the participating firm and force them to truly evaluate their marketing programs.

Product/Services

New Product Research

This area has been very prolific, primarily driven by the work of Cooper and colleagues, but many other researchers have also made a significant impact. However, this area suffers from similar problems as the sales performance literature. Recent work by Cooper (1990) on the Stage Gate model has pointed out that new product development is a process that occurs over time. Most of the early research and much of the continuing research examines cross-sectionally the impact of various issues on the overall success of a particular product or project. However, as the Stage Gate process argues, different activities are likely to vary in importance and have differential impacts at different points in time. There is a need to understand how the process impacts the output, not just the input-output research that has primarily characterized this area. There is limited work examining specific parts of the new product process, but this work is mostly narrow in scope and does not connect to the entire process. Readers should again be cautioned that much of the work on new products in business markets appears in a wide variety of journals from both the management and engineering disciplines, and that while there appears to be a great deal of overlap, some interesting perspectives appear in other literatures not covered in this review. In addition, continued work on the diffusion of innovations paradigm also crosses many disciplines, not just the limited coverage in the specific business marketing literature.

Product Management Research

Other than the product elimination research there has been very little programmatic research in the product management literature. There has been minimal work dealing with the people involved in product management and exactly what the job entails. Much more needs to be done to define the product management process, the skills/competencies needed to do the job, as well as best practices. As noted in the review, the notion of the bundling and unbundling of product offerings is a very basic strategic question that is only now being addressed in some fashion. Also noted is the potential importance of brand equity, something that is very important in end consumer markets and which needs to be extensively addressed in business-to-business markets.

Services Research

The services research agenda really breaks down to two issues, those of how to manage a service business (i.e., the offering is a pure or mostly service offering) and the notion of the role of service in the product offering. As suggested previously, the notion of value as perceived by the buyer is going to be key in these kinds of businesses and certainly with service as an added-value or necessity for a product offering.

The research in the area is fragmented. Much of the SERVQUAL research, we would argue, may not be relevant to business markets unless it is directly applicable to the way the buyer values the offering. The fact that measurements of SERVQUAL are very mixed from a reliability and validity standpoint point to this issue among others. As had been suggested, many purchasing departments establish formal sets of measures of supplier performance. These are the value measures for the buying firm and whether a marketer is dealing with products or services, the job is to comply with the necessary performance measures or to change them.

Pricing

Pricing Research

Pricing still remains probably the least researched of the traditional 4 P's and probably the least understood by both researchers and practitioners. With reference to the notion of value as noted in the discussion of personal selling and organizational buying, business markets are faced with the issue of price as a definition of value and concurrently face the problem of how to compete on other aspects of value or against competitors who compete on a different value basis. The work by Woodside (1994) is path-breaking and interesting and can be extended to examine price as value and to include non-pricing value issues.

Channels and Logistics

Channel Management Research

Channel management still requires a great deal of descriptive work. Work in the area of defining distribution partners, such as distributors and manufacturers sales agents, is minimal. The behavioral issues are well researched, although as noted earlier, are narrow in scope and context. The work on partnerships provides interesting insights about the make-up of channel relationships. There is good normative material on how to think through the channels of distribution problem, but little empirical work which actually supports the issues raised.

Logistics and Physical Distribution Research

This area has little specific research in the business marketing literature. However, as noted previously, it is the subject of a great deal of research effort which appears in very specialized journals. The end consumer in an exchange, be they a business or an individual, derives time and place utility in large measure from the activities of logistics and physical distribution (or materials management from a buyer or purchasing perspective).

Promotion

Advertising Research

As noted previously, advertising appears to be the black sheep of business marketing, despite as noted by Paustian (1996) the substantial amount being spent on it. There has been comparatively little research and what exists has not been of a programmatic nature. Advertising performance, at a micro level, has received considerable attention while an important area like advertising strategy has received almost none. Little is known about how advertising impacts the buying process. While it is assumed that business advertising facilitates the sales effort, there is little empirical evidence to support that assumption, let alone the magnitude of the effect if it does hold true. No comprehensive model of advertising from a business marketing perspective exists. Research has provided some insights into how advertising works and *Business Marketing* (1987) published the Advertising Research Foundation research on the impact of business-to-business advertising, but we are missing a theoretical perspective to test and truly understand how and why advertising affects purchase decisions.

Of interest is the recent growth in what is called integrative communica-

tions. While this work strictly focuses on advertising and ignores the sales communication process, the concept of integrating all communications makes sense from a pragmatic perspective and business marketers need to heed this perspective in terms of linking their various promotional messages together.

Sales Promotion Research

Research on sales promotion has been very narrowly focused on primarily personal inducements and trade shows. Most of the personal inducement work has been descriptive and has used either salespeople and managers or purchasing personnel as respondents. No work to date has used other buying center members. Trade show research has been mostly descriptive but has also provided some theory as to why and how trade shows work.

Other than those two areas, other aspects of sales promotion have been ignored. There have been virtually no attempts at even defining the nature of various sales promotion tactics. Likewise, while it is recognized that many business marketing firms make extensive use of catalogs, research has scarcely addressed this area. No work has been done defining the use of new technologies on catalog or other sales promotion activities. As has been suggested, the notion of integrated communications has been argued at length in the advertising and communications literature, but little has been published on what that means for business marketers.

Public Relations Research

Advertising's role as the black sheep of business marketing is certainly preferable to public relations role. If one were to judge the importance of the subject by the amount of research on the topic, then public relations would appear to be the least important area. There has been virtually no research on public relations in business markets. Obviously, there is much work that could be done in the public relations area that would be of use to business marketers. Fundamental research on public relations activities used by business marketers and how it is done would be useful. The crisis literature has focused mostly on consumer markets, but problems also occur within business markets and no work has been done examining how companies deal with these kinds of crises.

General Promotion Research

General promotion spans a broad number of areas, but is almost entirely devoid of the integrated communications perspective which is so commonly discussed in the general advertising literature for consumer markets. As with most areas, some topics have tended to receive a considerable amount of attention while others have received none. In the case of general promotion, telemarketing has been extensively researched while lead tracking and direct marketing have had minimal coverage. As with almost every other area, there appears to be no programmatic research.

Personal Selling Research

In general, this area has had a significant amount of research over the years. The most researched area is clearly that of sales performance. Yet, as was shown in Churchill, Ford, Hartley, and Walker's (1985) meta analysis, there has been only limited success in predicting sales performance. Research in the area of sales performance is just beginning to move from a "black box" or input-output approach to more of a process orientation. However, almost all of the work to date continues to be cross sectional in nature. Sales has long been recognized to be a process. What is needed, if we are to really understand sales performance, are research programs that explicitly recognize that sales performance occurs over time. Work done by the IMP group in understanding organizational buying also provides insights into the nature of successful selling.

Although there has been a considerable amount of research on sales performance, there is still considerable debate as to the definition of performance. Walker, Churchill and Ford (1979) provided benchmark theoretical definitions that distinguished between performance and effectiveness, but as Bodkin (1990) notes, there are many different measures of sales performance and most continue to be fraught with difficulties. Research has also not addressed factors outside a salesperson's control and how they impact on performance.

Research is slowly starting to address issues of sales coordination, teamwork, and key account management. Sales planning, sales force automation and technology, and women in sales remain virtually ignored. Of these areas, it is extremely puzzling that given all the attention the trade press has given to sales force automation that academic research has so completely ignored it and its potential for dramatically changing the nature of selling.

One other issue which seems appropriate to address is the notion of value selling, value-added selling, and the like that are so common in the managerial trade literature. The notion of value and how buyers judge the value of an offering, is the most critical component for the marketing of business-to-business goods and services. Value-added selling, in our estimation, addresses how do we convince the buyer that things other than the basic product or service have value and should be considered by the buyer when purchasing the product or service. At a very simple level, the salesperson can sell based

on price, the basic product or service, upgrading the buyer's perception of value by selling additional services, or other issues that provide value to the buyer. This kind of conceptualization may be valuable in future sales performance research since the skills and behaviors needed in each situation may differ.

Sales Training Research

Sales training represents another area of business marketing research that has received very little attention in the academic literature. What research has been in business marketing has been descriptive or prescriptive with no real efforts to understand cause and effect relationships in the sales training context. Given the large sums of money invested in sales training and its hoped for positive impact on sales performance, additional research in this area is clearly needed. Fundamental questions like how effective is most sales training still remain unanswered. The literature gives no particular indication whether it is or is not effective. Researchers have yet to develop measures of training effectiveness.

Sales Motivation and Rewards Research

This area has been well researched, mainly from the perspective of expectancy theory. A number of areas such as role conflict and role ambiguity and the problems with those issues (e.g., stress and propensity to leave) have been explored in considerable detail. However, as with other sales research, this area also suffers from a lack of a process perspective. A classic work by Cron (1984) on the sales career life cycle and work on stress and burnout by Sager (1994), Singh, Goolsby and Rhoads (1994), and Verbeke (1997) provide insight into the time and process aspects of the phenomenon.

Compensation is still an issue for most companies-how much to pay salespeople, what is too little, what is too much, and how much does one have to pay to attract the kinds of people who will do the job well. There is a tremendous literature in management and psychology that deals with these issues in various contexts, but the anecdotal literature from the trade press still indicates that there are more questions than answers. Only limited research has been done on how we reward teams and when is it appropriate, but as sales becomes more complex, more team selling is bound to evolve, making this a very relevant question.

General Sales Management Research

This area has produced a wide variety of research topics and perspectives. Areas that have had some research include performance evaluation, leadership issues, supervisory issues, and sales force deployment. Most of these areas, and in fact all that has been discussed previously, are highly interrelated.

The movement toward more behavioral performance evaluation also suggests more of a process orientation. This notion of behavioral performance evaluation versus just outcome evaluation offers some very specific payoffs for managers that they cannot get from output evaluations. If a salesperson does not make quota that is all the information a manager would receive. But, if a manager can tie behavioral evaluation to quota or other output performance measures, then the knowledge of those linkages can be used in improving specific behavioral performance and subsequently improved output performance.

The work by Cravens and colleagues on sales force deployment is exemplary in terms of both collaboration among many people and programmatic research. Their recent work using an Australian sample is also a good example of an integrative view of sales management practices. Leadership represents an area that has not had very much research activity, and is ripe, not only for more empirical work, but for greater integration as a focal point in the sales management process.

As noted previously, almost nothing has been done on hiring and firing. There is, however, a long history of research in the personnel literature on hiring. Relating to sales and behaviors, there is a very specific literature in the personnel and psychology areas that deals with the linking of behavioral skills back into the hiring process. Interested researchers can start with Rollins (1989), Rollins and Fruge (1992), Esque and Gilbert (1995) and Guinn (1998). Finally, it should be noted that sales management is a process which is broad in conception. It includes not only outside salespeople, which are almost always the focal point of most research, but inside sales technical people, telemarketers, and other people within the firm who support the sales process. Research needs to recognize this complexity and respond to it. This suggests that the field critically evaluate the concepts of performance and effectiveness and redefine them to recognize the strategic and tactical aspects of sales performance, the time and process element, and the fact that many people other than salespeople impact the overall sales success.

Limitations

Finally, we are well aware that every research project has its limitations and ours is no exception. We are certain that some readers will point out that there are articles or areas that they consider extremely important that we did not discuss or did not discuss in sufficient detail. However, with a project of this magnitude and a field as broad as business marketing, this is something that is unavoidable. And while we attempted to include as comprehensive a

set of publications as possible, there are some who will no doubt feel that this journal or that proceeding should have been included. As with any major undertaking, hard decisions had to be made in order to keep the project manageable while at the same time providing the needed depth and breadth of coverage. We feel that the tradeoffs we have made were appropriate.

Summary and Conclusions

Industrial/business marketing has definitely come of age. However, while the subject from a research perspective is no longer an infant, it is clearly a long way from maturity. Having spent an enormous amount of time reading and sifting through the business marketing literature and then rereading and organizing it for this review, we conclude by offering the following more generalized observations and suggestions to our present and future colleagues:

- More programmatic research by teams of researchers is needed. The rare instances of programmatic research that have been done have been quite fruitful.
- More process oriented research and more longitudinal research is needed. This will require more emphasis on more exploratory research and methods other than surveys.
- More multiple sample research, with adequate reporting of scales where appropriate. Most research reported in the literature contains only one data set. Senior researchers, especially, should concentrate on multiple sample research.
- More emphasis on international research. While there is a similarity to business done worldwide, there are also obvious differences. More research and thinking needs to be done on the impact of culture and other variables distinct to different areas of the world and the impact of those variables on doing business in those countries.
- More emphasis on integrative research that looks at several related issues at once. We are not suggesting that researchers completely discontinue examining smaller pieces. However, we are suggesting integrative research incorporating findings from several individual research projects should be used, especially when multiple factors are at work. One can almost think of it as a regression problem, where different answers are obtained from multiple regression versus several simple regressions.
- Key topics in need of further research are:
 - Defining value from the buyers perspective,
 - Defining business relationships,
 - Methodology improvements and measure validation,

- International issues both measures and methodology and substantive issues.
- Integration of promotion with major efforts in the sales management area
- Testing of existing OBB and buyer-seller models,
- Defining processes in business marketing and determining best practices, and
- More industrial response modeling

Obviously there are many other topics that are both important and appropriate. We hope that our review will spur continued efforts at improving our understanding of business markets. We are confident that the next 20 years will yield answers to most of the questions we have posed.

REFERENCES

- Abeele, P.V., and I. Butaye (1980), "Pre-Testing the Effectiveness of Industrial Advertising," *Industrial Marketing Management*, 9 (1), 75-83.
- Abratt, R., and L.F. Pitt (1985), "Pricing Practices in Two Industries," *Industrial Marketing Management*, 14 (4), 301-306.
- _____, and M.R. Smythe (1989), "A Survey of Sales Incentive Programs," *Industrial Marketing Management*, 18 (3), 209-214.
- Abu-Ismail, F.F. (1982), "Modeling the Dimensions of Innovation, Adoption, and Diffusion in Foreign Markets," *Management International Review*, 22 (3), 54-64.
- Achrol, R. (1991), "Evolution of the Marketing Organization: New Forms for Turbulent Environments," *Journal of Marketing*, 55 (4), 77-93.
- Acito, F., and T.P. Hustad (1981), "Industrial Product Concept Testing," *Industrial Marketing Management*, 10 (3), 157-164.
- Adele Hughes, M. and D. Garrett (1990), "Intercoder Reliability Estimation Approaches in Marketing: A Generalizability Theory Framework for Quantitative Data," *Journal of Marketing Research*, 27 (May), 185-195.
- Alderson, W. (1957), Marketing Behavior and Executive Action: A Functionalist Approach to Marketing Theory, Homewood, IL: Richard D. Irwin.
- Alguire, M., C. Frear and L. Metcalf (1994), "An Examination of the Determinants of Global Sourcing Strategy," *Journal of Business and Industrial Marketing*, 9 (2), 62-74.
- Ames, B.C. (1978), "Affirming the Management Ethic in Industrial Firms," *Industrial Marketing Management*, 7 (5), 331-336.
- Anderson, J.C., H. Hakansson, and J. Johanson (1994), "Dyadic Business Relationships Within a Business Network Context," *Journal of Marketing*, 58 (4), 1-15.
- _____, and J.A. Narus (1984), "A Model of the Distributor's Perspective of Distributor-Manufacturer Working Relationships," *Journal of Marketing*, 48 (Fall), 62-74.
- _____, and _____ (1990), "A Model of Distributor Firm and Manufacturer Firm Working Partnerships," *Journal of Marketing*, 54 (January), 42-58.

- ______, and ______(1991), "Partnering as a Focused Marketing Strategy," *California Management Review*, 33 (3), 95-113.
- _____, and ____ (1999), Business Market Management, Upper Saddle River, NJ: Prentice-Hall.
- , D.C. Jain, and P.K. Chintagunta (1993), "Customer Value Assessment in Business Markets: A State of the Practice Study," *Journal of Business-to-Business Marketing*, 1 (1), 3-28.
- Anderson, E., and R. Oliver (1987), "Perspectives on Behavior-Based versus Outcome-Based Sales Force Control Systems," *Journal of Marketing*, 51 (4), 76-88.
- ______, and B. Weitz (1989), "Determinants of Continuity in Conventional Industrial Channel Dyads," *Marketing Science*, 8 (Fall), 310-323.
- Anderson, P.F., and T.M. Chambers (1985), "A Reward/Measurement Model of Organizational Buying Behavior," *Journal of Marketing*, 49 (Spring), 7-23.
- Anklesaria, J. and D.N. Burt (1987), "Personal Factors in the Purchasing/Engineering Interface," *Journal of Purchasing and Materials Management*, 23 (4), 9-18.
- Ansari, A. and B. Modarress (1994), "Quality Function Deployment: The Role of Suppliers," *International Journal of Purchasing and Materials Management*, 30 (4), 28-35.
- Apaiwongse, T. (1993), "Market Response to EPA Policies," *Industrial Marketing Management*, 22 (4), 319-330.
- (1994), "The Influence of Green Policies on a Dual Manufacturing Center: An Ecological Marketing Approach," *Journal of Business and Industrial Marketing*, 9 (2), 41-50.
- Aranoff, G. (1995), "Avoiding a Transfer Pricing Problem: Conditions When to Be Flexible," *Journal of Business-to-Business Marketing*, 2 (3), 1-15.
- Armstrong, J.S. and T.J. Yokum (1994) "Effectiveness of Marketing Incentives," Industrial Marketing Management, 23 (2), 133-136.
- Arinze, B. (1990), "Marketing Planning with Computer Models: A Case Study in the Software Industry," *Industrial Marketing Management*, 19 (2), 117-129.
- Atuahena, G.K. (1995), "Involving Organizational Buyers in New Product Development," *Industrial Marketing Management*, 24 (3), 215-226.
- Avlonitis, G.J. (1982), "Problem Situations Evoking the Elimination Decision in Industrial Marketing," Proceedings of the American Marketing Association Summer Conference, Chicago: American Marketing Association, 238-241.
- _____ (1983), "Product Elimination Decision and Strategies," *Industrial Marketing Management*, 12 (1), 31-44.
- (1984), "Industrial Product Elimination: Major Factors to Consider," *Industrial Marketing Management*, 13 (2), 77-85.
- _____ (1985a), "Revitalizing Weak Industrial Products," *Industrial Marketing Management*, 14 (2), 93-105.
- (1985b), "Advisors and Decision Makers in Product Eliminations," *Industrial Marketing Management*, 14 (1), 17-26.
- (1986a), "The Management of the Product Elimination Function: Theory and Empirical Analysis," in Arch G. Woodside (ed), *Advances in Business Marketing Vol 1*, Stamford, CT: JAI Press, 1-66.

- (1986b), "The Identification of Weak Industrial Products," *European Journal of Marketing*, 20 (11), 24-42.
- _____(1993), "Drop Strategies: What Factors Do Managers Consider in Deciding to Drop," *European Journal of Marketing* 27 (4), 35-57.
- , K.A. Boyle, and A.G. Kovremenoc (1986), "Matching the Salesmen to the Selling Job," *Industrial Marketing Management*, 15 (1), 45-54.
- Axinn, C.N., R. Savitt, J. Sinkulu, and S. Thach (1995), "Export Intention, Beliefs, and Behaviors in Smaller Industrial Firms," *Journal of Business Research*, 32 (1), 49-55.
- Babakus, E., D. Pedrick, and A. Richardson (1995), "Assessing Perceived Quality in Industrial Service Settings: Measure Development and Application," *Journal of Business-to-Business Marketing*, 2 (3), 47-68.
- Bagozzi, R.P. (1975), "Marketing as Exchange," Journal of Marketing, 39 (October), 32-39.
- Bailetti, A.J., and P.F. Litua (1995), "Integrating Customer Requirements into Product Design," *Journal of Product Innovation Management*, 12 (1), 3-15.
- Banting, P.M. (1978), "Unsuccessful Innovation in the Industrial Market," *Journal of Marketing*, 42 (1), 99-100.
- _____, J. Beracs, and A. Gross (1991), "The Industrial Buying Process in Capitalist and Socialist Countries," *Industrial Marketing Management*, 20 (2), 105-13.
- Barclay, D.W. (1991), "Interdepartmental Conflict in Organizational Buying: The Impact of Organizational Context," *Journal of Marketing Research*, 28 (May), 145-159.
- _____(1992), "Organizational Buying Outcomes and Their Effects on Subsequent Decisions," *European Journal of Marketing*, 26 (4), 48-64.
- Barczak, G., and D. Wilemon (1992), "Successful New Product Team Leaders," *Industrial Marketing Management*, 21 (1), 61-68.
- Barius, B. (1994), "Simultaneous Marketing: A Holistic Marketing Approach to Strategy," *Industrial Marketing Management*, 23 (2), 145-54.
- Barksdale, H.C., Jr., T.E. Powell and E. Hargrove (1984), "Complaint Voicing by Industrial Buyers," *Industrial Marketing Management*, 13 (2), 93-99.
- Barrett, J. (1986), "Why Major Account Selling Works," *Industrial Marketing Management*, 15 (1), 63-73.
- Barrier, T., and M. Morris (1987), "Industrial Marketing Implications of Electronic Data Exchange," *Proceedings of the Summer Educators Conference*, Chicago: American Marketing Association, 35-40.
- Bartkus, K.R., M.F. Peterson, and D.N. Bellinger (1989), "Type A Behavior, Experience, and Salesperson Performance," *Journal of Personal Selling and Sales Management*, 9 (2), 11-18.
- Basham, A.P. (1993), "Consultant Selection: The Two Envelope System of Bidding," *Industrial Marketing Management*, 12 (4), 271-279.
- Bass, F.M., T.V. Krishnan, and D.C. Jain (1994), "Why the Bass Model Fits Without Decision Variables," *Marketing Science*, 13 (3), 203-223.
- Bates, F.L., and C.C. Harvey (1975), *The Structure of Social Systems*, New York: Gardner Press, Inc.

