

YORAM “JERRY” WIND’S CONTRIBUTIONS TO MARKETING

Yoram “Jerry” Wind

ABSTRACT

The chapter briefly reviews the eight volumes in my Legend series – organizational buying behavior, consumer behavior, product and new product management, marketing strategy, market segmentation, global marketing, marketing research and modeling, and the future of marketing. In addition, the chapter highlights the three driving forces of much of my research: (a) the real world challenges facing corporations and organizations, (b) the search for new methodological developments, and (c) the continuous challenge of the prevailing marketing concepts and approaches. The chapter concludes with some reflections on the evolution of marketing in the past five decades and my wish list for the discipline and my future activities.

INTRODUCTION

I am honored and humbled to be included as one of the first 10 “Legends of Marketing.”

Although the initial assignment of identifying major streams of my research and editors for these volumes was a relatively easy task, the task Naresh asked for – a single chapter summarizing all of my contributions – is a daunting and difficult challenge.

The difficulty is not only in trying to summarize the content of the eight volumes, but the mere fact that I would have hoped that a major part of my contributions have not only been my published research but through interactions with students, colleagues, and executives of the various companies and organizations with whom I have worked over the years. These interactions have also had a major influence on my own thinking and writing and are reflected in many of my publications, many of which are referenced in this chapter, and which can be found on my website: http://marketing.wharton.upenn.edu/documents/cv/Jerry_Wind_CV.pdf.

In pulling together my various publications and organizing them for the Legends series, I identified eight domains, which are listed with their volume editors and contributors, in **Table 1**. They have some significant overlap and to understand the overlaps, it will be helpful to state at the beginning the three underlying themes that have influenced most of my research activities:

- a. The real world challenges facing corporations and organizations.
- b. The search for and use of the latest methodological developments to assure the rigor and validity of the solutions.
- c. The continuous challenge of prevailing concepts and approaches in search of better ones.

The Real World Challenges

One of my strong beliefs has always been that a major part of our role as academics of an applied field such as marketing is to bridge the gap between the academia and business.

Advances in medicine have been possible because of the close link between the medical schools and their hospitals. For us in marketing, the consulting world (whether for corporations, governments, or nonprofits, and whether for pay or as pro bono activities) offers the opportunity to develop and apply concepts and methods that could address and solve real

Table 1. The Jerry Wind Legends of Marketing Series.

Volume	Editors	Commentators
<i>Organizational Buying Behavior</i>	<i>Robert J. Thomas</i> Professor of Marketing & Executive Director, Georgetown Center for Professional Development & Innovation; McDonough School of Business, Georgetown University	Robert Spekman Arch Woodside Wesley Johnston
<i>Consumer Behavior</i>	<i>Barbara Kahn</i> Patty and Jay H. Baker Professor; Professor of Marketing; Director, Jay H. Baker Retailing Center, The University of Pennsylvania	John Deighton Arun Jain Dave Schmittlein
	<i>Robert Meyer</i> Gayfryd Steinberg Professor; Professor of Marketing; Co-Director, Risk Management and Decision Processes Center, The Wharton School, University of Pennsylvania	
<i>Product and New Product Management</i>	<i>Vijay Mahajan</i> John P. Harbin Centennial Chair in Business, Professor of Marketing; McCombs School of Business, The University of Texas at Austin	Glen Urban Eitan Muller Arvind Rangaswamy
<i>Marketing Strategy</i>	<i>David Reibstein</i> William Stewart Woodside Professor of Marketing; The Wharton School, The University of Pennsylvania	Christine Moorman George Day Don Lehman Dominique Hanssens
<i>Market Segmentation</i>	<i>David Bell</i> Xinmei Zhang and Yongge Dai Professor; Professor of Marketing; The Wharton School, The University of Pennsylvania	Josh Eliashberg Sunil Gupta Gary Lilien
<i>Global Marketing</i>	<i>Arun Jain</i> Samuel P. Capen Professor of Marketing Research, University of Buffalo	C. Samuel Craig Johnny K. Johansson Roger Calontone Roger Layton
<i>Marketing Research and Modeling</i>	<i>Vithala R. Rao</i> Deane W. Malott Professor of Management, Professor of Marketing and Quantitative Methods; The Johnson School, Cornell University	Howard Moskowitz Joel Steckel Naresh Malhotra
<i>The Future of Marketing</i>	<i>George Day</i> Geoffrey T. Boisi Professor; Professor of Marketing; The Wharton School, The University of Pennsylvania	Phil Kotler Dave Reibstein Fred Webster