- Bauer, S.M. (1994), How to Sell to the United States Government: Marketing Goods and Services to America's Greatest Customer, Citadel Press.
- Beardslty, G., and E. Mansfield (1978), "Accuracy of Industrial Forecasts of Profitability of New Products and Processes," *Journal of Business*, 51 (1), 127-134.
- Behrmann, D.N. and W.D. Perreault (1982), "Measuring the Performance of the Industrial Salesperson," *Journal of Business Research*, 10 (3), 355-370.
- Bejou, D., B. Wray, and T.N. Ingram (1996), "Determinants of Relationship Quality: An Artificial Neural Network Analysis," *Journal of Business Research*, 36 (2), 137-143.
- Bellizzi, J.A. and C. Glacken (1986), "Building a More Successful Rep Organization," *Industrial Marketing Management*, 15 (3), 207-214.
- _____, and R.E. Hite (1986), "Improving Industrial Advertising Copy," *Industrial Marketing Management*, 15 (2), 117-122.
- _____, and J. Lehrer (1983), "Developing Better Industrial Advertising," *Industrial Marketing Management*, 12 (1), 19-23.
- , and D.J. Lipps (1984), "Managerial Guidelines for Trade Show Effectiveness," *Industrial Marketing Management*, 13 (1), 49-52.
- ______, L. Minas, and W. Norvell (1994), "Tangible versus Intangible Copy in Industrial Print Advertising," *Industrial Marketing Management*, 23 (2), 155-163.
- _____, and J.J. Mohr (1984), "Technical versus Nontechnical Wording of Industrial Print Advertising," *Proceedings of the Summer AMA Educators Conference*, 171-175.
- Bello, D.C. (1992), "Industrial Buyer Behavior at Trade Shows: Implications for Selling Effectiveness," *Journal of Business Research*, 25 (1), 59-80.
- _____, and G. Barczak (1990), "Using Industrial Trade Shows to Improve New Product Development," *Journal of Business and Industrial Marketing*, 5 (2), 43-56.
- ______, and H.C. Barksdale (1986), "Exporting at Industrial Trade Shows," *Industrial Marketing Management*, 15 (3), 197-206.
- ______, and ______ (1989), "Exporting Industrial Products at American Trade Shows," in *Advances in Business Marketing Vol 3*, Stamford, CT: JAI Press, 1-25. _____, and B.J. Verhage (1989), "Performing Export Tasks in Industrial Channels of Distribution," *European Journal of Marketing*, 23 (2), 68-78.
- Benjamin, W.A. (1979), "Management of Business Information," *Industrial Marketing Management*, 8 (1), 51-56.
- Berenson, C. (1968), "The R&D: Marketing Interface-A General Analogue Model for Technology Diffusion," *Journal of Marketing*, 32 (April), 8-15.
- for Technology Diffusion," *Journal of Marketing*, 32 (April), 8-15. Bergin, M., S. Dutta and O.C. Walker (1992), "Agency Relationships in Marketing: A Review of the Implications and Applications of Agency and Related Theories," *Journal of Marketing*, 56 (3), 1-24.
- Berl, R., T. Powell, and N.C. Williamson (1984), "Industrial Sales Force Satisfaction and Performance with Herzberg's Theory," *Industrial Marketing Management*, 13 (1), 11-19.
- , N.C. Williamson, and T.E. Powell (1984), "Industrial Salesforce Motivation: A Critique and Test of Maslow's Hierarchy of Needs," *Journal of Personal Selling and Sales Management*, 4 (1), 32-39.

- Berling, R. (1993), "The Emerging Approach to Business Strategy: Building a Relational Advantage," *Business Horizons*, 36 (4), 16-27.
- Berry, D. (1987), "A Method to Portray and Analyze Sales Performance," *Industrial Marketing Management*, 16 (2), 131-144.
- _____, and K. Abrahamsen (1981), "Three Types of Salesmen to Understand and Motivate," *Industrial Marketing Management*, 10 (3), 207-218.
- Bettis-Outland, H., and R.G. McFarland (1998), "A Current Review of Salesforce Operations Modeling Research," *Proceedings of the National Conference in Sales Management*, Normal, IL: Illinois State University, 118-123.
- Bharadwaj, S.G., P.R. Varadarajan, and J. Fahy (1993), "Sustainable Competitive Advantage in Service Industries: A Conceptual Model," *Journal of Marketing*, 57 (4), 83-99.
- Biggs, J., E. Thies, and J. Sisak (1990), "The Cost of Ordering," *Journal of Purchasing and Materials Management*, 26 (3), 30-36.
- Billesbach, T., A. Harrison, and S. Croon-Morgan (1991), "Supplier Performance Measures and Practices in JIT Companies in the U.S. and U.K.," *Journal of Purchasing and Materials Management*, 27 (4), 24-28.
- Binetti, G. (1980), "On-Line Information Retrieval Aids New Product Development," *Industrial Marketing Management*, 9 (3), 247-251.
- Bingham, F.G. (1988), "New Product Development Model," in *Proceedings of the Academy of Marketing Science*, 324-327.
- _____, and C.J. Quigley (1989), "Venture Team Application to New Product Development," *Journal of Business and Industrial Marketing*, 4 (2), 49-59.
- Bird, M.M. (1989), "Gift Giving and Gift Taking in Industrial Companies," *Industrial Marketing Management*, 18 (2), 91-94.
- Birov, L., and S. Fawcett (1993), "International Purchasing: Benefits, Requirements, and Challenges," *International Journal of Purchasing and Materials Management*, 29 (2) 28-37.
- Blasko, V.J., and C. Patti (1984), "The Advertising Budgeting Practices of Industrial Marketers," *Journal of Marketing*, 48 (4), 104-110.
- Blenkhorn, D., and P.M. Banting (1978), "Broadening the Concept of Industrial Purchasing," *Industrial Marketing Management*, 7 (6), 374-378.
- Blois, K.J. (1985), "Matching New Manufacturing Technology to Industrial Markets and Strategies," *Industrial Marketing Management*, 14 (1), 43-47.
- Bly, R.W. (1998), Business to Business Direct Marketing, Chicago, IL: NTC Business Books.
- Bodkin, C.D. (1990), The Adaptive Behavior Construct and Its Effect on Salesperson Performance, Unpublished Doctoral Dissertation, Blacksburg, VA: Virginia Polytechnic University.
- Boles, J., N. Donthu, and R. Lohtia (1995), "Salesperson Evaluation Suing Relative Performance Efficiency: The Application of DEA," *The Journal of Personal Selling and Sales Management*, 15 (3), 32-49.
- Bolfing, C., and S. Schmidt (1988), "Using Expert Database Services," *Industrial Marketing Management*, 17 (2), 141-152.
- Bonoma, T.V. (1983), "Get More Out of Your Trade Shows," *Harvard Business Review*, 61 (1), 75-83.

- ______, R. Bagozzi, and G. Zaltman (1978), "The Dyadic Paradigm with Specific Application Toward Industrial Marketing," in T.V. Bonoma and G. Zaltman (eds.), Organizational Buying Behavior, Chicago: American Marketing Association, 49-66.
- _____, and W.J. Johnston (1978), "The Social Psychology of Industrial Buying and Selling," *Industrial Marketing Management*, 17, 213-224.
- ______, and G. Zaltman (1978), "Introduction," in T.V. Bonoma and G. Zaltman (eds.) *Organizational Buying Behavior*, Chicago: American Marketing Association, 1-30.
- ______, and W.J. Johnston (1977), *Industrial Buying Behavior*, Cambridge, MA: Marketing Science Institute.
- Borys, B. and D.B. Jemison (1989), "Hybrid Arrangements as Strategic Alliances: Theoretical Issues in Organizational Combinations," *Academy of Management Review*, 14 (February), 234-249.
- Bostrom, G.O. (1995), "Successful Cooperation in Professional Services," *Industrial Marketing Management*, 24 (3), 151-165.
- Boughton, P.D. (1984), "Pricing in a Closed Bid Environment," *Proceedings of the Annual Meeting of the Academy of Marketing Science* Vol. 7, 343-347.
- _____ (1987), "The Competitive Bidding Process: Beyond Probability Models," Industrial Marketing Management, 16 (2), 87-94.
- Bowers, T.L. and S.U. Rich (1991), "Effect of Product and Market Factors on Communication Style of the Salesperson," *Proceedings of the Academy of Marketing Science Vol. 14*, Coral Gables, FL: Academy of Marketing Science, 323-327.
- Boyd, H.W., and R.S. Headen (1978), "Definition and Management of the Product-Market Portfolio," *Industrial Marketing Management*, 7 (5), 337-346.
- Bradley, M.F. (1977), "Buying Behaviour in Ireland's Public Sector," *Industrial Marketing Management*, 6 (August), 251-258.
- Brand, G.T. (1972), *The Industrial Buying Decision*, London: Cassell/Associated Business Programmes, also published in the United States by John Wiley and Son.
- Brandi, J.T. (1978), "Simulation Theory Can Provide Practical Solutions to Complex Industrial Marketing Problems," *Industrial Marketing Management*, 7 (6), 387-390.
- Brasch, J.J. (1978), "Sales Forecasting Difficulties in a Developing Country," *Industrial Marketing Management*, 7 (5), 354-360.
- Breitenbach, R.B. (1995), "Fairness in the Resolution of International Business Disputes," *International Journal of Purchasing and Materials Management*, 31 (4), 32-37.
- Bristor, J. and M. Ryan (1987), "The Buying Center Is Dead: Long Live the Buying Center," *Proceedings of the Association for Consumer Research Vol 14*, Association for Consumer Research, 255-258.
- Brock, J.J. (1984), "Competitor Analysis: Some Practical Approaches," *Industrial Marketing Management*, 13 (4), 225-231.
- Brown, L.O. (1978), "Forecasting Sales Trends in the Solid State Industry," *Industrial Marketing Management*, 7 (4), 243-249.

- Brown, R.J. (1979), "A New Marketing Tool: Life Cycle Costing," *Industrial Marketing Management*, 8 (2), 109-113.
- Brown, R.B., and R. Herring (1995), "The Role of the Manufacturers Distributor," *Industrial Marketing Management*, 24 (4), 285-295.
- Brown, R.V., G.L. Lilien, and J.W. Ulvila (1993), "New Methods for Estimating Business Markets," *Journal of Business-to-Business Marketing*, 1 (2), 33-65.
- Brown, J.A. and D.E. Sommers (1982), "Developing a Strategic Marketing Orientation in a Large Industrial Firm," *Industrial Marketing Management*, 11 (3), 167-171.
- Brown, S.P. (1995), "The Moderating Effects of Insupplier/Outsupplier Status on Organizational Buying Attitudes," *Journal of the Academy of Marketing Science*, 23 (3), 170-181.
- Browning, J., and N.B. Zabriskie (1983), "How Ethical Are Industrial Buyers?" *Industrial Marketing Management*, 12 (4), 219-224.
- Bucklin, L.P., and S. Sengupta (1993), "Organizing Successful Co-Marketing Alliances," *Journal of Marketing*, 57 (2), 32-46.
- Burger, P. C., and C.W. Cann (1995), "Post Purchasing Strategy," *Industrial Marketing Management*, 24 (2), 91-97.
- Burke, R., A. Rangasvamy, J. Wind, and J. Eliasberg (1990), "A Knowledge Based System for Advertising Design," *Marketing Science*, 9 (3), 212-229.
- Burt, D.N. (1989), "Managing Product Quality Through Strategic Purchasing," Sloan Management Review, 30 (3), 39-48.
- Bushaw, R.E., and E.S. Grant (1994), "Exploring the Distinctive Nature of Work Commitments: Their Relationships with Personal Characteristics, Job Performance, and Propensity to Leave," *Journal of Personal Selling and Sales Manage*ment, 14 (2), 41-56.
- Butler, J.K., and R.M. Reese (1991), "Leadership Style and Sales Performance: A Test of the Strategic Leadership Model," *Journal of Personal Selling and Sales Management*, 11 (3), 37-46.
- Buttner, F.H., and H.W. Lanford (1980), "Technology Development: Determining What to Forecast," *Industrial Marketing Management*, 9 (3), 187-199.
- Calantone, R., and C. di Benedetto (1990), "Defensive Industrial Marketing Strategies," *Industrial Marketing Management*, 19 (3), 267-278.
- Calder, B.J. (1977), "Structural Role Analysis of Organizational Buying: A Preliminary Investigation," in A.G. Woodside, J.N. Sheth, and P.D. Bennett (eds), Consumer and Industrial Buying Behavior, New York: North Holland Publishing Co.
- Campbell, J.P., M. Dunnette, E. Lawler, and K. Weick (1970), *Managerial Behavior, Performance and Effectiveness*, New York: McGraw Hill.
- Campbell, N.C.G. (1985a), "An Interaction Approach to Organizational Buying Behavior," *Journal of Business Research*, 13 (1), 35-48.
- (1985b), "Buyer/Seller Relationships in Japan and Germany: An Interaction Approach," *European Journal of Marketing*, 19 (3), 57-66.
- _____, and M.T. Cunningham (1990), "Customer Analysis for Strategy Development in Industrial Markets," in D. Ford (ed.), *Understanding Business Markets: Interaction, Relationships, and Networks*, London: Academic Press, 124-136.

- Canning, G. (1982), "Do a Value Analysis of Your Customer Base," *Industrial Marketing Management*, 11 (2), 89-93.
- Cannon, H., and F.W. Morgan (1991), "A Strategic Pricing Framework," *Journal of Business and Industrial Marketing*, 6 (3), 59-70.
- Cardozo, R.N. (1986), "Analyzing Industrial Markets," in McGraw Hill 11, 1-11.
- , S. Shipp, and K. Roering (1992), "Proactive Strategic Partnerships: A New Business Markets Strategy," *Journal of Business and Industrial Marketing*, 7 (1), 51-63.
- D.K. Smith, and M. Viswanathan (1988), "Identifying Key Customers for Novel Industrial Products," *Journal of Product Innovation Management*, 5 (2), 102-113.
- Carter, J.R., and R. Narasimhan (1990), "Purchasing in the International Marketplace: Implications for Operations," *Journal of Purchasing and Materials Man*agement, 26 (3), 2-11.
- _____, and _____ (1994), "The Role of Purchasing and Materials Management in TQM and Customer Satisfaction," *International Journal of Purchasing and Materials Management*, 30 (3), 52-57.
- _____, and _____(1996), "Is Purchasing Really Strategic," International Journal of Purchasing and Materials Management, 32 (1), 20-28.
- Cavinato, J. (1991), "Identifying Interfirm Total Cost Advantages for Supply Chain Competition," Journal of Purchasing and Materials Management, 27 (4), 10-15.
- Cavusgil, S. (1988), "Unraveling the Mystique of Export Pricing," *Business Horizons*, X (3), 54-63.
- ______, P.L. Yeoh, and M. Mitri (1995), "Selecting Foreign Distributors," *Industrial Marketing Management*, 24 (4), 297-304.
- Cespedes, F. (1990), "A Preface to Payment: Designing a Sales Compensation Plan," *Sloan Management Review*, 32 (1), 59-70.
- _____ (1992), "Sales Coordination: An Exploratory Study," *Journal of Personal Selling and Sales Management*, 12 (3), 13-29.
- _____ (1994), "Industrial Marketing: Managing New Requirements," *Sloan Management Review*, 35 (3), 45-60.
- and E.R. Corey (1990), "Managing Multiple Channels," *Business Horizons*, 33 (4), 67-77.
- , S.X. Doyle, and D. Freedman (1989), "Teamwork for Today's Selling," *Harvard Business Review*, 69 (2), 44-58.
- Chakrabarti, A.K., S. Feinman, and W. Fuentevilla (1981), "Targeting Technical Information to Organizational Positions," *Industrial Marketing Management*, 10 (3), 195-203.
- _____, and J.R. Morgan (1981), "Estimating Potential for Aftermarket Requirements," *Industrial Marketing Management*, 10 (3), 165-174.
- Chambley R., and D. Sandler (1992), "Business-to-Business Advertising: What Layout Style Works Best?" *Journal of Advertising Research*, 32 (6), 31-46.
- Chang, K., and C.G. Ding (1995), "The Influence of Culture on Industrial Buying Selection Criteria in Taiwan and Mainland China," *Industrial Marketing Management*, 24 (4), 277-84.
- Chao, C., E. Scheuing, and W. Ruch (1993), "Purchasing Performance Evaluation:

- An Investigation of Different Perspectives," *International Journal of Purchasing and Materials Management*, 29 (3), 33-40.
- Chawla, S.K., and R. Nataraajan (1994), "Does the Name of the Sender Affect Industrial Mail Response?" *Industrial Marketing Management*, 23 (2), 111-115.
- Cheron, E., and E. Kleinschmidt (1985), "A Review of Industrial Market Segmentation Research and a Proposed Framework," *International Journal of Research in Marketing*, 2 (2), 101-115.
- Chiesl, N.E. and L.L. Knight (1981), "Japanese Buyers Attitudes Toward U.S. Supply Sources," *Industrial Marketing Management*, 10 (4), 243-51.
- _____, and _____ (1985), "Attitudes Toward Japanese Supply Sources," *Journal of Purchasing and Materials Management*, 21 (2), 2-6.
- and S.W. Lamb (1983), "Segmenting International Industrial Markets,"

 Journal of the Academy of Marketing Science, 11 (3), 250-258.
- Chisnall, P.M. (1977), Effective Industrial Marketing, London: Longman.
- Choffray, J.M., and G.L. Lilien (1978), "Assessing Response to Industrial Marketing Strategy," *Journal of Marketing*, 42 (2), 20-31.
- , and _____(1982), "Designor: A Decision Support Procedure for Industrial Product Design," *Journal of Business Research*, 10 (2), 185-197.
- ______, and ______ (1986), "A Decision-Support System for Evaluation Sales Prospects and Launch Strategies for New Products," *Industrial Marketing Management*, 15 (1), 75-85.
- ______, and E. Yoon (1989), "New Industrial Product Performance: Models and Empirical Analysis," in *Advances in Business Marketing, Vol. 3*, 49-77.
- Chonko, L.B. (1986), "Organizational Commitment in the Sales Force," *Journal of Personal Selling and Sales Management*, 6 (3), 19-27.
- Churchill, G.A., N.M. Ford, and O.C. Walker (1979), "Personal Characteristics of Salespeople and the Attractiveness of Alternative Rewards," *Journal of Business Research*, 7 (1), 25-50.
- ______, S. Hartley and O.C. Walker (1985), "The Determinants of Salesperson Performance: A Meta-Analysis," *Journal of Marketing Research*, 22 (2), 103-118.
- Clare, D.A., and D.G. Sanford (1984), "Cooperation and Conflict Between Industrial Sales and Production," *Industrial Marketing Management*, 13 (3), 163-169.
- Clark, G.L., and P.F. Kaminski (1988), "How to Get More for Your Money in Mail Surveys," *Journal of Business and Industrial Marketing*, 3 (1), 17-23.
- ______, and G. Grown (1990), "The Readability of Advertising and Articles in Trade Journals," *Industrial Marketing Management*, 19 (3), 251-260.
- Clark, K., and T. Fujimoto (1990), "The Power of Product Integrity," *Harvard Business Review*, 68 (6), 107-118.
- Cleary, M.J., and H.W. Lanford (1978), "The Evolution of Technology Assessment," *Industrial Marketing Management*, 7 (1), 26-31.
- Coe, B.J. (1981), "Use of Strategic Planning Concepts by Industrial Marketers," Educators Proceedings, Chicago: American Marketing Association, 13-16.
- Cohen, M. and H. Lee (1990), "Out of Touch with Customer Needs? Spare Parts and After Sales Service," *Sloan Management Review*, 31 (2), 55-66.

- Cohn, S.F. (1980), "Industrial Product Adoption in a Technology Push Industry," Industrial Marketing Management, 9 (2), 89-95.
- Coleman, B.J., and M. Mcknew (1990), "A Technique for Order Placement and Sizing," *Journal of Purchasing and Materials Management*, 26 (2), 32-40.
- Comer, J.M., and K.C. Chakrabarti (1978), "The Information Industry for the Industrial Marketer," *Industrial Marketing Management*, 7 (1), 65-70.
- (1985), "Industrial Sales Managers: Satisfaction and Performance," *Industrial Marketing Management*, 14 (4), 239-244.
- , R.D. O'Keefe, and A.A. Chilenskas (1980), "Technology Transfer from Government Laboratories to Industrial Markets," *Industrial Marketing Management*, 9 (1), 63-67.
- Cooke, E.F. (1986), "What Is Business and Industrial Marketing," *Journal of Business and Industrial Marketing*, 1 (1), 9-17.
- _____, and T. Marian (1992), "Industrial versus Consumer Sales Promotion," in *Proceedings of the Academy of Marketing Science*, Miami: 315-319.
- _____, L.W. Smith and D.C. Van Doren (1989), "Manufacturing Companies Try to Become Special by Using Specialty Advertising," *Journal of Business and Industrial Marketing*, 4 (2), 43-48.
- Cooper, P.D., and R.W. Jackson (1988), "Applying a Services Marketing Orientation to the Industrial Services Sector," *Journal of Business and Industrial Marketing*, 3 (2), 51-54.
- Cooper, R.G. (1975), "Why New Industrial Products Fail," *Industrial Marketing Management*, 4 (5), 315-326.
- _____ (1988), "Predevelopment Activities Determine New Product Success," *Industrial Marketing Management*, 17 (3), 237-248.
- _____ (1990), New Products: The Key Factors in Success, Chicago: American Marketing Association.
- _____ (1992), "The New Product System: The Industry Experience," *Journal of Product Innovation Management*, 9 (2), 113-127.
- _____, and U. De Brentani (1984), "Criteria for Screening New Industrial Products," *Industrial Marketing Management*, 13 (3), 149-156.
- ______, and E.J. Kleinschmidt (1995), "Benchmarking the Firms Critical Success Factors in New Product Development," *Journal of Product Innovation Management*, 12 (5), 374-391.
- Copeland, M.J. (1930), Cases on Industrial Marketing, with Introduction and Commentaries, New York: McGraw-Hill.
- Coppett, J.I. (1988), "Auditing Your Customer Service Activities," Industrial Marketing Management, 17 (4), 277-284.
- ______, and R.D. Voorhees (1985), "Telemarketing: Supplement to Field Sales," *Industrial Marketing Management*, 14 (3), 213-216.
- Corey, E.R. (1973), *Industrial Marketing: Cases and Concepts*, Englewood Cliffs, NJ: Prentice-Hall.
- _____ (1978), Procurement Management: Strategy, Organization, and Decision Making, Boston: CBI.
- Cox, J.E. (1989), "Approaches for Improving Salespersons' Forecasts," *Industrial Marketing Management*, 18 (4), 307-311.

- Cox, W.E., and L.V. Dominguez (1979), "The Key Issues and Procedures of Industrial Marketing Research," *Industrial Marketing Management*, 8 (1), 81-93.
- Cravens, D., T.N. Ingram, R. LaForge, and C. Young (1993), "Behavior-Based and Outcome-Based Sales Force Control Systems," *Journal of Marketing*, 57 (4), 47-59.
- ______, and R. LaForge (1983), "Sales Force Deployment Analysis," *Industrial Marketing Management*, 12 (3), 179-192.
- _____, and _____ (1986), "Sales Force Deployment," in A Woodside, Ed., Advances in Business Marketing Vol 1, Stamford, CT: JAI Press, 67-112.
- ______, W. Moncrief, C. Lamb, and T. Dielman (1990), "Sequential Modeling Approach for Redeploying Selling Effort in Field Sales Forces," *Journal of Business Research*, 20 (3), 217-34.
- Cressman, G. (1995), "Lean versus Anorexic Marketer: Diagnosing Marketing Activities," *Journal of Business-to-Business Marketing*, 2 (1), 59-72.
- Crittenden, V., L.R. Gardiner, and A. Storm (1993), "Reducing Conflict Between Marketing and Manufacturing," *Industrial Marketing Management*, 22 (4), 299-309.
- Cross, J., and W. Rudelius (1993), "Tradeoffs in Industrial Market Segmentation: Theory and Practice," in *Developments in Marketing Science*, Vol. 16, 99-102.
- Crow, L.E., R.W. Olshavsky, and J. Summers (1980), "Industrial Buyers Choice Strategies: A Protocol Analysis," *Journal of Marketing Research*, 17, 34-44.
- Cummings, W.T., D.W. Jackson Jr., and L.L. Ostrom (1984), "Differences Between Industrial and Consumer Product Managers," *Industrial Marketing Management*, 13 (3), 171-180.
- Cunningham, M.T. (1980), "International Marketing and Purchasing of Industrial Goods-Features of a European Research Project," *European Journal of Marketing*, 14 (5), 322-353.
- Curren, M.T., V.S. Folkes, and J.S. Steckel (1992), "Explanations for Successful and Unsuccessful Marketing Decisions," *Journal of Marketing*, 56 (2), 18-31.
- Dahlstrom, R., F.R. Dwyer, and M. Chandrashekaran (1995), "Environment, Structure, and Performance in Interfirm Exchange," *Journal of Business-to-Business Marketing*, 2 (2), 37-58.
- Dale, B.G. and M.T. Cunningham (1983), "The Purchasing/Manufacturing Interface in the Make or Buy Decision," *Journal of Purchasing and Materials Manage*ment, 19 (1), 11-18.
- Dant, R. and P. Schul (1992), "Conflict Resolution Processes in Contractual Channels of Distribution," *Journal of Marketing*, 56 (1), 38-54.
- Darmon, R Y. (1982), "Compensation Plans that Link Management and Salesmen's Objectives," *Industrial Marketing Management*, 11 (2), 151-163.
- ______, and S.J. Shapiro (1980), "Sales Recruitment-A Major Area of Underinvestment," *Industrial Marketing Management*, 9 (1), 47-51.
- Davies, H., T.K.P. Leung, S.T.K. Luk, and Y.K. Wong (1995), "The Benefits of Guanxi," *Industrial Marketing Management*, 24 (3), 207-14.
- D'Aveni, R.A. (1996), Hypercompetition, New York: The Free Press.
- Davis, T. (1993), "Effective Supply Chain Management," Sloan Management Review, 34 (4), 35-46.

- Dawes, P.L., and P.G. Patterson (1988), "The Performance of Industrial and Consumer Product Managers," *Industrial Marketing Management*, 17 (1), 73-84.
- Dawson, L.M. (1980), "Setting Multinational Industrial Marketing Strategies," Industrial Marketing Management, 9 (3), 179-86.
- Day, R.L., and H.C. Barksdale Jr. (1992), "How Firms Select Professional Services," *Industrial Marketing Management*, 21 (2), 85-91.
- _____, and P.A. Herbig (1990), "How the Diffusion of Industrial Innovations Is Different from New Retail Products," *Industrial Marketing Management*, 19 (3), 261-266.
- deBrentani, U., and C. Droge (1988), "Determinants of the New Product Screening Decision: A Model Analysis," *International Journal of Research in Marketing*, 5 (2), 91-106.
- _____(1991), "Success Factors in Developing New Business Services," *European Journal of Marketing*, 25 (2), 33-59.
- _____ (1995), "New Industrial Service Development: Scenarios for Success and Failure," *Journal of Business Research*, 32 (2), 93-104.
- Decormier, R.A., and D. Jobber (1993), "The Counselor Selling Method: Concepts and Constructs," *Journal of Personal Selling and Sales Management*, 13 (4), 39-59.
- deKluyver, C.A. (1980), "Bottom-Up Sales Forecasting Through Scenario Analysis," *Industrial Marketing Management*, 9 (2), 167-170.
- Demirdjian, Z.S. (1984), "A Multidimensional Approach to Motivating Salespeople," *Industrial Marketing Management*, 13 (1), 25-32.
- De Monthoux, P.G. (1978), "The Marketing Management Consultant," *Industrial Marketing Management* 7 (2), 139-144.
- Dempsey, William A. (1978), "Vendor Selection and the Buying Process," *Industrial Marketing Management*, 7 (4), 257-267.
- F.A. Bushman, and R.E. Plank (1980), "Personal Inducements of Industrial Buyers," *Industrial Marketing Management*, 9 (4), 281-289.
- Deng, S., and L.H. Wortzel (1995), "Importer Purchase Behavior: Guidelines for Asian Exporters," *Journal of Business Research*, 32 (1), 41-47.
- DeVincentis, J.R., and L.K. Kotcher (1995), "Packaged Goods Sales Forces-Beyond Efficiency," *The McKinsey Quarterly*, 1, 72-85.
- Diamantopoulos, A., B.B. Schlegelmilch, and L. Webb (1991), "Factors Affecting Industrial Mail Response Rates," *Industrial Marketing Management*, 20 (4), 327-339.
- Dibb, S. and L. Simpkin (1993), "Implementation Problems in Industrial Market Segmentation," *Industrial Marketing Management*, 23 (1), 55-63.
- Dion, P., and P.M. Banting (1990), "What Industrial Marketers Can Expect from U.S.-Canada Free Trade," *Industrial Marketing Management*, 19 (1), 77-80.
- Dolan, R., and J. Mathews (1993), "Maximizing the Utility of Customer Product Testing: Beta Test Design and Management," *Journal of Product Innovation Management*, 10 (4), 318-330.
- Domerski, T., and E. Guzeh (1992), "Industrial Buying Behavior: The Case of Poland," *Journal of Business Research*, 24 (1), 11-18.

- Donath, R. (1998), "Promise em Anything, But Give em a Price," *Marketing News*, 32 (January 19), 5.
- Doulatshahi, S. (1992), "Purchasing's Role in a Concurrent Engineering Environment," *Journal of Purchasing and Materials Management*, 28 (1), 21-25.
- Dowling, G.R. (1986), "Managing Your Corporate Image," *Industrial Marketing Management*, 15 (2), 109-115.
- Dubinsky, A.J. (1981), "The Effects of Sales Training," *Industrial Marketing Management*, 10 (2), 129-37.
- , and T.N. Ingram (1983), "Important First-Line Sales Management Qualifications: What Do Sales Executives Think," *Journal of Personal Selling and Sales Management*, 3 (1), 18-25.
- ______, and ______ (1983), "Reward Valences of Industrial Salespeople: A Segmentation Analysis," *Proceedings of the American Marketing Association Summer Educators Conference*, 49, 203-207.
- F. Yammerino, and M. Jolson (1994), "Closeness of Supervision & Salesperson Work Outcomes: An Alternative Perspective," *Journal of Business Research*, 29 (3), 225-237.
- ______, ______, and W. Spangler (1995), "Transformational Leadership: An Initial Examination in Sales Management," *Journal of Personal Selling and Sales Management*, 15 (2), 17-29.
- Duhan, D., and R. Wilson (1990), "Prenotification and Industrial Survey Responses," *Industrial Marketing Management*, 19 (2), 95-105.
- Dumond, E. (1991), "Performance Measurement and Decision Making in a Purchasing Environment," *Journal of Purchasing and Materials Management*, 27 (2), 21-31.
- _____(1994), "Moving Toward Value Based Purchasing," *International Journal of Purchasing and Materials Management*, 30 (2), 2-8.
- Dundas, G.R., and K.A. Krentler (1982), "Critical Path Method for Introducing an Industrial Product," *Industrial Marketing Management*, 11 (2), 125-131.
- Dunn, D.T. and C. Thomas (1994), "Partnering with Customers," *Journal of Business and Industrial Marketing*, 9 (1), 34-40.
- Dwyer, F.R., P.H. Schurr, and S. Oh (1987), "Developing Buyer-Seller Relationships," *Journal of Marketing*, 51 (April), 11-27.
- Easton, A. (1978), "Purposes and Analysis of Industrial Package Design," *Industrial Marketing Management*, 7 (5), 316-323.
- Easton, G., and C. Toner (1983), "Women in Industrial Advertisements," *Industrial Marketing Management*, 12 (2), 145-149.
- Eckles, R.W., and T.J. Novotny (1984), "Industrial Product Managers: Authority and Responsibility," *Industrial Marketing Management*, 13 (2), 71-75.
- Edwards, M.R., W.T. Cummings, and J.L. Schlachter (1984), "The Paris-Peoria Solution: Innovations in Appraising Regional and International Sales Personnel," *Journal of Personal Selling and Sales Management*, 4 (2), 27-38.
- El Ansary, A., N. Zabriske, and J. Browning (1993), "Sales Teamwork," *Journal of Business and Industrial Marketing*, 8 (3), 65-72.
- Ellis, B., and M. Raymond (1993), "Sales Force Quality," *Journal of Business and Industrial Marketing*, 8 (3), 17-27.

- Ellram, L. (1991), "A Managerial Guideline for the Development and Implementation of Purchasing Partnerships," *Journal of Purchasing and Materials Management*, 27 (3), 2-8.
- _____ (1992), "The Role of Purchasing in Cost Savings Analysis," *Journal of Purchasing and Materials Management*, 28 (1), 26-33.
- (1993), "Total Cost of Ownership: Elements and Implementation," *International Journal of Purchasing and Materials Management*, 29 (4), 3-11.
- _____(1995), "Partnering Pitfalls and Success Factors," International Journal of Purchasing and Materials Management, 31 (2), 36-44.
- ______, and J.N. Pearson (1993), "The Role of the Purchasing Function: Toward Team Participation," *International Journal of Purchasing and Materials Management*, 29 (3), 3-9.
- Engle, J.F., D.T. Kollat, and R. Blackwell (1973) *Consumer Behavior, 2nd Edition*, New York: Holt Rinehart and Winston.
- Erffmeyer, R., K.R. Russ, and J. Hair (1991), "Needs Assessment and Evaluation in Sales-Training Programs," *Journal of Personal Selling and Sales Management*, 11 (1), 17-30.
- Erramilli, M.K. and C.P. Rao (1993), "Service Firms' International Entry-Model Choice: A Modified Transaction Cost Analysis Approach," *Journal of Marketing*, 57 (3), 19-38.
- Esque, T.J. and T.F. Gilbert (1995), "Making Competencies Pay Off," *Training*, 32 (1), 44-48, 50.
- Estell, K. (ed.) (1991), Sellers Guide to Government Purchasing: Federal, State, and Local Contacts and Key Publications and Resources, Detroit: Gale Research.
- Evans, F.B. (1963), "Selling as a Dyadic Relationship: A New Approach," *American Behavioral Scientist*, 6 (May), 76-79.
- Evans, R.H. (1981), "Product Innovation and Industrial Buying," *Journal of Purchasing and Materials Management*, 17 (2), 23-28.
- _____ (1982), "Product Involvement and Industrial Buying," *Journal of Purchasing and Materials Management*, 18 (2), 23-28.
- Evans, J.R. and R.L. Lashin (1994), "The Relationship Marketing Process: A Conceptualization and Application," *Industrial Marketing Management*, 23 (5), 439-452.
- Faria, A., and J.R. Dickinson (1992), "Mail Survey Response, Speed, and Cost," *Industrial Marketing Management*, 21 (1), 51-60.
- Farley, J.U., J.M. Hulbert, and D. Weinstein (1980), "Price Setting and Volume Planning by Two European Industrial Companies: A Study and Comparison of Decision Processes," *Journal of Marketing*, 44 (1), 46-54.
- Farris, P.W., and R.D. Buzzell (1980), "A Comment on Modeling the Marketing Mix Decision for Industrial Products," *Management Science*, 26 (1), 97-101.
- Fast, N.D. (1978), "New Venture Department: Organizing for Innovation," *Industrial Marketing Management*, 7 (2), 77-88.
- _____ (1979a), "The Future of Industrial New Venture Departments," *Industrial Marketing Management*, 8 (4), 264-273.
- _____(1979b), "Key Managerial Factors in New Venture Departments," *Industrial Marketing Management*, 8 (3), 221-235.

- Ferguson, W. (1978). "A Critical Review of Recent Organizational Buying Research," *Industrial Marketing Management*, 7, 225-230.
- _____ (1980), "A New Method for Routing Salespersons," *Industrial Marketing Management*, 9 (2), 171-178.
- Fern, E.F., and J.R. Brown (1984), "The Industrial/Consumer Marketing Dichotomy: A Case of Insufficient Justification," *Journal of Marketing*, 48 (Spring), 68-76.
- Festervand, T.A., S.J. Grove, and R.E. Reidenback (1988), "The Sales Force as a Marketing Intelligence System," *Journal of Business and Industrial Marketing*, 3 (1), 53-59.
- Finn, D.W. and W.C. Moncreif (1985), "Sales Force Entertainment Activities," *Industrial Marketing Management*, 14 (4), 227-234.
- Fiocca, R. (1982), "Account Portfolio Analysis for Strategy Development," Industrial Marketing Management, 11 (1), 53-62.
- Fish, K.E., J.H. Barner, and M.W. Aiken (1995), "Artificial Neural Networks," *Industrial Marketing Management*, 24 (5), 431-438.
- Fishner, S. (1989), A Report on Government Procurement Practices, Merrifield, VA: Camelot.
- Forbes, J.L., and N.T. Mehta (1981), "Value-Based Strategies for Industrial Products," *Business Horizons*, 24 (3), 32-42.
- Ford, D. (1978), "Stability Factors in Industrial Marketing Channels," *Industrial Marketing Management*, 7 (6), 410-422.
- _____ (1984), "Buyer/Seller Relationships in International Industrial Markets," Industrial Marketing Management, 13 (2), 101-12.
- _____ (1990), Understanding Business Markets: Interaction, Relationships and Networks/The Industrial Marketing and Purchasing Group, London: Academic Press.
- _____, and C. Ryan (1981), "Taking Technology to Market," *Harvard Business Review*, 59 (2), 117-126.
- ______, B. Cotton, D. Farmer, A. Gross, and I. Wilkinson (1993), "Make or Buy Decisions and Their Implications," *Industrial Marketing Management*, 22 (3), 207-214.
- Ford, R., F. McLaughlin, and S. Williamson (1992), "Using Certified Mail on Industrial Research," *Industrial Marketing Management*, 21 (4), 281-286.
- Forker, L.N. (1992), "Purchasing's Views on Countertrade," Journal of Purchasing and Materials Management, 28 (2), 10-19.
- _____, and R. Janson (1990), "Ethical Practices in Purchasing," *Journal of Purchasing and Materials Management*, 26 (1), 19-26.
- Foxall, G.R. (1988), "Marketing New Technology: Markets, Hierarchies, and User-initiated Innovation," *Managerial & Decision Economics*, 9 (3), 237-250.
- (1989), "User Initiated Product Innovations," *Industrial Marketing Management*, 18 (2), 95-104.
- Fram, E. (1992), "We Can Do a Better Job of Selecting International Distribution," *Journal of Business and Industrial Marketing*, 7 (2), 61.
- ______, and R. Ajanu (1994), "International Distributors and the Role of U.S. Top Management: A Requirement for Export Competitiveness," *Journal of Business and Industrial Marketing*, 9 (4), 33-41.

- Frambach, R.T. (1993), "An Integrated Model of Organizational Adoption and Diffusion of Innovations," *European Journal of Marketing*, 27 (5), 22-41.
- Franwick, G., J.C. Ward, M. Hutt, and P. Reingen (1994), "Evolving Patterns of Organizational Beliefs in Formation of a Strategy," *Journal of Marketing*, 58 (2), 96-110.
- Fraser, C., and R. Hite (1990), "Impact of International Marketing Strategy on Performance in Diverse Global Markets," *Journal of Business Research*, 20 (3), 249-62.
- Frazier, G.L., and R.C. Rody (1991), "The Use of Influence Strategy in Interfirm Relationships in Industrial Products Channels," *Journal of Marketing* 55 (1), 52-69.
- Frear, C., and L.E. Metcalf (1995), "Strategic Alliances and Technology Markets," *Industrial Marketing Management*, 24 (5), 379-390.
- M. Alguire, and L. Metcalf (1995), "Country Segmentation as the Basis of International Purchasing Patterns," *Journal of Business and Industrial Marketing*, 10 (2), 59-68.
- _____, L. Metcalf, and M. Alguire (1992), "Offshore Sourcing: Its Nature and Scope," *Journal of Purchasing and Materials Management*, 28 (3), 2-11.
- Frederick, J. (1934), Industrial Marketing-A Century of Marketing, New York: Prentice-Hall.
- Freeman, C. (1991), "Networks of Innovators: A Synthesis of Research Issues," *Research Policy*, 20 (5), 499-514.
- Freeman, V., and J. Cavinato (1990), "Fitting Purchasing to the Strategic Firm: Frameworks, Processes and Values," *Journal of Purchasing and Materials Management*, 26 (1), 6-10.
- Fries, J. (1982), "Library Support for Industrial Marketing Research," *Industrial Marketing Management*, 11 (1), 47-51.
- Funkhouser, G.R. (1984), "A Practical Theory of Persuasion Based on Behavioral Science Analysis," *Journal of Personal Selling and Sales Management*, 4 (2), 17-25.
- Futrell, C.M. (1980), "Salesmen and Saleswomen Job Satisfaction," *Industrial Marketing Management*, 9 (1), 27-39.
- _____, A. Parasuraman, and J. Sager (1983), "Sales Force Evaluation with Expectancy Theory," *Industrial Marketing Management*, 12 (2), 125-29.
- _____, and P.L. Schul (1978), "Sales Management Control and Job Performance," Industrial Marketing Management, 7 (5), 311-15.
- Gagre, M., and R. Discenza (1992), "Accurate Product Costing in a JIT Environment," *Journal of Purchasing and Materials Management*, 28 (4), 28-31.
- _____, ____(1995), "Target Costing," Journal of Business and Industrial Marketing, 10 (1), 16-22.
- Galper, M., and G.L. Lilien (1982), "Industrial Marketing Communications: Present Status and Needs," in Strategic Directions in Industrial Marketing, Chicago: American Marketing Association, 23-35.
- Ganesan, S. (1994), "Determinants of Long Term Orientation in Buyer-Seller Relationships," *Journal of Marketing*, 58 (2), 1-19.
- Gartner, W., and R. Thomas (1993), "Factors Affecting New Product Forecasting Accuracy," *Journal of Product Innovation Management*, 10 (1), 35-52.