Notes: The Legends of Marketing series was launched by Sage. The 10 initial legends include: Jagdish Sheth, Philip Kotler, Kent Monroe, Shelby Hunt, Naresh Malhotra, V. Kumar, Richard Bagozzi, Gerald Zaltman, Paul Green, and Jerry Wind.

world problems. In my case, many of the methodological developments with which I have been involved relating to multidimensional scaling, conjoint analysis, diffusion models, and other methods or the design of research processes such as concept testing approaches and adaptive experimentation have been the direct response to management challenges. Even my recent works on mental models have been motivated by the realization that one of the major obstacles to successful business transformation is the mental models of the executives.

Search and Development of New Marketing Research and Models

Ever since my doctorate studies at Stanford in the mid-1960s, I have been intrigued with new research methods and models in many of the behavioral sciences. Most notable are the breakthrough developments in mathematical psychology (especially MDS, clustering, and conjoint analysis), in decision theory (especially the development by Tom Saaty of the Analytic Hierarchy Process) and in diffusion models, and recently, in complexity theory and networks. Many of these methods were superior to the approaches used at the time in marketing and provided opportunities to explore and experiment with the design of innovative methods to better address the real world challenges faced by management.

Challenging the Prevailing Concepts and Approaches

As a result of the need to address real world challenges and the opportunities to develop new research designs utilizing new research and modeling approaches, I was able to challenge some of the conventional wisdom of marketing and introduce new concepts. In the past decade, with the increased importance of the empowered consumers, radical technological advances, globalization, and increased demand for greater accountability for return on marketing and advertising investments, challenging the current mental models of marketing and advertising became a must and was the thrust of my recent activities, including the publication of the *Power of Impossible Thinking* and the initiation of the Future of Advertising Project (<http://myfoa.net/>).

These driving forces of my research and professional activities are illustrated in Fig. 1. The balance of this chapter will provide a brief summary of each of the eight domains covered in my Legends of Marketing series. The chapter will conclude with (a) some reflections on the evolution



Fig. 1. The Driving Forces of My Research.

of marketing in the past five decades and the role I have played and (b) with my wish list for the discipline and my own activities.

ORGANIZATIONAL BUYING BEHAVIOR

My 1966 doctoral dissertation at Stanford focused on organizational buying behavior and its implications for marketing to organizations. Until then, studies of business-to-business marketing were almost always focused on purchasing agents and how they acquired products and services for their organizations; my research identified a broader group of participants – the buying center – and a more comprehensive process of industrial buying behavior and its determinants.

As I continued to study organizational buying behavior, my research evolved into six interrelated topics, driven by my concern for a focus on relevant problems, improved research methods, and challenging existing ways of thinking about organizational buying behavior:

- organizational buying processes;
- drivers of organizational buying behavior;
- the organizational buying center;
- industrial market segmentation;
- creative insights on markets of organizations; and
- evolving futures in organizational buying behavior.

When I joined the Wharton faculty in January 1967, I also started working with the Marketing Science Institute (MSI), where I contributed several chapters to MSI's *Industrial Marketing and Creative Marketing* (Robinson, Faris, & Wind, 1967) book. The chapter that resonates most with me is *The Determinants of Industrial Buyers' Behavior* in which I identified five sets of variables instrumental in understanding and explaining the behavior of individual organizational buyers: the links between a buyer's own psychological and behavioral characteristics; the interpersonal influences of other organizational members; organizational variables; inputs from various sources of supply; and environmental variables. This expanded my thinking into the BuyGrid model – Fig. 2 – which introduced the concept that marketing to an organization requires an understanding of three key dimensions of buyer behavior and their interaction:

- *The buying situation and buying context* – the purchase status of an individual product or service as a new task, a straight rebuy, or a modified rebuy. A challenging supplier will attempt to influence the buying organization to engage in a new task or modified rebuy, whereas the incumbent supplier will try to keep the purchase as a straight rebuy.

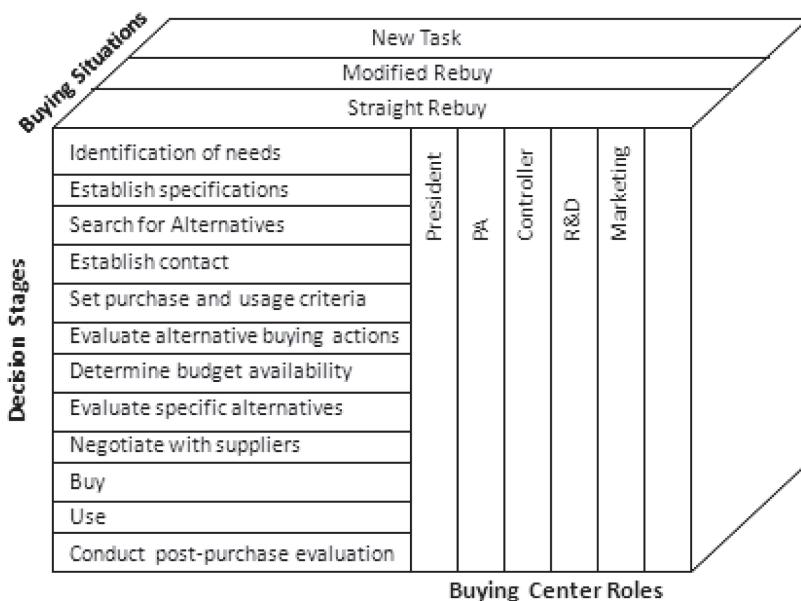


Fig. 2. The BuyGrid Model.

- *The buying process* – the phases or processes through which products and services are acquired. The complexity, uncertainty, and specific phases of the process vary according to the buying situation – for example new task buying tends to be the most complex buying process, often with high degrees of uncertainty and a multiperson buying center.
- *The buying center* – all those involved in the buying process. The composition and dynamics of the buying center depend on the buying situation.

Several papers evolved from this early work. *Industrial Source Loyalty* (Wind, 1970), moved beyond the then-customary practice of studying consumer loyalty to brands and stores, and examined the loyalty of industrial firms to their suppliers. *A Reward-Balance Model of Buying Behavior in Organizations* (1971) introduced the proposition that the set of criteria used to reward the buyer is a major determinant of buying decisions. In formulating it, I applied the behavioral principle of homeostasis and found support for the model with a case study of two electronic component manufacturers. With Fred Webster, I developed *A General Model for Understanding Organizational Buying Behavior* (Webster & Wind, 1972). The so-called *Webster-Wind Model* proposed the most comprehensive conceptualization of organizational buying behavior at the time and provided a basis to design marketing strategies that could reach the organization in an effective manner.

Although my 1966 dissertation initially formalized the buying center concept as a two-part phenomenon – those who had direct contact with the purchase decision, and those in the organization who were linked to those who had direct contact with the purchase, but with lesser influence – I later broadened the definition to include all the organizational members involved in the purchase decision, a more structured approach to marketing and selling. This expanded approach was formalized in *Organizational Buying Center: A Research Agenda* (Wind, 1978), which focused on the challenge of implementing the concept of the buying center. It was also reflected in *Emerging Models of Organizational Buying Processes* (Nicosia & Wind, 1977). With *The Linking Pin Role in Organizational Buying Centers* (Wind & Robertson, 1981), we introduced the role of linking the buying organization with other organizations.

My interest in new research tools and methods of analysis was reflected in all my work on organizational buying behavior. Over the years the methods I employed included attitude measurement (*Integrating Attitude Measures in a Study of Industrial Buying Behavior*, Wind, 1968), simulations (Wind & Robinson, 1968), complex marketing research designs in the development of