- Gauvin, S. and R.K. Sinha (1993), "Innovativeness in Industrial Organizations: A Two-Stage Model of Adoption," *International Journal of Research in Marketing*, 10 (2), 165-183.
- Gengler, C.E., D.J. Howard, and K. Zolner (1995), "A Personal Construct Analysis of Adaptive Selling and Sales Experience," *Psychology and Marketing*, 12 (4), 287-304.
- Gensch, D.A. (1984), "Targeting the Switchable Industrial Customer," Marketing Science, 3 (1), 41-54.
- Gensch, D.A., N. Aversa, and S.P. Moore (1990), "A Choice Modeling Market Information System that Enabled ABB Electric to Expand in Market Share," *Interfaces*, 20 (1), 6-25.
- Gentry, J. (1993), "Strategic Alliances in Purchasing: Transportation Is the Vital Link," International Journal of Purchasing and Materials Management, 29 (3), 11-17.
- George, W., J.P. Kelly, and C. Marshall (1986), "The Selling of Services: A Comprehensive Model," *Journal of Personal Selling and Sales Management*, 6 (2), 29-37.
- Germain, R., and M. Cooper (1990), "How a Customer Mission Statement Affects Company Performance," *Industrial Marketing Management*, 19 (1), 47-54.
- Ghauri, P.N. (1988), "Negotiating with Firms in Developing Countries: Two Case Studies," *Industrial Marketing Management*, 17 (1), 49-53.
- Ghingold, M. (1988), "Bridging Theory and Practice in the Allocation of Sales and Promotional Resources with Customer Organizations," *Journal of Business and Industrial Marketing*, 3 (2), 17-26.
- Giunipero, L.C., and C. O'Neal (1988), "Obstacles to JIT Procurement," *Industrial Marketing Management*, 17 (1), 35-41.
- Glisan, G., and J. Hawes (1990), "Selecting Creative People for Sales Positions," Industrial Marketing Management, 19 (4), 331-337.
- Glover, D.R. (1991), "Distributor Attitudes Toward Manufacturer Sponsored Promotions," *Industrial Marketing Management*, 20 (3), 241-249.
- , S.W. Hartley, and C.H. Patti (1989), "How Advertising Message Strategies Are Set," *Industrial Marketing Management*, 18 (1), 19-26.
- Goolsby, J., R.R. Lagace, and M. Boorom (1992), "Psychological Adaptiveness and Sales Performance," *Journal of Personal Selling and Sales Management*, 12 (2), 51-66.
- Gopalakrishna, S. and J. Williams (1992), "Planning and Performance Assessment of Industrial Trade Shows: An Exploratory Study," *International Journal of Research in Marketing*, 9, 207-224.
- _____, G.L. Lilien, J.D. Williams, and I.K. Sequerira (1995), "Do Trade Shows Pay Off," *Journal of Marketing*, 59 (3), 75-83.
- _____, and _____(1995), "A Three Stage Model of Industrial Trade Show Performance," *Marketing Science*, 14 (1), 22-42.
- Gordon, G.L., R.J. Calantone, C.A. di Benedetto, and P.F. Kaminski (1993), "Customer Knowledge Acquisition in the Business Products Market," *Journal of Product and Brand Management*, 2 (3), 23-25.

- Goretsky, M.E. (1983), "Frameworks of Strategic Marketing Information Needs," *Industrial Marketing Management*, 12 (1), 7-11.
- Grace, D., and T. Pointon (1980), "Marketing Research Through the Sales Force," *Industrial Marketing Management*, 9 (1), 53-58.
- Graham, T., P. Daugherty, and B. Dudley (1994), "The Long Term Strategic Impact of Purchasing Partnerships," *International Journal of Purchasing and Materials Management*, 30 (4), 13-18.
- Grawboski, D.P. (1987), "Building an Effective Competitive Intelligence System," *Journal of Business and Industrial Marketing*, 2 (1), 39-43.
- Greco, A., and J. Hogue (1990), "Developing Marketing Decision Support Systems," *Journal of Business and Industrial Marketing*, 5 (2), 27-36.
- Green, P., and V. Srinivasan (1990), "Conjoint Analysis in Marketing: New Developments with Implications for Research and Practice," *Journal of Marketing Research*, 54 (November), 3-19.
- Greer, T. and R. Lohtia (1994), "Effects of Source and Paper Color on Response Rates in Mail Surveys," *Industrial Marketing Management*, 23 (1), 47-54.
- Griffin, A., and J. Hauser (1992), "Patterns of Communication Among Marketing Engineering and Manufacturing: A Comparison Between Two Product Teams," *Journal of Product Innovation*, 38(3), 360-373.
- Griffith, R.L., and L.G. Pol (1993), "Segmenting Industrial Markets," *Industrial Marketing Management*, 23 (1), 39-46.
- Gronhaug, K., and T. Lorentzen (1982), "Exploring Industrial Export Strategies," in B.J. Walker et al. (eds.), *An Assessment of Marketing Thought and Practice*, Chicago: American Marketing Association, 294-298.
- Gronroos, C. (1979), "An Applied Theory for Marketing Industrial Services," *Industrial Marketing Management*, 8 (1), 45-50.
- (1990), "Relationship Approach to Marketing in Service Contexts: The Marketing and Organizational Behavior Interface," *Journal of Business Re*search, 20 (1), 3-11.
- Gross, I. (1985) "Critical Uses of Research in Business Marketing," *Industrial Marketing Management*, 14 (3), 165-170.
- _____ (1985), "A Framework for Measuring Marketing Productivity," Chicago: American Marketing Association, 105-11.
- Gross, C., and R.T. Peterson (1978), "Some Human Problems in Industrial Sales Forecasting," *Industrial Marketing Management*, 7 (6), 367-368.
- Grunenwald, J.P., and T.T. Vernon (1988), "Pricing Decision Making for High-Tech Products and Services," *Journal of Business and Industrial Marketing*, 3 (1), 61-70.
- Guest, D.B., and H.J. Meric (1989), "The Fortune 500 Companies: Selection Criteria for Promotion to First Level Sales Management," *Journal of Personal Selling and Sales Management*, 9 (3), 47-52.
- Guinn, K.A. (1998), "Transforming Organizational Behavior Through Competency-based Integrated H R Systems," *Journal of Compensation and Benefits*, 13 (4), 24-27.
- Gulbro, R., and P. Herbig (1995), "Differences in Cross Cultural Negotiation Be-

- tween Industrial Product Companies and Consumer Product Firms," *Journal of Business and Industrial Marketing*, 10 (3), 18-28.
- Gummesson, E. (1978), "Toward a Theory of Professional Service Marketing," Industrial Marketing Management, 7 (2), 89-95.
- _____(1981), "Marketing Cost Concept in Service Firms," *Industrial Marketing Management*, 10 (3), 175-182.
- _____ (1994), "Making Relationship Marketing Operational," *International Journal of Service Industries Management*, 5 (5), 5-20.
- Gundlach, G.T., and P.E. Murphy (1993), "Ethical and Legal Foundations of Relationship Marketing Exchanges," *Journal of Marketing*, 57 (4), 35-46.
- Gupka, A.K., S.P. Raj, and D.L. Wilemon (1985), "R&D and Marketing Dialogue in High-Tech Firms," *Industrial Marketing Management*, 14 (4), 289-300.
- ______, and D. Wilemon (1988), "The Credibility-Cooperation Connection at the R&D Marketing Interface," *Journal of Product Innovation Management*, 5 (1), 20-31.
- Gwynn, R.M. (1987), "A Survey Method of Obtaining Sales Data . . . Handling Systems," in Advances in Business Marketing, Vol. 2, Stamford, CT: JAI Press, 17-54.
- Haas, R. W. (1976), Industrial Marketing Management, New York: Petrocelli/Charter.
- Haggett, M. (1994), "Effect of Individual Prenotification on Response Rate, Speed, Quality, Bias, and Cost," *Industrial Marketing Management*, 23 (2), 101-110.
- Hakansson, H. (1980), "Marketing Strategies in Industrial Markets," *European Journal of Marketing*, 14 (5), 365-76.
- _____ (1982), International Marketing and Purchasing of Industrial Goods: An Interaction Approach, New York: John Wiley and Sons.
- _____, and A.K. Eriksson (1993), "Getting Innovations out of Supplier Networks," Journal of Business-to-Business Marketing, 1 (3), 3-34.
- _____, and I. Snehota (1990), "No Business Is an Island: The Network Concept of Business Strategy," in D. Ford (ed), *Understanding Business Markets: Interaction, Relationships, and Networks*, London: Academic Press, 526-540.
- ______, and B. Wootz (1979), "A Framework of Industrial Buying and Selling," *Industrial Marketing Management*, 8 (1), 28-39.
- Haley, G.T., and Goldberg, S.M. (1995), "Net Present Value Techniques and Their Effects on New Product Research," *Industrial Marketing Management*, 24 (3), 177-190.
- Hall, R. (1978), Organizations: Structure and Process, Englewood Cliffs: Prentice Hall.
- Hallen, L., and J. Johanson (1985), "Industrial Marketing Strategies and Different National Environments," *Journal of Business Research*, 13 (6), 495-510.
- ______, and N. Seyed-Mohamed (1993), "Dyadic Business Relationships and Customer Technologies," *Journal of Business-to-Business Marketing*, 1 (4), 63-90.
- Halvorson, P., and W. Rudelius (1977), "Is There a Free Lunch?" *Journal of Marketing*, 41 (January), 44-49.

- Hansen, R.A., C. Tinney, and W. Rudelius (1983), "Increase Response to Industrial Surveys," *Industrial Marketing Management*, 12 (3), 165-169.
- Hansen, S. W., T.L. Powers, and J.E. Swan (1997), "Modeling Industrial Buyer Complaints: Implications for Satisfying and Saving Customers," *Journal of Marketing Theory and Practice*, 5 (4), 12-22.
- Harrell, G.D., and M.F. Fors (1992), "Internal Marketing of a Service," *Industrial Marketing Management*, 21 (4), 299-306.
- Harrer, B.J., R.O. Weijo, and M.P. Hattrup (1988), "The Role of Change Agents in New Product Adoption: A Case Study," *Industrial Marketing Management*, 17 (2), 95-102.
- Harvey, M. (1987), "Industrial Product Counterfeiting: Problems and Proposed Solutions," *Journal of Business and Industrial Marketing*, 2 (4), 5-13.
- _____, and J. Rupert (1988), "Selecting an Industrial Advertising Agency," *Industrial Marketing Management*, 17 (2), 119-128.
- Haugland, S. (1990), "The Governance of International Buyer-Seller Relationships," Proceedings of the American Marketing Association Winter Educators Conference, Chicago: American Marketing Association, 205-11.
- Haverty, J., and M. Kyj (1991), "What Happens When New Competitors Enter an Industry," *Industrial Marketing Management*, 20 (1), 73-80.
- Hawes, J.M. (1984), "Evaluating Trade Show Opportunities," in *Proceedings of the Academy of Marketing Science*, 474-478.
- ______, K.E. Mast, and J.E. Swan (1989), "Trust Earning Perceptions of Seller and Buyers," *Journal of Personal Selling and Sales Management*, 9 (1), 1-8.
- Hayward, G. (1978), "Market Adoption of New Industrial Products," *Industrial Marketing Management*, 7 (3), 193-198.
- _____, D.H. Allen, and J. Masterson (1977), "Innovation Profiles: A New Tool for Capital Equipment Manufacturers," *European Journal of Marketing*, 11 (4), 299-311.
- _____, and J. Masterson (1987), "Innovation and the Sales Manager," *Management Decision*, 25 (4), 52-56.
- Heide, J.B., and G. John (1992), "Do Norms Matter in Marketing Relationships," *Journal of Marketing*, 56 (2), 32-44.
- _____, and R.L. Stump (1995), "Performance Implications of Buyer-Supplier Relationships in Industrial Markets: A Transaction Cost Explanation," *Journal of Business Research*, 32 (1), 57-66.
- ______, and A.M. Weiss (1995), "Vendor Consideration and Switching Behavior for Buyers in High Technology Markets," *Journal of Marketing*, 59 (3), 30-43.
- Henthorne, T., M. LaTour and A. Williams (1992), "Initial Impression in the Organizational Buyer-Seller Dyad: Sales Management Implications," *Journal of Personal Selling and Sales Management*, 12 (3), 57-65.
- Herbig, P.A. (1991), "A Cusp Catastrophe Model of the Adoption of an Industrial Innovation," *Journal of Product Innovation Management*, 8 (2), 127-137.
- , J. Milewicz and J.E. Golden (1993), "The Do's and Don'ts of Sales Forecasting," *Industrial Marketing Management*, 22 (1), 49-57.
- _____, and F. Palumbo (1993), "Serving the Aftermarket in Japan and the United States," *Industrial Marketing Management*, 22 (4), 339-46.

- ______, and A. Shao (1993), "American Keiretsu: Fad or Future," *Journal of Business-to-Business Marketing*, 1 (4), 3-30.
- Herstatt, C., and E. Von Hippel (1992), "Developing New Product Concepts via the Lead User Method: A Case Study," *Journal of Product Innovation Management*, 9 (3), 213-221.
- Hibbert, E.P. (1993), "Global Make or Buy Decisions," *Industrial Marketing Management*, 22 (2), 67-78.
- Hill, M.R. (1980), "International Industrial Marketing into Eastern Europe," European Journal of Marketing, 14 (3), 139-64.
- Hill, J.S., and A.W. Allaway (1993), "How U.S. Based Companies Manage Sales in Foreign Countries," *Industrial Marketing Management*, 22 (1), 7-16.
- Hill, N.C. and M.J. Swenson (1994), "The Impact of Electronic Data Interchange on the Sales Function," *Journal of Personal Selling and Sales Management*, 14 (3), 79-88
- Hill, R.M., R.S. Alexander, and J.S. Cross (1975), *Industrial Marketing*, 4th Edition, Homewood, IL: Richard D. Irwin.
- Hiller, T.J. (1975), "Decision-Making in the Corporate Industrial Buying Process," *Industrial Marketing Management*, 4, 99-106.
- Hines, P. (1995), "Network Sourcing: A Hybrid Approach," International Journal of Purchasing and Materials Management, 31 (2), 18-24.
- Hise, R. (1995), "The Implications of Time Based Competition on International Logistics Strategies," *Business Horizons*, 38 (5), 39-45.
- ______, L. O'Neal, A. Parasuraman, and J. McNeal (1990), "Marketing/R&D Interaction in New Product Development: Implications for New Product Success," *Journal of Product Innovation Management*, 7 (2), 142-55.
- Hite, R.E. (1990), "Leadership in Sales Management," in A. Woodside, Ed., Advances in Business Marketing Vol 3, Stamford, CT: JAI Press, 93-119.
- _____, and J.A. Bellizzi (1986), "A Preferred Style of Sales Management," *Industrial Marketing Management*, 15 (3), 215-23.
- _____, and _____ (1987), "Salespeople's Use of Entertainment and Gifts," *Industrial Marketing Management*, 16 (4), 279-285.
- Hlavacek, J., and T.J. McCuistion (1983), "Industrial Distribution: When, Who and How?" *Harvard Business Review*, 61 (2), 96-101.
- Hofstede, G. (1980), Culture's Consequences: International Differences in Work-Related Values, Newbury Park, CA: Sage Publications
- Holmes, B. (1991), "Lease-Buy Decision Analysis," Journal of Purchasing and Materials Management, 27 (4), 35-40.
- Holmlund, M., and S. Kock (1995), "Buyer Perceived Service Quality in Industrial Networks," *Industrial Marketing Management*, 24 (2), 109-121.
- Honeycutt, E.D. and J.B. Ford (1995), "Guidelines for Managing an International Sales Force," *Industrial Marketing Management*, 24 (2), 135-44.
- _____, and T.H. Stevenson (1989), "Evaluating Sales Training Programs," *Industrial Marketing Management*, 18 (3), 215-22.
- _____, V. Howe, and T.N. Ingram (1993), "Shortcomings of Sales Training Programs," *Industrial Marketing Management*, 22 (2), 117-23.

- _____, J.D. Ford, and J. Tanner (1994), "Who Trains Salespeople," *Industrial Marketing Management*, 23 (1), 65-70.
- Hooley, G.J., and D. Jobber (1986), "Five Common Factors in Top Performing Industrial Firms," *Industrial Marketing Management*, 15 (2), 89-96.
- Howell, S.D. (1980), "Learning Curves for New Products," Industrial Marketing Management, 9 (2), 97-99.
- Hozier, G.C. Jr., and F. Robles (1985), "Direct Mail Response Factors for an Industrial Service," *Industrial Marketing Management*, 14 (2), 113-118.
- Huang, J.H. (1993.) "Color in U.S. and Taiwanese Industrial Advertising," *Industrial Marketing Management*, 22 (3), 195-198.
- Hultink, E.J., and H.S.J. Robben (1995), "Measuring New Product Success: The Difference that Time Perspective Makes," *Journal of Product Innovation Management*, 12 (5), 392-405.
- Hutt, M.H. (1995), "Cross Functional Working Relationships in Marketing," *Journal of the Academy of Marketing Science*, 23 (4), 351-357.
- ______, W.J. Johnston, and J.R. Ronchetto (1985), "Selling and Buying Centers: Formulating Strategic Exchange Patterns," *Journal of Personal Selling and Sales Management*, 5 (1), 33-40.
- ______, and P. Reingen (1987), "Social Network Analysis: Emergent versus Prescribed Patterns in Organizational Buying Behavior," *Proceedings, Association for Consumer Research, Vol. 14*, Association for Consumer Research, 259-265.
- _____, and T. Speh (1984), "The Marketing Strategy Center: Diagnosing the Industrial Marketers Interdisciplinary Role," *Journal of Marketing*, 48 (4), 53-61.
- _____, and _____ (1991), Business Marketing Management Fourth Edition, Ft. Worth: The Dryden Press, 478.
- Iacobucci, D. (1996), "Concerning the Diffusion of Network Models in Marketing," *Journal of Marketing*, 60 (3), 134-135.
- ______, Ed. (1996), Networks in Marketing, Thousand Oaks, CA: Sage Publications. Ingram, T.N., K.S. Lee, and S.J. Skinner (1989), "An Empirical Assessment of Salesperson Motivation, Commitment and Job Outcomes," Journal of Personal Selling and Sales Management, 9 (3), 25-33.
- ______, C. Schwepter and D. Hutson (1992), "Why Salespeople Fail," *Industrial Marketing Management*, 21 (3), 225-230.
- Jackson, B.B. (1980), "Manage Risk in Industrial Pricing," Harvard Business Review, 58 (4), 121-133.
- _____ (1985), Winning & Keeping Industrial Customers, Lexington, MA: Lexington Books.
- _____, and B.P. Shapiro (1979), "New Way to Make Product Line Decisions," Harvard Business Review, 57 (3), 139-149.
- Jackson, D.W., J. Keith, and J.J. Schlacter (1983), "Evaluation of Selling Performance," *Journal of Personal Selling and Sales Management*, 3 (2), 43-51.
- _____, and L.L. Ostrom (1979), "Life Cycle Pricing: A Tool for Industrial Marketers," *Proceedings of the American Marketing Association Summer Educators Conference*, 44, 459-463.
- ______, and K. Evans (1981), "Measures Used to Evaluate Industrial Marketing Activities," *Industrial Marketing Management*, 10 (4), 269-74.

- _____, J.J. Schlacter, and W.G. Wolfe (1995), "Examining the Bases Utilized for Evaluating Salespeoples' Performance," *Journal of Personal Selling and Sales Management*, 15 (4), 57-65.
- _____, and S.S. Tax (1995), "Managing the Industrial Sales Force Culture," *Journal of Business and Industrial Marketing*, 10 (2), 34-47.
- Jackson, R.W. (1988), "The Effect of Approved Vendor Lists on Industrial Marketing," in A.G. Woodside (ed.), Advances in Business Marketing Vol 3. Greenwich, CT: JAI Press, Inc. 79-94.
- ______, and P.D. Cooper (1988), "Unique Aspects of Marketing Industrial Services," *Industrial Marketing Management*, 17 (2), 111-118.
- Jagetia, L.C., and D.M. Patel (1981), "Developing an End-Use Intelligence System," *Industrial Marketing Management*, 10 (2), 101-107.
- Jain, S.C. (1985), "An Integrated Approach to Competitive Analysis," Chicago: American Marketing Association, 9-16.
- ______, and M.L. Laric (1979), "A Framework for Strategic Industrial Pricing," Industrial Marketing Management 8 (1), 75-80.
- Jennings, R.G., and R.E. Plank (1995), "When the Purchasing Agent Is a Committee," *Industrial Marketing Management*, 24 (5), 411-419.
- Jobber, D. (1986), "Improving Response Rates in Industrial Mail Surveys," *Industrial Marketing Management*, 15 (3), 185-195.
- (1990), "Maximizing Response Rates in Industrial Mail Surveys: A Review of the Evidence," in *Advances in Business Marketing Vol 4*, Stamford, CT: JAI Press, 121-146.
- _____, and S. Sanderson (1985), "The Effect of Two Variables on Industrial Mail Survey Returns," *Industrial Marketing Management*, 14 (2), 119-121.
- Johanson, J. and L. Mattson (1985), "Marketing Investments and Market Investments in Industrial Networks," *International Journal of Research in Marketing*, 2 (3), 185-195.
- Johne, F.A. (1984), "How Experienced Product Innovators Organize," Journal of Product Innovation Management, 1 (4), 210-223.
- , and P.A. Snelson (1988), "Success Factor in Product Innovation: A Selective Review," *Journal of Product Innovation Management*, 5 (2), 114-128.
- Johnson, J.C., and K.C. Schneider (1995), "Outsourcing in Distribution: The Growing Importance of Transportation Brokers," *Business Horizons*, 38 (6), 40-48.
- Johnson, T.C. (1995), "A Typology of Disturbances to Buyer-Seller Relationships," Proceedings of the Academy of Marketing Science Vol 18, Coral Gables, FL: The Academy of Marketing Science, 220-224.
- Johnston, M.J., J. Hair, and J. Boles (1989), "Why Do Salespeople Fail," *Journal of Personal Selling and Sales Management*, 9 (3), 53-58.
- Johnston, W.J. (1979), Communication Networks and Influence Patterns in Industrial Buying Behavior, Unpublished Doctoral Dissertation, Pittsburgh: The University of Pittsburgh.
- _____ (1981), "Industrial Buying Behavior: A State of the Art Review," in (ed.) Annual Review of Marketing 1981 Chicago: American Marketing Association, 75-88.
- _____, and J. Boles (1994), "Business to Business Selling and Sales Force Manage-

- ment," in A.G. Woodside (ed.), Advances in Business Marketing and Purchasing Vol 6, Greenwich CT: JAI Press, 185-220.
- _____, and M. Cooper (1981), "Analyzing the Industrial Salesforce Selection Process," *Industrial Marketing Management*, 10 (2), 139-147.
- _____, and M. R. Czinkota (1985), "Export Attitudes of Industrial Manufacturers," Industrial Marketing Management, 14 (2), 123-32.
- _____, and J.E. Lewin (1996), "Organizational Buying Behavior: Toward an Integrative Framework," *Journal of Business Research*, 35 (1), 1-15.
- _____, and _____(1997), "Advances in Industrial Marketing Theory and Practice from the *Journal of Business and Industrial Marketing*," *Journal of Business Research*, 38 (March), 199-210.
- ______, and M.D. Shields (1983), "Evaluating the Newer Salesperson," *Industrial Marketing Management*, 12 (3), 193-99.
- _____, and R.E. Spekman (1982), "Industrial Buying Behavior: A Need for an Integrative Approach," *Journal of Business Research*, 10 (2), 135-146.
- Johnston, J. L., T. Sakano, J.A. Cote, and N. Onzo (1993), "The Exercise of Interfirm Power and Its Repercussions in US-Japanese Channel Relationships," *Journal of Marketing*, 57 (2), 1-10.
- Jolson, M., and J. Comer (1992), "Predicting the Effectiveness of the Industrial Salesperson," *Industrial Marketing Management*, 21 (1), 69-75.
- Juttner, U., and H. Wehili (1994), "Competitive Advantage: Merging Marketing and the Competence Based Perspective," *Journal of Business and Industrial Marketing*, 9 (4), 42-53.
- Kalafatis, S. P. (1994), "Impact of the Inclusion of an Article on Incentives in Industrial Mail Surveys," *Industrial Marketing Management*, 23 (2), 137-143.
- Kallis, J.M. and J.J. Giglitrano (1992), "Improving Mail Response Rates with Express Mail," *Industrial Marketing Management*, 21 (1), 1-4.
- Kaminsky, P. and G. Clark (1987), "The Readability of Sales Training Manuals," *Industrial Marketing Management*, 16 (3), 179-84.
- Kanter, R.M. (1994), "Collaborative Advantage: The Art of Alliance," *Harvard Business Review*, 72 (4), 96-112.
- Karagozoglu, N., and W. Brown (1993), "Time-Based Management of the New Product Development Process," *Journal of Product Innovation Management*, 10 (3), 205-215.
- Karimabady, H. and T. Brunn (1991), "Postal Surveys to Small Manufacturers," Industrial Marketing Management, 20 (4), 319-326.
- Kasper, H. and J. Lemmink (1989), "After Sales Service Quality: Views Between Industrial Customers and Service Managers," *Industrial Marketing Management*, 18 (3), 199-208.
- Kauffman, R.G., and T.A. Oliva (1994), "Multivariate Catastrophe Model Estimation: Method and Application," Academy of Management Journal, 37 (1), 206-221.
- Kaynak, E. (1989), "How Chinese Buyers Rate Foreign Suppliers," *Industrial Marketing Management*, 18 (3), 187-198.
- ______, and O. Kucukemiroglu (1992), "Sourcing of Industrial Products: Region Centric Orientation of Chinese," *European Journal of Marketing*, 26 (5), 36-55.

- Keeney, R.L., and G.L. Lilien (1987), "New Industrial Product Design and Evaluation Using Multiattribute Value Analysis," *Journal of Product and Innovation Management*, 4 (3), 185-198.
- Keep, W.W., G. Omura, and R. Calantone (1994), "What Managers Should Know About Their Competitors Patented Technologies," *Industrial Marketing Manage*ment, 23 (3), 257-264.
- Kelly, J.P. and R.T. Hise (1979), "Industrial and Consumer Goods Product Managers Are Different," *Industrial Marketing Management*, 8 (4), 325-332.
- Kendall, D.L., and M.T. French (1991), "Forecasting the Potential for New Industrial Products," *Industrial Marketing Management*, 20 (3), 177-183.
- Kennedy, A.M. (1982), "Industrial Buyer Behavior: A Review of Literature and Research Needs," *Management Decision*, 20 (1), 38-53.
- (1983), "The Adoption and Diffusion of New Industrial Products: A Literature Review," *European Journal of Marketing*, 17 (3), 31-88.
- Kennedy, E.J. and L. Lawton (1990), "Men and Women in the Industrial Salesforce: A Longitudinal Study," *Proceedings of the American Marketing Association Summer Educators Conference*, Chicago: American Marketing Association, 200 (abstract only).
- Kerin, R. and W. Cron (1987), "Assessing Trade Show Financing and Performance: An Exploratory Study," *Journal of Marketing*, 51 (3), 87-94.
- _____, and M.G. Harvey (1987), "Strategic Marketing Thinking: A Game Perspective," *Journal of Business and Industrial Marketing*, 2 (2), 47-54.
- Kickert, W.J.M., and J.P. van Gigch (1979), "A Metasystem Approach to Organizational Decision-Making," Management Science, 25 (12), 1217-1231.
- Kijewski, V. (1990), "Trade Shows: A Long Way to Go," in *Proceedings of the American Marketing Association Winter Educators Conference*, 45-46.
- _____, Y. Yoon, and G.G. Young (1993), "How Exhibitors Select Trade Shows," *Industrial Marketing Management*, 22 (4), 287-298.
- Kim, J., D.A. Reid, R.E. Plank, and R. Dahlstrom (1995), "The Role of Brand Equity in Business Markets: A Model, Research Proposition and Managerial Implications," *Proceedings of the Summer Educators Conference*, Chicago: American Marketing Association, 111-112.
- Kirpalani, V.H., and M. MacPherson (1979), "Organize Around End Use Markets," *Industrial Marketing Management*, 8 (4), 305-12.
- Kizilbash, A.H., W.O. Hancock, C.A. Maile, and P. Gillett (1979), "Social Auditing for Marketing Managers," *Industrial Marketing Management*, 8 (1), 1-6.
- Klein, S., G. Fraxier, and V. Roth (1990), "A Transaction Cost Analysis of Channel Integration in International Markets," *Journal of Marketing Research*, 27 (2), 196-208.
- Kleinschmidt, E. (1994), "A Comparative Analysis of New Product Programmes," European Journal of Marketing, 28 (7), 5-29.
- Knowles, P.A., S.J. Grove, and K. Keck (1994), "Signal Detection Theory and Sales Effectiveness," *Journal of Personal Selling and Sales Management*, 14 (2), 1-14.
- Koh, A.C., and R.A. Robicheaux (1988), "Variations in Export Performance Due to Differences in Export Marketing Strategic Implications for Industrial Markets," *Journal of Business Research*, 17 (3), 249-58.

- Kohli, A. and G. Zaltman (1988), "Measuring Multiple Buying Influences," *Industrial Marketing Management*, 17 (3), 197-204.
- _____, and B. Jaworski (1990), "Marketing Orientation: The Construct, Research Propositions, and Managerial Implications," *Journal of Marketing*, 54 (2), 1-18.
- _____, and B. Jaworski (1994), "The Influence of Coworker Feedback on Salespeople," *Journal of Marketing*, 58 (4), 82-94.
- Konijnendijk, P. (1993), "Dependence and Conflict Between Production and Sales," Industrial Marketing Management, 22 (3), 161-168.
- Korgaonkar, P.K., D.N. Bellenger, and A.E. Smith (1986), "Successful Industrial Advertising Campaigns," *Industrial Marketing Management*, 15 (2), 123-128.
- Kortge, G.D. (1984), "Inverted Breakeven Analysis for Profitable Marketing Decisions," *Industrial Marketing Management*, 13 (4), 219-224.
- _____ (1993), "Link Sales Training and Product Life Cycles," *Industrial Marketing Management*, 22 (3), 239-45.
- ______, and P.A. Okonkwo (1989), "Simultaneous New Product Development: Reducing the New Product Failure Rate," *Industrial Marketing Management*, 18 (4), 301-306.
- ______, and _____ (1993), "Perceived Value Approach to Pricing," *Industrial Marketing Management*, 22 (2), 133-140.
- Kosek, C. (1996), "Business-to-Business Grabs \$51.7 Billion: Discipline Captures 37.4% of Total 1995 Marketing Dollars," *Advertising Age's Business Marketing*, 81 (5), s3-s4.
- Kralyic, P. (1983), "Purchasing Must Become Supply Management," Harvard Business Review, 61 (5), 109-117.
- Kumar, A., and W. Dillon (1990), "Use of Confirmatory Measurement Models in the Analysis of Multi-Informant Reports," *Journal of Marketing Research*, 27 (February), 102-111.
- Kyj, M. (1987), "Customer Service as a Competitive Tool," *Industrial Marketing Management*, 16 (3), 225-230.
- LaForge, R., and D. Cravens (1982), "Steps in Selling Effort Deployment," *Industrial Marketing Management*, 11 (3), 183-94.
- , _____, and C.Young (1986), "Using Contingency Analysis to Select Selling Effort Allocation Strategies," *Journal of Personal Selling and Sales Management*, 6 (2), 19-28.
- ______, C.Young, and E. Hamm (1983), "Increase Sales Productivity Through Improved Sales Call Allocation Strategy," *Journal of Personal Selling and Sales Management*, 3 (2), 53-59.
- Lagace, R. R. (1990), "Leader-Member Exchange: Antecedents and Consequences of the Cadre and Hired Hand," *Journal of Personal Selling and Sales Manage*ment, 10 (1), 11-19.
- LaGarce, R. and A.E. Prell (1978), "Transactional Marketing: An Understanding of the Industrial Marketing Process," *Industrial Marketing Management*, 7 (1), 54-59.
- Lamb, C. (1990), "Blueprinting the Future: Strategy Development at Allied Signal, Incorporated," *Journal of Business and Industrial Marketing*, 5 (1), 41-47.

- Lambert, D.R. (1981), "Price as a Quality Cue in Industrial Marketing," *Journal of the Academy of Marketing Science*, 9 (3), 227-238.
- ______, H. Marmostein, and A. Sharma (1990), "Industrial Salespeople as a Source of Marketing Information," *Industrial Marketing Management*, 19 (2), 141-148.
- _____, and J.U. Sterling (1987), "What Types of Profitability Reports Do Marketing Managers Receive," *Industrial Marketing Management*, 16 (4), 295-303.
- Lamont, L.M., and W.J. Lundstrom (1974), "Defining Industrial Sales Behavior: A Factor Analytic Study," in R.C. Curhan (ed.), 1974 Combined Proceedings, Chicago: American Marketing Association, 493-498.
- Lancaster, G. (1995), "Marketing and Engineering Revisited," *Journal of Business and Industrial Marketing*, 10 (1), 6-15.
- Landeros, R., R.F. Reck, and F. Griggs (1994), "Evaluating Suppliers Overhead Allocations," *International Journal of Purchasing and Materials Management*, 30 (2), 40-50.
- , and R.E. Plank (1995), "Maintaining Buyer-Supplier Partnerships," *International Journal of Purchasing and Materials Management*, 31 (3), 3-11.
- Langrehr, V., F. Langrehr and J. Tatreau (1992), "Business Users' Attitudes Toward Recycled Materials," *Industrial Marketing Management*, 21 (4), 361-367.
- Lantos, G. (1987), "An Ethical Base for Marketing Decision Making," Journal of Business and Industrial Marketing, 2 (2), 11-16.
- LaPlaca, P.J. (1988), "Contingency Pricing for Improved Profit Performance," Journal of Business and Industrial Marketing, 3 (2), 65-70.
- _____ (1997), "Contributions to Marketing Theory and Practice from *Industrial Marketing Management*, A Journal of Business Research, 38 (March), 179-198.
- Laric, M.V. (1980), "Pricing Strategies in Industrial Markets," European Journal of Marketing, 14 (5), 303-315.
- Lavenka, N.M., and A.F. Jung (1991), "The Effects of Retail Competition on the Personal Selling Effort of New Car Salespeople," *Journal of Applied Business Research*, 7 (3), 110-115.
- Lawless, M. and R. Fisher (1990), "Sources of Durable Competitive Advantage in New Products," *Journal of Product Innovation Management*, 7 (1), 35-44.
- Lere, J.C. and J.V. Saraph (1995), "Activity Based Costing for Purchasing Managers Cost and Pricing Determination," *International Journal of Purchasing and Materials Management*, 31 (4), 25-31.
- Lehman, D.R., and J. O'Shaughnessy (1974), "Difference in Attribute Importance for Different Industrial Products," *Journal of Marketing*, 38 (2), 36-42.
- _____, and _____(1982), "Decision Criteria Used in Buying Different Categories of Products," *Journal of Purchasing and Materials Management*, 18, 19-14.
- _____, and J.H. Steckel (1985), "Effective Advertising in Industrial Supplier Directories," *Industrial Marketing Management*, 14 (2), 107-111.
- Leigh, T.W., and P.F. McGraw (1989), "Mapping the Procedural Knowledge of Industrial Sales Personnel: A Script-Theoretic Investigation," *Journal of Marketing*, 53 (1), 16-34.
- Levthesser, L., D. LaBahn and K. Harich (1995), "Assessing Cross National Business Relationships," *Industrial Marketing Management*, 24 (1), 61-68.

- Lewin, J.E., and W.J. Johnston (1996), "The Effects of Organizational Restructuring on Industrial Buying Behavior: 1990 and Beyond," *Journal of Business and Industrial Marketing*, 11 (6), 93-111.
- Lichtenthal, J.D. (1988), "Group Decision Making in Organizational Buying: A Role Structure Approach," in A.G. Woodside (ed.) Advances in Business Marketing Vol 3, Greenwich, CT: JAI Press, 119-157.
- _____, and G. Butaney (1991), "Undergraduate Industrial Marketing: Content and Methods," *Industrial Marketing Management*, 20 (3), 231-239.
- _____, and R.H. Ducoffe (1994), "Industrial Advertising Decisions," *Advances in Business Marketing and Purchasing Vol 6*, Stamford, CT: JAI Press, 221-257.
- ______, S. Sikri, and K. Folk (1989), "Teleprospection: An Approach for Qualifying Accounts," *Industrial Marketing Management*, 18 (1), 11-17.
- and D.T. Wilson (1992), "Becoming Market Oriented," *Journal of Business Research*, 24 (3), 191-207.
- ______, and M.M. Long (1997), "A Scientific Contribution to the Field from the *Journal of Business-to-Business Marketing*," *Journal of Business Research*, 38 (March), 211-234.
- Lilien, G.L. (1979), "ADVISOR2: Modeling the Marketing Mix for Industrial Products," *Management Science*, 25 (February), 191-204.
- _____ (1980), "Reply to Farris and Buzzell's Comment on ADVISOR2 Paper," Management Science, 26 (1), 101-105.
- _____ (1983), "A Descriptive Model of the Trade-Show Budgeting Decision Process," *Industrial Marketing Management*, 12 (1), 25-29.
- _____, and J.D.C. Little (1976), "The ADVISOR Project: A Study of Industrial Marketing Budgets," *Sloan Management Review*, 16 (Spring), 17-31.
- _____, A.J. Silk, J.M. Choffray, and M. Rao (1976), "Industrial Advertising Effects and Budgeting Practices," *Journal of Marketing*, 40 (January).
- _____, and D. Weinstein (1984), "An International Comparison of the Determinants of Industrial Marketing Expenditures," *Journal of Marketing*, 48 (1), 46-53.
- Lim. J.S., and D.A. Reid (1992), "Vital Cross Functional Linkages with Marketing," *Industrial Marketing Management*, 21 (2), 159-165.
- Lindquist, J., and L.E. Crow (1985), "Use of Written Purchase Guidelines and Formalized Vendor Rating Systems," *Proceedings of the Academy of Marketing Science*, Vol 8, 63-67.
- Lister, P. (1967), "Identifying and Evaluating the Purchasing Influence," IMRA Journal (August), 190-199.
- Little, B., and R.A. More (1978), "Sales Forecast Errors for New Product Projects," *Industrial Marketing Management*, 7 (1), 49-53.
- Littler, D., F. Leverich, and M. Bruce (1995), "Factors Affecting the Process of Collaborative Product Development: A Study of UK Manufacturers of Information and Communication Technology Products," *Journal of Product Innovation Management*, 12 (1), 16-32.
- Locander, W.B. and W.A. Staples (1978), "Evaluating and Motivating Salesmen with the BARS Method," *Industrial Marketing Management*, 7 (1), 43-48.
- London, S., and C. Donmeyer (1990), "Increasing Response to Industrial Mail Surveys," *Industrial Marketing Management*, 19 (3), 235-241.

- Long, B.G., and D.L. Varble (1978), "Purchasing's Use of Flexible Price Contracts," Journal of Purchasing and Materials Management, 14 (3), 2-5.
- Lothia, R. and R. Krapful (1994), "The Impact of Transaction Specific Investments on Buyer-Seller Relationships," *Journal of Business and Industrial Marketing*, 9 (1), 6-17.
- Lucas, G.H. and A.J. Bush (1983), "An Examination of Equity Theory in the Organizational Buyer-Seller Dyad," *Proceedings of the American Marketing Association*, Vol 49, Chicago, American Marketing Association, 301-304.
- _____, and _____ (1984), "Guidelines for Marketing a New Industrial Product," Industrial Marketing Management, 13 (5), 157-161.
- _____, and _____(1988), "The Marketing-R&D Interface: Do Personality Factors Have an Impact?," *Journal of Product Innovation Management*, 5 (4), 257-268.
- Lynch, J.E., and G.J. Hooley (1987), "Advertising Budgeting Practices of Industrial Advertisers," *Industrial Marketing Management*, 16 (1), 63-69.
- ______, and _____ (1989), "Industrial Advertising Budgeting Approaches in the UK," *Industrial Marketing Management*, 18 (4), 265-270.
- Lynn, S.A. (1986), "Segmenting a Business Market for a Professional Service," Industrial Marketing Management, 15 (2), 13-21.
- Lysonski, S., and E.M. Johnston (1983), "The Sales Manager as a Boundary Spanner: A Role Theory Analysis," *Journal of Personal Selling and Sales Management*, 3 (2), 8-19.
- _____, and A. Woodside (1989), "Boundary Role Spanning, Behavior, Conflict, and Performance of Industrial Product Managers," *Journal of Product Innovation Management*, 6 (3), 169-184.
- Mabert, V., J. Muth, and R. Schmenner (1992), "Collapsing New Product Development Times: Six Case Studies," *Journal of Product Innovation Management*, 9 (3), 200-212.
- MacInnis, M., and L. Heslop (1990), "Marketing Planning in a High-Tech Environment," *Industrial Marketing Management*, 19 (2), 107-116.
- MacNeil, I. (1980), *The New Social Contract*, New Haven, CT: Yale University Press.
- Madden, C.S., and M.J. Caballero (1987), "Perceptions of the Specialty Advertising Industry: Implications for Business Marketing," *Journal of Business and Industrial Marketing*, 2 (4), 37-44.
- Mafi, M., and L. Carr (1990), "Guidelines for Marketing in Iran," *Industrial Marketing Management*, 19 (2), 167-171.
- Magrath, A. (1991), "Ten Timeless Truths About Pricing," *Journal of Business and Industrial Marketing*, 6 (3), 15-23.
- _____, and K. Hardy (1987), "Selecting Sales and Distribution Channels," *Industrial Marketing Management*, 16 (4), 273-278.
- _____, and _____ (1992), "Manufacturers Services for Distributors," *Industrial Marketing Management*, 21 (2), 119-124.
- Mahajan, V. and E. Muller (1979), "Innovation Diffusion and New Product Growth Models in Marketing," *Journal of Marketing*, 43 (4), 55-68.
- ______, and F.M. Bass (1990), "New Product Diffusion Models in Marketing: A Review and Directions for Research," *Journal of Marketing*, 54 (1), 1-26.

- Maizel, S. (1988), "Promoting Commodity Products with Co-op," *Journal of Business and Industrial Marketing*, 3 (2), 13-15.
- Manssen, L. (1990), "Using PC's to Automate and Innovate Marketing Activities," Industrial Marketing Management, 19 (3), 209-213.
- Marshall, J.J., and H. Vredenburg (1988), "Successfully Using Telemarketing in Industrial Sales," *Industrial Marketing Management*, 17 (1), 15-22.
- Masiello, T. (1988), "Developing Market Responsiveness Throughout Your Company," *Industrial Marketing Management*, 17 (2), 85-94.
- Mayo, E., H. Lee, and R.R. Reck (1991), "Personal Selling and Communication Styles: An Exploratory Test of the Communication Style Model," *Proceedings of the Academy of Marketing Science Vol 14*, Coral Gables, FL: The Academy of Marketing Science, 139-145.
- McCrohan, K. (1978), "Forecasting Business Needs in the Telephone Market," *Industrial Marketing Management*, 7 (2), 109-113.
- McCullough, L.S., and R.K. Taylor (1993), "Humor in American, British, and German Ads," *Industrial Marketing Management*, 22 (1), 17-28.
- McGuinness, N.W. (1990), "New Product Idea Activities in Large Technology Based Firms," *Journal of Product Innovation Management*, 7 (3), 173-185.
- ______, and B. Little (1981), "The Influence of Product Characteristics on the Export Performance of New Industrial Products," *Journal of Marketing*, 45 (2), 110-22.
- McGuire, E.P. (1986), "Establishing Service Policies for Industrial Goods," New York: McGraw Hill, 90, 1-10.
- McKeown, J. (1990), "New Products from New Technologies," *Journal of Business and Industrial Marketing*, 5 (1), 67-72.
- McMillan, J.R. (1973), "Role Differentiation in Industrial Buying Decisions," *Proceedings of the American Marketing Association*, Chicago: American Marketing Association, 207-211.
- McQuiston, D. and R. Walters (1989), "The Evaluative Criteria of Industrial Buyers: Implications for Sales Training," *Journal of Business and Industrial Marketing*, 4 (2), 65-75.
- Mehr, P.R. (1992), "Identifying Independent Reps," *Industrial Marketing Management*, 21 (4), 319-321.
- (1994), "Focusing on Large Prospective Customers in High-Tech and Industrial Markets," *Industrial Marketing Management*, 23 (3), 265-272.
- Meidan, A. (1982), "Optimizing the Number of Industrial Salespersons," *Industrial Marketing Management*, 11 (1), 63-75.
- Meldrum, M.J. (1995), "Marketing High Tech Products: The Emerging Themes," European Journal of Marketing, 29, 45-48.
- _____, and R.D. Millman (1991), "10 Risks in Marketing High Technology Products," *Industrial Marketing Management*, 20 (1), 43-50.
- Mendez, E. and J. Pearson (1994), "Purchasing's Role in Product Development: The Case for Time Based Strategies," *International Journal of Purchasing and Materials Management*, 30 (1), 2-12.
- Mentzer, J.T. (1986), "Determining Motor Carrier Backhaul Markets," *Industrial Marketing Management*, 15 (3), 237-243.

- ______, and R. Gomes (1989), "Evaluating a Decision Support Forecasting System," *Industrial Marketing Management*, 18 (4), 313-323.
- _____, and N. Goudhi (1993), "Expert Systems in Industrial Marketing," *Industrial Marketing Management*, 22 (2), 109-116.
- Meredith, L. (1989), "Developing and Using a Data Base Marketing System," *Industrial Marketing Management*, 18 (4), 245-257.
- _____(1993), "A Customer Evaluation System," Journal of Business and Industrial Marketing, 8 (1), 58-72.
- Merrifield, B. (1978), "Industrial Project Selection and Management," *Industrial Marketing Management*, 7 (5), 324-330.
- Messer, F.R. (1992), *Business to Business Communications Handbook*, Chicago, IL: NTC Business Books.
- Messina, M.J., A.L. Guiffrida and G. Wood (1991), "Faculty/Practitioner Differences: Skills Needed for Industrial Marketing Entry Positions," *Industrial Marketing Management*, 20 (1), 17-21.
- Metcalf, L.E., C.R. Frear, and R. Krishnan (1992), "Buyer-Seller Relationships: An Application of the IMP Interaction Model," *European Journal of Marketing*, 26 (2), 27-46.
- Miaoulis, G., and P.J. LaPlaca (1982), "A Systems Approach for Developing High Technology Products," *Industrial Marketing Management*, 11 (4), 253-262.
- Michaels, R.E., A.J. Dubinsky, and G.A. Rich (1995), "An Empirical Investigation of Components of Industrial Buyer Motivation," *Journal of Business-to-Business Marketing*, 2 (2), 5-35.
- _____, A. Kumar, and S. Samu (1995), "Activity Specific Role Stress in Purchasing," *International Journal of Purchasing and Materials Management*, 31 (1), 10-19.
- Michman, R. D. (1980), "Trends Affecting Industrial Distributors," *Industrial Marketing Management*, 9 (3), 213-216.
- _____ (1987), "Linking Futuristics with Marketing Planning, Forecasting, and Strategy," *Journal of Business and Industrial Marketing*, 2 (2), 61-68.
- Midgley, D.F., P.D. Morrison, and J.H. Roberts (1992), "The Effect of Network Structure in Industrial Diffusion Processes," *Research Policy*, 21 (6), 533-552.
- Miles, M.P., D.A. Arnold, and H. Nash (1990), "Adaptive Communication: The Adoption of Seller's Interpersonal Style to the Stage of the Dyad's Relationship and the Buyer's Communication Style," *Journal of Personal Selling and Sales Management*, 10 (1), 21-27.
- Min, H. and W. Galle (1991), "International Purchasing Strategies of Multinational U.S. Firms," *Journal of Purchasing and Materials Management*, 27 (3), 9-18.
- Mintu, A.T. (1989), "A Proposed Theoretical Model for Dyadic Marketing Negotiations," *Developments in Marketing Science, Vol 12*, Coral Gables, FL: Academy of Marketing Science, 33-37.
- Mitchell, P.C.N., P. Quinn, and E. Percival (1991), "Marketing Strategies for Mature Industrial Products," *Industrial Marketing Management*, 20 (3), 201-206.
- Moeller, C., and D.T. Wilson (1995), Business Marketing: An Interaction and Networks Perspective, Norwell, MA: Kluwer Academic Publishers.
- Moenaert, R., and W. Souder (1990), "An Information Transfer Model for Integrat-

- ing Marketing and R&D Personnel in New Product Development," *Journal of Product Innovation Management*, 7 (2), 91-107.
- _____, and W. Souder (1990), "An Analysis of the Use of Extrafinancial Information by R&D and Marketing Persons," *Journal of Product Innovation Management*, 7 (3), 213-29.
- Mohr, J.J. and J. Nevin (1990), "Communication Strategies in Marketing Channels: A Theoretical Perspective," *Journal of Marketing*, 54 (4), 37-51.
- Moncrief, W.C. (1986), "Selling Activity and Sales Position Taxonomies for Industrial Salesforces," *Journal of Marketing Research*, 23 (3), 261-270.
- ______, C.W. Lamb, and T. Dielman (1986), "Developing Telemarketing Support Systems," *Journal of Personal Selling and Sales Management*, 6 (2), 43-49.
- ______, and J.N. Mackay (1991), "Laptop Computers in Industrial Sales," *Industrial Marketing Management*, 20 (4), 279-285.
- , S. Shipp, C.W. Lamb, and D.W. Cravens (1989), "Examining the Roles of Telemarketing in Selling Strategy," *Journal of Personal Selling and Sales Management*, 9 (3), 1-12.
- Monczka, R.M., and L.C. Giunipero (1988), "Organizational Approaches to International Purchasing," *Proceedings of the American Marketing Association*, 19.
- ______, and R. Trent (1991), "Global Sourcing: A Development Approach," *Journal of Purchasing and Materials Management*, 27 (2), 2-8.
- ______, and ______ (1992), "Worldwide Sourcing: Assessment and Execution," Journal of Purchasing and Materials Management, 28 (4), 9-19.
- Montoya-Weiss, M. and R. Calantone (1994), "Determinants of New Product Performance: A Review and Meta Analysis," *Journal of Product Innovation Management*, 11 (5), 397-417.
- Moon, M. and G. Armstrong (1994), "Selling Teams: A Conceptual Framework and Research Agenda," *Journal of Personal Selling and Sales Management*, 14 (1), 17-30.
- Moore, S.A. and B.B. Schlegelmilch (1994), "Improving Service Quality in an Industrial Setting," *Industrial Marketing Management*, 23 (1), 83-92.
- More, R.A. (1978), "Primary and Secondary Marketing Information for New Industrial Products," *Industrial Marketing Management*, 7 (3), 153-160.
- _____(1984), "Improving the Organizational Adoption Rate for High Technology Industrial Products," *Journal of Product Innovation Management*, 1 (3), 182-198.
- (1986), "Developer/Adopter Relationships in New Industrial Product Situations," *Journal of Business Research*, 14 (6), 501-517.
- Morgan, D.S., and F.W. Morgan (1980), "Marketing Cost Controls: A Survey of Industrial Practices," *Industrial Marketing Management*, 9 (3), 217-21.
- Morgan, N.A. and N.F. Piercy (1992), "Market-Fed Quality," *Industrial Marketing Management*, 21 (2), 111-118.
- Morgan, R.M. and S.D. Hunt (1994), "The Commitment-Trust Theory of Relationship Marketing," *Journal of Marketing*, 58 (3), 20-38.
- Moriarty, R.T. (1982), "Exploring Complex Decision Making Units: A New Approach," *Journal of Marketing Research*, 19 (May), 182-191.
- _____, and M. Galper (1978), "Organizational Buying Behavior: A State of the Art

- Review," MSI Working Paper 78-101, Cambridge, MA: Marketing Science Institute.
- ______, and U. Moran (1990), "Managing Hybrid Marketing Systems," *Harvard Business Review*, 68 (6), 146-155.
- Morris, M. (1987), "Separate Prices as a Marketing Tool," *Industrial Marketing Management*, 16 (2), 79-86.
- ______, and D. Davis (1992), "Measuring and Managing Customer Service in Industrial Firms," *Industrial Marketing Management*, 21 (4), 343-53.
- _____, and D.A. Fuller (1989), "Pricing an Industrial Service," *Industrial Marketing Management*, 18 (2), 139-146.
- _____, and R. Calantone (1991), "Redefining the Purchasing Function: Entrepreneurial Perspective," *Journal of Purchasing and Materials Management*, 27 (4), 2-9.
- , R. Laforge, and D. Allen (1994), "Salesperson Failure: Definition, Determinants, and Outcomes," *Journal of Personal Selling and Sales Management*, 14 (1), 1-15.
- _____, and C. Schurink (1993), "Pricing Behavior in Industrial Markets," *Journal of Business and Industrial Marketing*, 8 (3), 28-43.
- _____, and J. Trotter (1990), "Institutionalizing Entrepreneurship in a Large Compay: A Case Study at AT&T," *Industrial Marketing Management*, 19 (2), 131-139.
- Moss, C.D. (1979), "Industrial Salesmen as a Source of Marketing Intelligence," *European Journal of Marketing*, 13 (3), 94-102.
- Muczyk, J. and M. Gable (1987), "Managing Sales Performance Through a Comprehensive Performance Appraisal System," *Journal of Personal Selling and Sales Management*, 7 (1), 41-52.
- Mudambi, S. (1995), "Rethinking Industrial Branding Research," Proceedings of the Summer Educators Conference, Chicago: American Marketing Association, 115-120.
- Munson, J.M. and W.A. Spivey (1980), "Sales Force Selection that Meets Federal Regulation and Management Needs," *Industrial Marketing Management*, 9 (1), 11-22.
- Murphy, P., D. Dalenberg, and J. Daley (1990), "Improving Survey Responses with Postcards," *Industrial Marketing Management*, 19 (4), 349-355.
- _____, and J. Daley (1994), "Logistics Issues in International Sourcing: An Exploratory Study," *International Journal of Purchasing and Materials Management*, 30 (3), 22-27.
- Murray, J.A. (1981), "Marketing Is Home for the Entrepreneurial Process," *Industrial Marketing Management*, 10 (2), 93-99.
- Narus, J.A., and J.C. Anderson (1986), "Industrial Distributor Selling: The Roles of Outside and Inside Sales," *Industrial Marketing Management*, 15 (1), 55-62.
- _____, and T. Guimaraes (1987), "Computer Usage in Distributor Marketing," Industrial Marketing Management, 16 (1), 43-54.
- , M. Reddy, and G.L. Pinchak (1984), "Key Problems Facing Industrial Distributors," *Industrial Marketing Management*, 13 (3), 139-147.

- Narver, J., and S. Slater (1990), "The Effect of a Marketing Orientation on Business Profitability," *Journal of Marketing*, 54 (4), 20-33.
- Nauman, E., and D.J. Lincoln (1989), "Systems Theory Approach to Conducting Industrial Marketing Research," *Journal of Business Research*, 19, 151-164.
- Navasimhan, R. (1983), "An Analytical Approach to Supplier Selection," *Journal of Purchasing and Materials Management*, 19 (4), 27-32.
- New, D.E., and J.L. Schlacter (1979), "Abandon Bad R&D Projects with Earlier Marketing Appraisals," *Industrial Marketing Management*, 8 (4), 274-280.
- Newman, R.G. and J.M. McKeller (1995), "Target Pricing: A Challenge for Purchasing," *International Journal of Purchasing and Materials Management*, 31 (3), 13-20.
- Nickels, W.G., R.F. Everitt, and R. Klein (1983), "Rapport Building for Salespeople: A Neuro-Linguistic Approach," *Journal of Personal Selling and Sales Management*, 3 (2), 1-7.
- Nijssen, E.J., A.R.L. Arbouw, and H.R. Commandeur (1995), "Accelerating New Product Development: A Preliminary Empirical Test of the Hierarchy of Implementation," *Journal of Product Innovation Management*, 12 (2), 99-109.
- O'Hara, B., F. Palumbo, and P. Herbig (1993), "Industrial Trade Shows Abroad," *Industrial Marketing Management*, 23 (2), 165-170.
- Oikawa, N., and J. Tanner (1992), "The Influence of Japanese Culture on Business Relationships and Negotiation," *Journal of Business and Industrial Marketing*, 7 (4), 55-62.
- Okoroafo, S. (1994), "Implementing International Countertrade: A Dyadic Approach," *Industrial Marketing Management*, 23 (3), 229-234.
- Oliver, R., and E. Anderson (1994), "An Empirical Test of the Consequences of Behavior and Outcome-Based Sales Control Systems," *Journal of Marketing*, 58 (4), 53-67.
- , and E. Anderson (1995), "Behavior- and Outcome-Based Sales Control Systems: Evidence and Consequences of Pure-Form and Hybrid Governance," *Journal of Personal Selling and Sales Management*, 14(4), 1-16.
- O'Neal, C. (1993), "Concurrent Engineering with Early Supplier Involvement: A Cross Functional Challenge," *Journal of Purchasing and Materials Management*, 29 (2), 2-9.
- _____, and W.C. LaFief (1992), "Marketing's Lead Role in Total Quality," *Industrial Marketing Management*, 21 (2), 133-143.
- Onkvisit, S., and J.J. Shaw (1989), "The Diffusion of Innovations Theory: Some Research Questions and Ideas," *Akron Business and Economic Review*, 20 (1), 46-55.
- Oren, S.S., and M.H. Rothkopf (1984), "A Market Dynamics Model for New Industrial Products and Its Application," *Marketing Science*, 3 (3), 247-265.
- Oumlil, A.B., and A.J. Williams (1989), "Market-Driven Procurement," *Industrial Marketing Management*, 18 (4), 289-292.
- Ozanne, J., and G.A Churchill (1971), "Adoption Research: Information Sources in the Industrial Purchasing Decision," in R.L. King (ed.), *Marketing and the New Science of Planning*, Chicago: American Marketing Association, 322-328.

- Palia, A. (1992), "Countertrade Practices in Indonesia," *Industrial Marketing Management*, 21 (3), 273-79.
- _____ (1993), "Countertrade Practices in Japan," *Industrial Marketing Management*, 22 (2), 125-32.
- and O. Shenkar (1991), "Countertrade Practices in China," *Industrial Marketing Management*, 20 (1), 57-65.
- and H.D. Yoon (1994), "Countertrade Practices in Korea," *Industrial Marketing Management*, 23 (3), 205-13.
- Paliwoda, S.J., and A.J. Bonaccorsi (1993), "Systems Selling in the Aircraft Industry," *Industrial Marketing Management*, 22 (2), 155-160.
- Parasuraman, A. (1981), "The Relative Importance of Industrial Promotional Tools," Industrial Marketing Management, 10 (4), 277-281.
- Pardo, C., R. Salle, and R. Spencer (1995), "The Key Accountization of the Firm," Industrial Marketing Management, 24 (2), 123-34.
- Park, C.W., M.S. Roth, and P.F. Jacques (1988), "Evaluating the Effects of Advertising and Sales Promotion Campaigns," *Industrial Marketing Management*, 17 (2), 129-140.
- Patti, C.H. and S. Kennedy (1991), *Business to Business Advertising: A Marketing Management Approach*, Chicago, IL: NTC Textbook Co.
- Patton, W.E., and R.H. King (1985), "The Use of Human Judgement Models in Evaluating Sales Force Performance," *Journal of Personal Selling and Sales Management*, 5 (1), 1-14.
- Paun, D. (1993), "When to Buy or Unbundle Products," *Industrial Marketing Management*, 22 (1), 29-34.
- Paustian, C. (1996), "Why is B-to-B Black Sheep of Marcomm?" Advertising Age's Business Marketing, 81 (5), 8.
- Paxson, M.C. (1992), "Follow Up Mail Surveys," Industrial Marketing Management, 21 (3), 195-201.
- Pearson, J.N., and L.N. Forker (1995), "International Countertrade: Has Purchasers' Role Really Changed?," *International Journal of Purchasing and Materials Management*, 31 (4), 38-44.
- Peattie, K. and M. Ratnayatan (1992), "Responding to the Green Movement," *Industrial Marketing Management*, 21 (2), 103-110.
- Peck, M. A. (1997), Integrated Account Management: How Business-to-Business Marketers Maximize Customer Loyalty and Profitability, New York: AMACOM.
- Penn, W.S. (1979), "Problem Formulation in Industrial Marketing Research," *Industrial Marketing Management*, 7 (6), 402-409.
- Perkins, W.S. (1993), "Measuring Customer Satisfaction," Industrial Marketing Management, 22 (3), 247-254.
- Perrien, J., S. Paradis, and P.M. Banting (1995), "Dissolution of a Relationship: The Salesforce Perception," *Industrial Marketing Management*, 24 (4), 317-327.
- Perry, J., and C. Perkins (1992), "Operationalizing Quality Considerations in the Purchasing Process," *Journal of Purchasing and Materials Management*, 28 (1), 10-14
- Peterson, R.T. (1990), "What Makes Sales Training Programs Successful," *Training and Development Journal*, 44 (August), 59-64.

- Petty, C., and T. Pointon (1979), "Forecasting Demand for a Recycling Plant," *Industrial Marketing Management*, 8 (3), 192-199.
- Phillips, L.A., R. Calantone, and M.T. Lee (1994), "International Technology Adoption: Behavior Structure, Demand Certainty, and Culture," *Journal of Business & Industrial Marketing*, 9 (2), 16-28.
- Piercy, N. (1981), "British Export Market Selection and Pricing," *Industrial Marketing Management*, 10 (4), 287-97.
- Plank, R.E. (1982), "Industrial Marketing Education: Practitioners' Views," Industrial Marketing Management, 11 (4), 311-315.
- (1985a), "Conceptualizing the International Market Segmentation Problem," *Proceedings of the Academy of Marketing Science*, 8, 58-62.
- (1985b), "A Critical Review of Industrial Market Segmentation," *Industrial Marketing Management*, 14 (2), 79-91.
- (1997), "Theory, Practice, and Empirical Development Contributions: Advances in Business Marketing and Purchasing," Journal of Business Research, 38 (March), 235-241.
- (1998) "The Emic versus Etic Dilemma in Cross Cultural Marketing Research: A Personal Construct Theory Perspective," (March), Midwest Marketing Association Meeting, 80-94.
- ______, and L. Fernandes (1984), "More Industrial Advertising Does Not Mean More Consumer Type Promotions," *Marketing News*, (April 13), 10.
- ______, and R.C. Greene (1987), "Personal Inducements: Selected Views from a Sales Management Perspective," in *Proceedings of the Academy of Marketing Science*, 348-352.
- _____, and J.N. Greene (1990), "Personal Inducements and Organizational Buying Behavior: A Neglected Research Agenda," in *Proceedings of the American Marketing Association Winter Educators Conference*, 83-88.
- _____, and _____ (1996), "Personal Construct Psychology and Personal Selling Performance," *European Journal of Marketing*, 30 (7), 25-48.
- , and D.A. Reid (1994), "The Mediating Role of Sales Behaviors: An Alternative Perspective on Sales Performance and Effectiveness," *Journal of Personal Selling and Sales Management*, 14 (2), 43-56.
- , and F. Bates (1994), "Barter: An Alternative to Traditional Methods of Purchasing," *International Journal of Purchasing and Materials Management*, 30 (2), 52-57.
- ______, and J.N. Greene (1992), "Managing Personal Inducements," *Journal of Promotional Management*, 1 (3), 39-58.
- ______, V. Kijewski, and J. Lim (1992), "The Importance of Computer Usage by Purchasing," *Industrial Marketing Management*, 21 (3), 243-248.
- Plinke, W. (1985), "Cost-Based Pricing, Behavioral Aspects of Pricing Decision for Capital Goods," *Journal of Business Research*, 13 (5), 447-460.
- Pollman, A.W., and M.L. McBair (1980), "Cost per Reader of Industrial Ads," *Journal of Advertising Research*, 20 (3), 51-54.
- Polonsky, M. J. (1995), "A Stakeholders Theory Approach to Designing Environmental Marketing Strategy," *Journal of Business and Industrial Marketing*, 10 (3), 29-46.

- Popper, E.T. and B.D. Buskirk (1992), "Technology Life Cycles in Industrial Markets," *Industrial Marketing Management*, 21 (1), 23-31.
- Powers, T.L. (1987), "Breakeven Analysis with Semi-Fixed Costs," *Industrial Marketing Management*, 16(4), 35-42.
- _____ (1989a), "Should You Increase Sales Promotion or Add Salespeople," *Industrial Marketing Management*, 18 (4), 259-263.
- _____(1989b), "Industrial Distribution Options: Tradeoffs to Consider," *Industrial Marketing Management*, 18 (3), 155-161.
- Pressley, M.M. (1980), "Improving Mail Survey Responses from Industrial Organizations," *Industrial Marketing Management*, 9 (3), 231-235.
- Presutti, W. (1991), "Technology Management: An Important Element in the Supplier Capability Survey," *Journal of Purchasing and Materials Management*, 27 (1), 11-15.
- Puri, S.J. (1993), "Where Industrial Sales Training Is Weak," *Industrial Marketing Management*, 22 (2), 101-108.
- Purohit, J. and R. Staelin (1994), "Rentals, Sales, and Buybacks: Managing Secondary Distribution Channels," *Journal of Marketing Research*, 31 (3), 325-338.
- Pye, C. (1995), "Beware of Suppliers Bearing Gifts," *NAPM Insights*, 6 (December), 28-30.
- Rabino, S. (1983), "Influencing the Adoption of an Innovation," *Industrial Marketing Management*, 12 (4), 233-241.
- ______, and T.E. Moore (1989), "Managing New Product Announcements in the Computer Industry," *Industrial Marketing Management*, 18 (1), 35-43.
- ______, and A. Wright (1984), "Applying Financial Portfolio and Multi-Criteria Approaches to Product Decisions," *Industrial Marketing Management*, 13 (4), 233-240.
- Rajagopal, S. and K. Bernard (1993), "Strategic Procurement and Competitive Advantage," *International Journal of Purchasing and Materials Management*, 29 (4), 13-20.
- Ramaswamy, A., H. Gatignon, and D. Reibstein (1994), "Competitive Marketing Behavior in Industrial Markets," *Journal of Marketing*, 58 (2), 45-55.
- Rangan, V.K., M.A.J. Menezes, and E.P. Maier (1992), "Channel Selection for New Industrial Products: A Framework, Method, and Application," *Journal of Marketing*, 56 (3), 69-82.
- _____, R.T. Moriarty, and G.S. Swartz (1992), "Segmenting Customers in Mature Industrial Markets," *Journal of Marketing*, 56 (October), 72-82.
- Rao, S. (1981), "A Dynamic Industrial Product Model," *Industrial Marketing Management*, 10 (3), 235-242.
- Ray, G.F. (1988), "The Diffusion of Innovations: An Update," *National Institute Economic Review*, 126, 51-56.
- Rayburn, G.S. (1977), "Accounting Tools in the Analysis and Control of Marketing Performance," *Industrial Marketing Management*, 6 (3), 175-182.
- Reck, R.F., and B.G. Long (1988), "Purchasing: A Competitive Weapon," *Journal of Purchasing and Materials Management*, 24 (3), 2-8.
- Roberts, J.A., R.S. Lapidus, and L.B. Chonko (1994), "An Exploratory Examination

- of Situational Variables, Effort, and Salesperson Performance," *Journal of Marketing Theory and Practice*, 2 (3), 70-93.
- Robertson, T.S. and H. Gatignon (1986), "Competitive Effects on Technological Diffusion," *Journal of Marketing*, 50 (3), 1-12.
- Robinson, P.J., C.W. Faris, and Y. Wind (1967), *Industrial Buying and Creative Marketing*, Boston: Allyn and Bacon.
- Rochford, L. (1991), "Generating and Screening New Product Ideas," *Industrial Marketing Management*, 20 (4), 287-296.
- _____, and W. Rudelius (1992), "How Involving More Functional Areas with a Firm Affects New Products," *Journal of Product Innovation Management*, 9 (4), 287-299.
- Rodgers, G. (1990), "Strategic Planning and Sales Teams," *Journal of Business and Industrial Marketing*, 5 (2), 65-70.
- Rogers, S.C. (1995), "How to Create Advertising that Works," *Journal of Business and Industrial Marketing*, 10 (2), 20-33.
- Rognes, J. (1995), "Negotiating Cooperative Supplier Relationships: A Planning Framework," *International Journal of Purchasing and Materials Management*, 31 (4), 12-18.
- Rollins, T. (1989), "A Blueprint for Salespeople Who Really Sell," *Training*, 26 (11), 50-55.
- ______, and M. Fruge (1992), "Performance Dimensions: Competencies with a Twist," *Training*, 29 (1), 47-51.
- Roos, J., E. Veie, and L.S. Welch (1992), "A Case Study of Equipment Purchasing in Czechoslovakia," *Industrial Marketing Management*, 21 (3), 257-63.
- Roscitt, R. and I.R. Parket (1990), "Strategic Service Management," *Journal of Business and Industrial Marketing*, 5 (1), 27-40.
- Rosen, B.N., S.P. Schnaars, and D. Shani (1988), "A Comparison of Approaches for Setting Standards for Technological Products," *Journal of Product Innovation Management*, 5 (2), 129-139.
- Rosenberg, R.D. (1982), "Forecasting Derived Product Demand in Commercial Construction," *Industrial Marketing Management*, 11 (1), 39-46.
- (1988), "Integrating Strategy, Industrial Product Innovation and Marketing Research," *International Journal of Research in Marketing*, 5 (3), 199-211.
- Rosenbloom, B. (1978), "Motivating Independent Industrial Distribution Channel Members," *Industrial Marketing Management*, 7 (4), 275-281.
- Ross, J.E., and R. Silverblatt (1987), "Developing the Strategic Plan," *Industrial Marketing Management*, 16 (2), 103-108.
- Rosson, P.J., and F.H.R. Seringhaus (1995), "Visitor and Exhibitor Interaction at Industrial Trade Fairs," *Journal of Business Research*, 32 (1), 81-90.
- Rothe, J.T. (1978), "Effectiveness of Sales Forecasting Methods," *Industrial Marketing Management*, 7 (2), 114-118.
- Rubinstein, M. (1992), "Effective Industrial Marketing with a Piggy Bank Budget," *Industrial Marketing Management*, 21 (3), 203-214.
- Rudelius, W., and R.A. Buchholz (1979), "What Industrial Purchasers See as Key Ethical Dilemmas," *Journal of Purchasing and Materials Management*, 15 (4), 2-10.

- ______, S.W. Hartley, and R.E. Willis (1990), "A Sales Forecasting Model for Firms Selling Projects to Order," *Advances in Business Marketing, Vol 4*, Stamford, CT: JAI Press, 147-175.
- ______, R.E. Willis, and S.W. Hartley (1986), "Forecasting for Firms Selling Projects or Jobs to Order," *Industrial Marketing Management*, 15 (2), 147-155.
- Russ, K. R., J. Hair, R. Erffmeyer and D. Easterling (1989), "Usage and Perceived Effectiveness of High Tech Approaches to Sales Training," *Journal of Personal Selling and Sales Management*, 9 (1), 46-54.
- Sager, J.K. (1990), "How to Retain Salespeople," *Industrial Marketing Management*, 19 (2), 155-66.
- _____, and M.W. Johnston (1989), "Antecedents and Outcomes of Organizational Commitment: A Study of Salespeople," *Journal of Personal Selling and Sales Management*, 9 (1), 30-41.
- Saghafi, M., D. Sciglimpaglia, and B. Withans (1995), "Strategic Decisions for American and European Industrial Marketers in a United Market," *Industrial Marketing Management*, 24 (2), 69-82.
- Sahsi, C.M., and J. Perretty (1992), "Do Trade Shows Provide Value?" *Industrial Marketing Management*, 21 (3), 249-255.
- Samiee, S. and K. Roth (1992), "The Influence of Global Marketing Standardization on Performance," *Journal of Marketing*, 56 (2), 1-17.
- _____, and P. Walters (1990), "Influence of Firm Size on Export Planning and Performance," *Journal of Business Research*, 20 (3), 235-48.
- Samli, A.C., K. Jacobs, and J.R. Willis (1992), "What Presale and Postsale Services Do You Need to Be Competitive," *Industrial Marketing Management*, 21 (1), 33-41.
- _____, and J.T. Mentzer (1980), "An Industrial Analysis Market Information System," *Industrial Marketing Management*, 9 (3), 237-245.
- _____, and J.R. Willis Jr. (1990), "Strategic Issues for Hi-Tech Marketing," in A.G. Woodside (ed), *Advances in Business Marketing Vol 4*, Greenwich, CT: JAI Press, 177-200.
- _____, G.P. Wirth, and J.R. Willis Jr. (1994), "High-Tech Firms Get More Out of Their International Sales Efforts," *Industrial Marketing Management*, 23 (4), 333-42.
- Saunders, J., and D. Jobber (1994), "Product Replacement: Strategy for Simultaneous Product Deletion and Launch," *Journal of Product Innovation Management*, 11 (5), 433-450.
- ______, and F.A.W. Wright (1979), "Do Brand Names Differentiate Identical Industrial Products," *Industrial Marketing Management*, 8 (2), 114-123.
- Schanck, J.T. (1979), "Strategic Planning for Industrial Marketers," *Industrial Marketing Management*, 8 (4), 257-263.
- Schellinck, D.A. (1983), "Effect of Time on a Marketing Strategy," *Industrial Marketing Management*, 12 (2), 83-88.
- Schlegelmilch, B.B., K. Boyle, and S. Therivel (1986), "Marketing Research in Medium-Sized U.K. and U.S. Firms," *Industrial Marketing Management*, 15 (3), 177-182.
- _____, and S. Therivel (1988), "The Use of Marketing Research in Engineering

- Companies: Empirical Evidence from U.S. and U.K. Companies," in *Advances in Business Marketing Vol 3*, Stamford, CT: JAI Press, 249-291.
- Schmitz, J. M. (1995), "Understanding the Persuasion Process Between Industrial Buyers and Sellers," *Industrial Marketing Management*, 24 (2), 83-90.
- Schnaars, S.P. (1984), "Situational Factors Affecting Forecasting Accuracy," *Journal of Marketing Research*, 21 (3), 290-297.
- Schul, P.L, and B.M. Wren (1992), "The Emerging Role of Women in Industrial Selling: A Decade of Change," *Journal of Marketing*, 56 (3), 38-54.
- Schurr, P.H. (1982), "Issues in Marketing Communications Research," in R.E. Spekman and D.T. Wilson (eds.), *Issues in Industrial Marketing: A View to the Future*, Chicago: American Marketing Association, 36-38.
- ______, and J.L. Ozanne (1985), "Influences on Exchange Processes: Buyers' Preconceptions of a Seller's Trustworthiness and Bargaining Toughness," *Journal of Consumer Research*, 11 (4), 939-953.
- Schuster, C.P. and C.D. Bodkin (1987), "Market Segmentation Practices of Exporting Companies," *Industrial Marketing Management*, 16 (2), 95-102.
- Scott, J.H., and S. Keiser (1984), "Forecasting Acceptance of New Industrial Products with Judgement Modeling," *Journal of Marketing*, 48 (2), 54-67.
- Seringhaus, F.H.R. (1987), "Using Trade Missions for Export Market Entry," *Industrial Marketing Management*, 16 (4), 249-255.
- Sethuraman, R., J.C. Anderson and J.A. Narus (1988), "Partnership Advantages and Its Determinants in Distribution and Manufacturing Working Relationships," *Journal of Business Research*, 17 (4), 327-347.
- Shah, K. and P.J. LaPlaca (1981), "Assessing Risks in Strategic Planning," *Industrial Marketing Management*, 10 (2), 77-91.
- Shapiro, B.P., and B.B. Jackson (1978), "Industrial Pricing to Meet Consumer Needs," *Harvard Business Review*, 56 (6), 119-127.
- Shaw, V. (1995), "Successful Marketing Strategies," *Industrial Marketing Management*, 24 (4), 329-39.
- Sherlock, P. (1992), *Rethinking Business-to-Business Marketing*, New York: The Free Press.
- Sheth, J.N. (1973), "A Model of Industrial Buyer Behavior," *Journal of Marketing*, 37 (October), 50-56.
- (1977), "Recent Developments in Organizational Buying Behavior," in A. Woodside, J.N. Sheth and P.D. Bennett (eds), *Consumer and Industrial Buying Behavior*, Amsterdam: North Holland Publishing Company, 17-34.
- (1985), "New Determinants of Competitive Structures in Industrial Markets," Chicago: American Marketing Association, 1-8.
- (1996), "Organizational Buying Behavior: Past Performance and Future Expectations," *Journal of Business and Industrial Marketing*, 11 (3/4), 7-24.
- Shipley, D. (1984), "Selection and Motivation of Distribution Intermediaries," *Industrial Marketing Management*, 13 (4), 249-256.
- _____ (1987), "Problems Confronting British Industrial Distributors," *European Journal of Marketing*, 21 (3), 77-88.
- _____, and E. Bourdon (1990), "Distributor Pricing in Very Competitive Markets," Industrial Marketing Management, 19 (3), 215-224.

- ______, and P. Howard (1993), "Brand Naming Industrial Products," *Industrial Marketing Management*, 22 (1), 59-66.
- _____, and J. Kiely (1986), "Industrial Sales Force Motivation and Herzberg's Dual Factor Theory: A UK Perspective," *Journal of Purchasing and Materials Management*, 6 (1), 9-16.
- ______, and ______(1988), "Motivation and Dissatisfaction of Industrial Salespeople: How Reliable Is Herzberg's Theory," *European Journal of Marketing*, 22 (1), 17-30.
- _____, and B. Neale (1987), "Industrial Barter and Countertrade," *Industrial Marketing Management*, 16 (1), 1-8.
- Shoham, A. (1992), "Selecting and Evaluating Trade Shows," *Industrial Marketing Management*, 21 (4), 335-341.
- ______, and M. Friestad (1993), "Salespeople's Emotions: An Initial Inquiry into Emotions of Industrial Products Salespeople," *Proceedings of the Academy of Marketing Science*, 16, 290-294.
- Sibley, S.D., and R.K. Teas (1979), "The Manufacturer's Agent in Industrial Distribution," *Industrial Marketing Management*, 8 (4), 286-292.
- ______, and D.A. Michie (1981), "Distribution Performance and Power Sources," Industrial Marketing Management, 10 (1), 59-65.
- Siguaw, J.A. and E.D. Honeycutt (1995), "An Examination of Gender Differences in Selling Behaviors and Job Attitudes," *Industrial Marketing Management*, 24 (1), 45-52.
- Silk, A.J., and M. U. Kalwani (1982), "Measuring Influence in Organizational Purchase Decisions," *Journal of Marketing Research*, 19 (May), 165-181.
- Silverstein, B. (1998), Business-to-Business Internet Marketing, New York: Maximum Press.
- Sims, J.T. (1979), "Measuring the Industrial Firm's Image," *Industrial Marketing Management*, 8 (4), 341-347.
- ______, and H.E. Brown (1979), "Increasing the Role of Direct Mail Marketing in Industrial Marketing Strategy," *Industrial Marketing Management*, 8 (4), 293-300.
- Sinclair, S., and K.E. Seward (1988), "Effectiveness of Branding a Commodity Product," *Industrial Marketing Management*, 17 (1), 22-33.
- ______, and E. Stalling (1990), "How to Identify Differences Between Market Segments with Attribute Analysis," *Industrial Marketing Management*, 19 (1), 31-40.
- _____, and _____(1990), "Perceptual Mapping: A Tool for Industrial Marketing: A Case Study," *Journal of Business and Industrial Marketing*, 5 (1), 55-66.
- Singh, J., R. Howell, and G. Rhoads (1990), "Adaptive Designs for Likert-Type Data: An Approach for Improving Marketing Surveys," *Journal of Marketing Research*, 27 (August), 304-321.
- Sinkula, J.M. (1991), "Some Factors Affecting the Adoption of Scanner-Based Research in Organizations," *Journal of Advertising Research*, 31 (2), 50-55.
- Skinner, R. N. (1995), Integrated Marketing: Making Marketing Work in Industrial and Business-to-Business Companies, New York: McGraw-Hill.
- Skinner, S.J., A.J. Dubinsky, and T.N. Ingram (1983), "Impact of Humor on Survey Responses," *Industrial Marketing Management*, 12 (2), 139-143.

- Slater, S. (1993), "Competing in High-Velocity Markets," Industrial Marketing Management, 22 (4), 255-64.
- Smith, B. and D. Barclay (1993), "Team Selling Effectiveness: A Small Group Perspective," *Journal of Business-to-Business Marketing*, 1 (2), 3-32.
- Smith, D., and R. Taylor (1985), "Organizational Decision Making and Industrial Marketing," *European Journal of Marketing*, 19 (7), 56-65.
- _____, and J. Owens (1995), "Knowledge of Customers' Customer as a Basis of Salesforce Differentiation," *Journal of Personal Selling and Sales Management*, 15 (3), 1-15.
- Smith, G., and T. Nagle (1994), "Financial Analysis for Profit-Driven Pricing," *Sloan Management Review*, 35 (3), 71-84.
- Smythe, D., and M. Clemons (1993). "Total Cost Supplier Selection Model: A Case Study," *International Journal of Purchasing and Materials Management*, 29 (1), 42-47.
- Soley, L.C. (1990), "Is Long Copy Effective for Industrial Advertisements?" Advances in Business Marketing, 201-224.
- ______, and L. Reid (1983), "Industrial Ad Readership as a Function of Headline Type," *Journal of Advertising*, 12 (1), 34-38.
- Souder, W.E. (1981), "Disharmony Between R&D and Marketing," Industrial Marketing Management, 10 (1), 67-73.
- (1988), "Managing Relations Between R&D and Marketing in New Product Development Projects," *Journal of Product Innovation Management*, 5 (1), 6-19.
- Spekman, R.E. (1977), A Contingency Approach to Power Relationships Within the Organizational Buying Task Group, Unpublished Doctoral Dissertation, Evanston, IL: Northwestern University.
- _____ (1988), "Strategic Supplier Selection: Understanding Long Term Buyer Relationships," *Business Horizons*, 31 (4), 75-81.
- _____ (1991), "US Buyers Relationships with Pacific Rim Sellers," *Journal of Purchasing and Materials Management*, 27 (1), 2-10.
- (1996), "A Reflection on Two Decades of Business-to-Business Marketing Research: Implications for Understanding Marketing Relationships and Networks," in D. Iacobucci, ed., Networks in Marketing, Thousand Oaks, CA: Sage Publications, 8-15.
- ______, and K. Gronhaug (1986). "Conceptual and Methodological Issues in Buying Centre Research," *European Journal of Marketing*, 20 (7), 50-63.
- Spiro, R.L., W.D. Perreault, and F.D. Reynolds (1977), "The Personal Selling Process: A Critical Review and Model," *Industrial Marketing Management*, 5, 351-364.
- , and W.D. Perreault (1979), "Influence Use by Industrial Salesmen: Influence Strategy Mixes and Situational Determinants," *Journal of Business*, 52 (3), 435-456.
- Steckel, J. (1988), "Pioneer: Decision Support for Industrial Product Planning," Summer Educators Proceedings, Chicago: American Marketing Association, 15-18.
- Steinberg, M., and R.E. Plank (1990), "Implementing Expert Systems into Business-to-Business Marketing Practice," *Journal of Business and Industrial Marketing*, 5 (2), 15-26.
- Stevenson, T.H. (1981), "Payoffs from National Account Management," *Industrial Marketing Management*, 10 (2), 119-124.

- _____(1991) "How Are Blacks Portrayed in Business Ads?" *Industrial Marketing Management*, 20 (3), 193-199.
- , F. Barner and S. Stevenson (1993), "Activity Based Costing: An Emerging Tool for Industrial Marketing Decisions," *Journal of Business and Industrial Marketing*, 8 (2), 40-52.
- _____, and A.L. Page (1979), "The Adoption of National Account Marketing by Industrial Firms," *Industrial Marketing Management*, 8 (1), 94-100.
- _____, D. Plath, and C. Bush (1990), "Using Expert Systems in Industrial Marketing," *Industrial Marketing Management*, 19 (3), 243-249.
- ______, and L.E. Swayne (1984), "Comparative Industrial Advertising: The Content and Frequency," *Industrial Marketing Management*, 13 (2), 133-138.
- ______, and ______ (1988), "Guidelines for Comparative Advertising in Industrial Trade Publications," *Journal of Business and Industrial Marketing*, 3 (1), 37-44.
- Stiles, G.W. (1972), An Information Processing Model of Industrial Buying Behavior, Unpublished Doctoral Dissertation, Minneapolis, MN: University of Minnesota.
- Stock, J.R., and B.J. LaLonde (1978), "The Purchasing Approach to Transportation Mode Selection," *Journal of Purchasing and Materials Management*, 14 (3), 2-5.
- Stone, L.W., and D. Good (1994), "Information Support for Sales Managers," *Industrial Marketing Management*, 23 (4), 281-286.
- Strutton, D., L.E. Pelton, and J.R. Lumpkin (1995), "Sex Differences in Ingratiating Behavior: An Investigation of Influence Tactics in the Salesperson-Customer Dyad," *Journal of Business Research*, 34 (1), 35-45.
- Stuart, F.I., and D. McCutcheon (1995), "Problem Sources in Establishing Strategic Alliances," *Journal of Purchasing and Materials Management*, 31 (1), 2-9.
- Sujan, H., M. Sujan, and J.H. Bettman (1988), "Knowledge Structure Differences Between More Effective and Less Effective Salespeople," *Journal of Marketing Research*, 25 (1), 81-86.
- _____, B.A. Weitz and N. Kumar (1994), "Learning Orientation, Working Smart, and Effective Selling," *Journal of Marketing*, 58 (3), 39-52.
- Sullivan, R. (1997), United States Government New Customer: Step by Step Guide, Information International.
- Swan, J.E., and C. Futrell (1978), "Men versus Women in Industrial Sales: A Performance Gap," *Industrial Marketing Management*, 7 (6), 369-373.
- _____, and D. Rink (1980), "Effective Use of Industry Product Life Cycle Trends," *Proceedings of the Summer Educators Conference*, Chicago: American Marketing Association, 198-201.
- ______, and J.J. Nolan (1985), "Gaining Customer Trust: A Conceptual Guide for the Salesperson," *Journal of Personal Selling and Sales Management*, 5 (2), 39-47.
- _____, and I.F. Trawick (1987), "Building Customer Trust in the Industrial Salesperson: Process and Outcomes," in A.G. Woodside (ed) *Advances in Business Marketing, Vol 2*, Greenwich, CT: JAI Press, 81-113.
- _____, D. Rink and J. Roberts (1988), "Measuring Dimensions of Purchaser Trust of Industrial Salespeople," *Journal of Personal Selling and Sales Management*, 8 (1), 1-9.
- ______, and D. Silva (1985), "How Industrial Salespeople Gain Customer Trust," *Industrial Marketing Management*, 14 (3), 203-211.

- Swayne, L.E., and T.H. Stevenson (1987), "Comparative Advertising in Horizontal Business Publications," *Industrial Marketing Management*, 16 (1), 71-76.
- Swift, C.O., J. Wayland, and R. Wayland (1994), "The ADA of 1990: Guidelines for Industrial Sales Managers," *Journal of Business and Industrial Marketing*, 9 (3), 30-37.
- Szmigin, I. (1993), "Managing Quality in Business to Business Services," *European Journal of Marketing*, 27 (1), 5-21.
- Szymanski, D. (1988), "Determinants of Selling Effectiveness: The Impact of Declarative Knowledge to the Personal Selling Concept," *Journal of Marketing*, 52 (1), 64-77.
- _____, and G. Churchill (1990), "Client Evaluation Cues: A Comparison of Successful and Unsuccessful Salespeople," *Journal of Marketing Research*, 27 (2), 163-174.
- Tanner, J.F., and L.B. Chonko (1995), "Trade Show Objectives, Management and Staffing Practices," *Industrial Marketing Management*, 24 (4), 257-264.
- Taylor III, B.W., and P.F. Anderson (1979), "Goal Programming Approach to Marketing/Production Planning," *Industrial Marketing Management*, 8 (2), 136-44.
- Terplitz, C.J. (1982), "Manufacturers Shift the Inventory Carrying Function," *Industrial Marketing Management*, 11 (3), 225-230.
- Thomas, R.J. (1989), "Problems in Demand Estimation for a New Technology," *Journal of Product and Innovation Management*, 2 (3), 145-157.
- ______, and Y. Wind (1980), "Conceptual and Methodological Issues in Organizational Buying Behavior," *European Journal of Marketing*, 14 (5), 239-263.
- ______, and ______(1982), "Toward Empirical Generalizations on Industrial Market Segmentation," in R.E. Spekman and D.T. Wilson (eds), *Issues in Industrial Marketing: A View to the Future*, Chicago: American Marketing Association, 1-18.
- Thompson, J.D., and A. Tuden (1959), "Strategies, Structures, and Processes of Organizational Decisions," in J.D. Thompson et al. (Eds.), *Comparative Studies in Administration*, University of Pittsburgh Press.
- Thompson, K. N. (1990), "Vendor Profile Analysis," *Journal of Purchasing and Materials Management*, 26 (1), 11-18.
- (1991), "Scaling Evaluative Criteria and Supplier Performance Estimation in Weighted Point Prepurchase Decision Models," *Journal of Purchasing and Materials Management*, 27 (1), 27-36.
- ______, B. Coe, and J. Lewis (1994), "Gauge the Value of Supplier Products: Buyer Side Applications of Economic Value Pricing Models," *Journal of Business and Industrial Marketing*, 9 (2), 29-40.
- Thorelli, H.B., and S. Burnett (1981), "The Nature of Product Life Cycles for Industrial Goods Businesses," *Journal of Marketing*, 45 (4), 97-108.
- _____, and A.E. Glowacka (1995), "Willingness of American Industrial Buyers to Source Internationally," *Journal of Business Research*, 32 (1), 21-30.
- Tigert, D., and B. Farivar (1981), "The Base New Product Growth Model: Sensitivity Analysis for a High Technology Product," *Journal of Marketing*, 45 (4), 81-90.
- Tinsley, D.B. and J. Lewis (1978), "Evaluating Industrial Services," *Journal of Purchasing and Materials Management*, 14 (4), 29-31.
- _____, and J. Ormsby (1988), "Improving Marketing with DRP," *Industrial Marketing Management*, 17 (4), 347-354.

- Tongren, H.N. (1979), "Marketing versus Public Relations in Selling Nuclear Power," *Industrial Marketing Management*, 8 (3), 250-256.
- Trade Show Bureau (1994), A Guide to the US Exposition Industry, Denver, CO: Trade Show Bureau Resource Center.
- Trawick, I.F., and J.E. Swan (1981), "A Model of Industrial Satisfaction/Complaining Behavior," *Industrial Marketing Management*, 10 (1), 23-30.
- ______, and ______ (1988), "How Salespeople Err with Purchasers: Overstepping Ethical Bounds," *Journal of Business and Industrial Marketing*, 3 (2), 5-11.
- ______, and D. Rink (1988), "Back-Door Selling: Violation of Cultural versus Professional Ethics by Salespeople and Purchaser Choice of the Supplier," *Journal of Business Research*, 17 (3), 299-309.
- _____, ____, and _____ (1989), "Industrial Buyer Evaluation of the Ethics of Sales Gift Giving: Value of the Gift and Customer versus Prospect Status," Journal of Personal Selling and Sales Management, 9 (3), 31-37.
- ______, _____, J.E. Mcgee, and D. Rink (1991), "Influence of Buyer Ethics and Salesperson Behavior on Intentions to Choose a Supplier," *Journal of the Academy of Marketing Science*, 19 (1), 17-23.
- Traynor, K., and S.C. Traynor (1989), "High Tech Advertising: A Status Report," *Journal of Advertising Research*, 29 (4), 30-36.
- Trent, R. and R. Monczka (1994), "Effective Cross-Functional Sourcing Teams: Critical Success Factors," *International Journal of Purchasing and Materials Management*, 30 (4), 2-11.
- Triandis, H.C., R. Bontempo, K. Leung, and C.H. Hui (1990), "A Method for Determining Cultural, Demographic and Personal Constructs," *Journal of Cross Cultural Psychology*, 21 (3), 302-318.
- Tsurumi, Y. (1982), "Managing Customer and Industrial Marketing Systems in Japan," *Sloan Management Review*, 24 (1), 41-50.
- Turnbill, P.W. (1990a), "A Review of Portfolio Plan Models for Industrial Marketing and Purchasing Management," European Journal of Marketing, 24 (3), 7-22.
- _____(1990b), "Roles of Personal Contacts in Industrial Export Marketing," Book Academic Press, 78-86.
- ______, D. Ford, and M. Cunningham (1996), "Interaction, Relationships, and Networks in Business Markets: An Evolving Perspective," *Journal of Business and Industrial Marketing*, 11 (3/4), 44-62.
- _____, and J.P. Valla (1986), "Strategic Planning in Industrial Marketing: An Interaction Approach," *European Journal of Marketing*, 20 (7), 5-20.
- Turner, G., G. Taylor, and M. Hartley (1994), "Ethics Policies and Gratuity Acceptance by Purchasers," *International Journal of Purchasing and Materials Management*, 30 (3), 43-47.
- Tyagi, P.K., and C.E. Block (1983), "Monetary Incentives and Salesmen Performance," *Industrial Marketing Management*, 12 (4), 263-269.
- Urban, G.L. and E. Von Hippel (1988), "Lead User Analysis for the Development of New Industrial Products," *Management Science*, 34 (5), 569-582.
- Valente, T.W. (1995), Network Models of the Diffusion of Innovation, Cresskill, NJ: Hampton Press, Inc.

- Van, D., C. Doris, and T. Stidthey (1990), "How to Develop a Database for Sales Leads," *Industrial Marketing Management*, 19 (3), 201-208.
- Van de Most, G. (1976), "Research in Industrial Market Research," *Industrial Marketing* (October), 128-129.
- Varadarajan, P.R., and M.H. Cunningham (1995), "Strategic Alliances: A Synthesis of Conceptual Foundations," *Journal of the Academy of Marketing Science*, 23 (4), 282-296.
- Venhateson, R. (1992), "Strategic Sourcing: To Make or Not to Make," *Harvard Business Review*, 70 (6), 98-107.
- Vesey, J.T. (1992), "Time to Market: Put Speed in Product Development," *Industrial Marketing Management*, 22 (2), 151-158.
- Vinh, J. and W. Verbeke (1993), "Adaptive Selling and Organizational Characteristics: Suggestions for Future Research," *Journal of Personal Selling and Sales Management*, 13 (1), 15-23.
- Von Hippel, E. (1978), "Successful Industrial Products from Customer Ideas," Journal of Marketing, 42 (1), 39-49.
- _____ (1986), "Lead Users: A Source of Novel Product Concepts," *Management Science*, 32 (7), 791-805.
- Vos, T.J. (1987), "Sharpening the Corporate Image for a Service Company," Journal of Business and Industrial Marketing, 2 (2), 69-76.
- Vredenbury, H. and C. Droge (1987), "The Value of Company Newsletters and Magazines," *Industrial Marketing Management*, 16 (3), 173-178.
- Vroom, V.H. (1964), Work and Motivation, New York: John Wiley and Sons.
- Vyas, N. (1993), "Industrial Product Elimination Decisions: Some Complex Issues," European Journal of Marketing, 27 (4), 58-76.
- _____, and A.G. Woodside (1984), "An Inductive Model of Industrial Supplier Choice Processes," *Journal of Marketing* 48 (1), 30-45.
- ______, W.L. Shelburn and R.C. Rogers (1995), "An Analysis of Strategic Alliances: Forms, Functions, and Framework," *Journal of Business and Industrial Marketing*, 10 (3), 47-60.
- Wagel, J.S. (1985), "Using Humor in the Industrial Selling Process," *Industrial Marketing Management*, 14 (4), 221-26.
- Wagner, W.B. (1987), "Customer Service in Industrial Marketing: Hedge Against Competition," *European Journal of Marketing*, 21 (7), 7-17.
- ______, and J. Hall (1991), "Equipment Lease Accounting in Industrial Marketing Strategy," *Industrial Marketing Management*, 20 (4), 305-310.
- ______, and R. LaGarce (1981), "Customer Service as a Marketing Strategy," *Industrial Marketing Management*, 10 (1), 31-41.
- Walker, O.C., G.A. Churchill, and N.M. Ford (1977), "Motivation and Performance in Industrial Selling: Present Knowledge and Needed Research," *Journal of Marketing Research*, 14 (May), 156-168.
- Walker, B.J., W. Kirchmann, and J.S. Conant (1987), "A Method to Improve Response to Industrial Mail Surveys," *Industrial Marketing Management*, 16 (4), 305-314.
- Wallace, K.M. (1984), "The Use and Value of Qualitative Research Studies," *Industrial Marketing Management*, 13 (3). 181-185.

- Walters, B., S. Peters, and G. Dess (1994), "Strategic Alliances and Joint Ventures: Making Them Work," *Business Horizons*, 37 (4), 5-10.
- Walton, J.R. (1979), "A Comparison of Opinion and Regression Forecasting for an Industrial Product," *Industrial Marketing Management*, 8 (4), 281-285.
- Ward, S., and F.E. Webster (1991), "Organizational Buying Behavior," in T.S. Robertson and H.H. Kassarjian (eds.) *Handbook on Consumer Behavior*, Englewood Cliffs, NJ: Prentice Hall, Inc., 419-458.
- Watts, C., and C. Hahn (1993), "Supplier Development Programs: An Empirical Analysis," *International Journal of Purchasing and Materials Management*, 29 (2), 11-17.
- _____, K. Kim, and C. Hahn (1992), "Linking Purchasing to Corporate Competitive Strategy," *Journal of Purchasing and Materials Management*, 28 (4), 2-8.
- Webster, F.E. (1969), "Industrial Buying Behavior: A State of the Art Appraisal," Proceedings of the American Marketing Association, Chicago: American Marketing Association, 145-150.
- (1978a), "Is Industrial Marketing Coming of Age?" in *Review of Marketing 1978*, G. Zaltman and T. Bonoma, eds. Chicago: American Marketing Association, 138-159.
- _____ (1978b), "Management Science in Industrial Marketing," *Journal of Marketing*, 42 (1), 21-27.
- ______, and Y. Wind (1972), "A General Model for Understanding Organizational Buying Behavior," *Journal of Marketing*, 36 (April), 12-19.
- ______, and ______(1973), Organizational Buying Behavior, Englewood Cliffs, NJ:
 Prentice Hall Inc.
- Weekly, J.K. (1992), "Pricing in Foreign Markets: Pitfalls and Opportunities," *Industrial Marketing Management*, 21 (3), 173-179.
- Weeks, W.A., L.B. Chonko, and L.R. Kahle (1990), "Performance Congruence and Value Congruence Impact on Sales Force Annual Sales," *Journal of the Academy of Marketing Science*, 17 (4), 345-351.
- _____, and L. Kahle (1990), "Social Values and Salespeople's Effort," *Journal of Business Research*, 20 (2), 183-190.
- Weilbaker, D. (1990), "The Identification of Selling Abilities Needed for Missionary Type Sales," *Journal of Personal Selling and Sales Management*, 10 (3), 45-58.
- Weinrauch, J.D., and R. Anderson (1982), "Conflicts Between Engineering and Marketing Units," *Industrial Marketing Management*, 11 (4), 291-301.
- ______, K. Mann, J.M. Pharr, and P.A. Robinson (1991), "Marketing Strategies of Small Industrial Manufacturers," *Industrial Marketing Management*, 20 (3), 251-59.
- Weiss, A.M., and E. Anderson (1992), "Converting from Independent Employee Salesforces: The Role of Perceived Switching Costs," *Journal of Marketing Research*, 29 (1), 101-115.
- Weitz, B.A. (1978), "Relationship Between Salesperson Performance and Understanding of Customer Decision Making," *Journal of Marketing Research*, 15 (4), 501-516.
- _____ (1981), "Effectiveness in Sales Interactions: A Contingency Framework," Journal of Marketing, 45 (1), 85-103.
- , and S.D. Jap (1995), "Relationship Marketing and Distribution Channels," Journal of the Academy of Marketing Science, 23 (4), 305-320.
- _____, H. Sujan, and M. Sujan (1986), "Knowledge, Motivation and Adaptive

- Behavior: A Framework for Improving Selling Effectiveness," *Journal of Marketing*, 50 (4), 174-191.
- Welch, J.L. (1985), "Researching Marketing Problems and Opportunities with Focus Groups," *Industrial Marketing Management*, 14 (4), 245-253.
- Wetzels, M., K. DeRuyten, J. Lemmiah and K. Koelemeijer (1995), "Measuring Customer Service Quality in International Marketing Channels: A Multimethod Approach," *Journal of Business and Industrial Marketing*, 10 (5), 50-59.
- Wheeler, D.R., and C.J. Shelley (1987), "Toward More Realistic Forecasts for High-Tech Products," *Journal of Business and Industrial Marketing*, 2 (3), 55-63.
- Wheiler, K. (1987), "Referrals Between Professional Service Providers," Industrial Marketing Management, 16 (3), 191-200.
- White, P.D. (1978), "Purchasing Managers and the Price-Perceived Quality Relationship," *Journal of Purchasing and Materials Management*, 14 (4), 9-12.
- Willett, R.P., and A. Pennington (1966), "Customer and the Salesman: The Anatomy of Choice and Influence in a Retailing Setting," *Proceedings of the American Marketing Association*, Chicago: American Marketing Association, 598-616.
- Williams, A.J. (1995), "Supply Managers for the 21st Century: The Learning Imperative," International Journal of Purchasing and Materials Management, 31 (3), 39-42.
- ______, L. Giunipero and T. Henthorne (1994), "The Cross Functional Imperative: The Case of Marketing and Purchasing," *International Journal of Purchasing and Materials Management*, 30 (3), 29-33.
- , S. Lacy, and W. Smith (1992), "Purchasing's Role in Value Analysis: Lessons from Creative Problem Solving," *Journal of Purchasing and Materials Management*, 28 (2), 37-42.
- _____, and W. Smith (1990), "Involving Purchasing in Product Development," Industrial Marketing Management, 19 (4), 315-319.
- Williams, J.D. (1983), "Industrial Publicity: One of the Best Promotional Tools," Industrial Marketing Management, 12 (3), 207-211.
- ______, and S. Gopalakrishna (1994), "Industrial Publicity," in *Advances in Business Marketing and Purchasing*, Vol 6, Stamford, CT: JAI Press, 259-302.
- Williams, F. (1988), "Product Publicity: Low Cost and High Credibility," *Industrial Marketing Management*, 17 (4), 355-360.
- Williams, K.C., R.L. Spiro, and L.M. Fine (1990) "The Customer-Salesperson Dyad: An Interaction/Communication Model and Review," *Journal of Personal Selling and Sales Management*, 10 (3), 29-43.
- Williams, R.F., and V. Sagarbakhshl (1988), "Competitive Bidding: Department of Defense and Private Sector Practices," *Journal of Purchasing and Materials Management*, 24 (3), 30-35.
- Williamson, O.E. (1975), Markets and Hierarchies: Analysis and Antitrust Implications, New York: The Free Press.
- Wills, G. (1984), "Marketing a Business School to Industry," *Industrial Marketing Management*, 11 (4), 303-310.
- Wilson, D.T. (1978), "Dyadic Interactions: Some Conceptualizations," in T.V. Bonoma and G. Zaltman (eds.), Organizational Buying Behavior, Chicago: American Marketing Association, 31-48.

- _____(1995), "An Integrated Model of Buyer-Supplier Relationships," *Journal of the Academy of Marketing Science*, 23 (4), 335-345.
- _____, and M. Ghingold (1987), "Linking R&D to Market Needs," *Industrial Marketing Management*, 16 (3), 207-214.
- Wilson, E.J. (1994), "The Relative Importance of Supplier Selection Criteria: A Review and Update," *International Journal of Purchasing and Materials Management*, (Summer) 35-41.
- Wilson, L., A. Weiss, and G. John (1990), "Unbundling of Industrial Systems," *Journal of Marketing Research*, 27 (2), 123-138.
- Wilson, R.D., P. Bennett, and C.L. Couchman (1985), "Evaluating the Effectiveness of Advertising to Business Markets," R.E. Spekman and D.T. Wilson (eds.) A Strategic Approach to Business Marketing, Chicago: American Marketing Association, 133-140.
- Wind, Y. (1978a), "Organizational Buying Behavior," in G. Zaltman and T. Bonoma (eds.), Review of Marketing, Chicago: American Marketing Association, 160-193.
- (1978b), "Organizational Buying Center: A Research Agenda," in T.V. Bonoma and G. Zaltman (eds.), Organizational Buying Behavior, Chicago: American Marketing Association, 67-76.
- _____, and R.J. Thomas (1980), "Conceptual and Methodological Issues in Organizational Buying Behavior," *European Journal of Marketing*, 14 (5/6), 239-263.
- ______, and _____ (1994), "Segmenting Industrial Markets," in A.G. Woodside (ed), Advances in Business Marketing and Purchasing, Vol 6, Stamford, CT: JAI Press, 59-82.
- Witt, J. and C.P. Rao (1989), "Trade Shows and an Industrial Promotion Tool: A Review and Research Agenda," in *Proceedings of the Academy of Marketing Science*, 392-396.
- Wolfe, R.A. (1994), "Organizational Innovation: Review, Critique and Suggested Research Directions," *Journal of Management Studies*, 31 (3), 405-431.
- Woodside, A.G. (1994), "Making Better Pricing Decisions in Business Markets," in A.G. Woodside (ed.), Advances in Business Marketing and Purchasing, Vol 6, Stamford, CT: JAI Press, 139-184.
- _____, and D. McKee (1994), "Strategic Management and Business Marketing and Purchasing," in A. Woodside (ed.), *Advances in Business Marketing*, *Vol* 6, Stamford, CT: JAI Press, 1-32.
- , R.H. Sanderson, and R.J Brodie (1988), "Testing Acceptance of a New Industrial Service," *Industrial Marketing Management*, 17 (1), 65-71.
- ______, and E.J Wilson (1986), "Combining Macro and Micro Industrial Market Segmentation," in *Advances in Business Marketing, Vol 1*, Stamford, CT: JAI Press, 241-257.
- Worthington, M., L.P. Goldsmith and F.M. contra Alston (1998), Contracting with the Federal Government, 4th Edition, New York: John Wiley and Sons.
- Wortzel, L.H. (1983), "Marketing to Firms in Developing Asian Countries," *Industrial Marketing Management*, 12 (2), 113-123.
- Wotruba, T., J.S. Macfie, and J.A. Colletti (1991), "Effective Sales Force Recognition Programs," *Industrial Marketing Management*, 20 (1), 9-15.
- Wren, B.T. and J.T. Simpson (1996), "A Dyadic Model of Relationships in Organiza-

- tional Buying: A Synthesis of Research Results," *Journal of Business and Industrial Marketing*, 11 (3/4), 63-79.
- Yang, Y.S., R.P. Leone, and D.L. Alden (1992), "A Market Expansion Ability Approach to Identify Potential Exporters," *Journal of Marketing*, 56 (1), 84-96.
- Yelle, L.E. (1980), "Industrial Life Cycles and Learning Curves: Marketing and Production Interaction," *Industrial Marketing Management*, 9 (4), 311-318.
- Yoon, E., and V. Kijewski (1995), "The Brand Awareness to Preference Link in Business Markets: A Study of the Semiconductor Manufacturing Industry," *Journal of Business-to-Business Marketing*, 2 (4), 7-36.
- Yorke, D. (1990), "Developing an Interactive Approach to the Marketing of Professional Services," in D. Ford (ed.), Understanding Business Markets: Interaction, Relationships and Networks, London: Academic Press, 347-358.
- Yorke, D. and G. Droussiotis (1994), "The Use of the Customer Portfolio Theory: An Empirical Survey," *Journal of Business and Industrial Marketing*, 9 (3), 6-18.
- Young, G.G. (1987), "Exhibit Marketing," in *Advances in Business Marketing*, Vol 2, Stamford, CT: JAI Press, 165-217.
- Yovovich, B.G. (1995) New Marketing Imperatives: Innovative Strategies for Today's Marketing Challenges, Englewood Cliffs, NJ: Prentice Hall, Inc.
- Yu, J.H., C.F. Keown, and L.W. Jacobs (1993), "Attitude Scale Methodology: Crosscultural Implications," *Journal of International Consumer Marketing*, 6 (2), 45-64.
- Zaltman, G. and T.V. Bonoma (1977), "Organizational Buying Behavior: Hypotheses and Directions," *Industrial Marketing Management*, 6 (February) 53-60.
- Zdep, S.M. (1986), "Enhancing Response Rates on Surveys Among Business Executives," *Journal of Business and Industrial Marketing*, 1 (1), 47-50.
- Zibrun, S.M. (1987), "Business-to-Business: A Value-Added Service to Build Opportunity," Journal of Business and Industrial Marketing, 2 (3), 67-76.
- Zinkhan, G.M. (1984), "Rating Industrial Advertisements," *Industrial Marketing Management*, 13 (1), 43-48.
- (1986), "Copy Testing Industrial Advertising: Methods and Measures," in *Advances in Business Marketing, Vol 1*, Stamford, CT: JAI Press, 259-280.
- ______, and B.D. Gelb (1985), "Competitive Intelligence Practices of Industrial Marketers," *Industrial Marketing Management*, 14 (4), 269-275.