industrial products and services (Grashof & Wind, 1981), decision analysis of high-risk patient referral (Richardson, Gabbe, & Wind 1984), and of course conjoint analysis, which has been at the core of many of my B2B consulting projects and resulting publications. In *Organizational Psychographics and Innovativeness* we utilized a hospital setting to demonstrate that psychographics – or attitudes, opinions and beliefs – were also important in business to business activity. As part of my effort to expand the understanding of buying behavior, in *Strategy-Driven Industrial Marketing Research* (Wind & Thomas, 1991), we developed a framework for integrating strategic decisions and organizational buying behavior. My initial work on *Market Segmentation* with Ron Frank and Bill Massy, (Frank, Massy, & Wind, 1972) was extended to organization buying behavior with *Industrial Market Segmentation* (Wind & Cardozo, 1974), which focused on the concepts of macro- and micro-segmentation. In this and later works, we examined the effects of market segmentation on organizations as well as consumers. In *Segmenting Industrial Markets* (Wind & Thomas, 1994), we built the segmentation decisions into a comprehensive managerial approach to industrial market segmentation, extending the segment focus to include the sales force and other relevant stakeholders. In an effort to improve the understanding of the structure of segmented markets and strategic marketing decisions, I collaborated on *Market-Based Guidelines for Design of Industrial Products* (Wind, Grashof, & Goldhar, 1978), which explained how marketing decisions can be made based on the integration of many of the concepts and methods discussed in my earlier research.

Conceptual and Methodological Issues in Organizational Buying Behavior (Wind & Thomas, 1980), provided a comprehensive review of the major issues facing the field, whereas *Blurring the Lines: Is There a Need to Rethink Industrial Marketing?* (Wind, 2007) challenged academic researchers and practitioners with the thesis that an emerging “convergence” in business-to-business and consumer marketing blurs the traditional boundaries between how organizations buy and how consumers buy. This convergence opens the door for new conceptualizations, research methods, and managerial opportunities to capitalize on the richness of studying organizational buying behavior.

CONSUMER BEHAVIOR

Studies of consumer behavior have been at the core of my research, which applied methodological rigor and innovative conceptualization in its pursuit.

As The Institute of Management Science (TIMS) representative on the policy's board that established JCR, I stressed the need for methodological innovation and rigor and the integration of the behavioral and management sciences.

In recognition of the importance of understanding of consumers' activities, interests and opinions in gaining an overall understanding of consumer lifestyle and its relationship to marketing initiatives, I wrote *Life Style Analysis: A New Approach* (1971). Although life style analysis had gained a prominent role in many commercial segmentation studies, most utilized simple correlation and cross-tabulation to relate the AIO and other background characteristics to product usage data. This chapter – which suggested that a multiple discriminant analysis seemed to be a more appropriate method given the multivariate nature of lifestyle data – was also the first attempt at an operational conceptualization of life style, and was undertaken in the hope it would lead to more systematic selection of the dimensions of life style and thus to better questionnaires and resulting life style data.

In 1972, Paul Green, Arun Jain and I published Benefit Bundle Analysis, which addressed the question of quantifying benefit importance, and provided an explicit approach for examining the components of overall product-service utility in the realistic case where the consumer must make tradeoff decisions among benefits. This approach also provides ways to examine individual differences in benefit evaluations. Further, while we employed an additive model, various extensions can be made to cope with interactions. By using different types of fractional factorial designs one can keep the respondent's ranking task manageable.

With the publication of *Preference of Relevant Others and Individual Choice Models* (Wind, 1976) I suggested an approach, based on recent developments in choice models, for quantifying the relative importance of the preferences of relevant others in decision-makers' choice behavior and whether individuals differ with respect to the importance of the influence of others on their own decisions. As the chapter detailed, I found that utilizing a two-stage conjoint measurement approach provided insight not only on the magnitude of influence but also on the reasons for accepting or rejecting such influence.

With *On the Measurement of Purchase Data: Surveys Versus Purchase Diaries* (Wind & Lerner, 1979), we linked individual consumers' survey responses to their panel diary recordings and found that the results for some (margarine) categories indicated correspondence between the two data sets at the aggregate brand share level but great discrepancies at the individual

consumer level. This called into question the use of survey reports as an indicator of individual purchase in product positioning, segmentation, advertising, media, and copy research and concept-product testing.

The chapter suggested the need for future research examining the relationship between survey and diary purchase data for other product categories; assessments of the characteristics of households that report accurately versus those that have a high discrepancy between their reported and recorded purchases; and called for the direction of attention and effort to the development of more reliable and accurate ways of measuring reported purchases in a survey context.

The chapter also called for consideration of research designs that would combine diary purchase data with survey data of respondents' perception of and preference for various brands; and the undertaking of a research program aimed at providing systematic answers to questions concerning the validity of purchasing measures, reported survey data, and determining which specific survey methods should be used for what objective.

In *Courtyard by Marriott: Designing a Hotel Facility with Consumer-Based Marketing Models* (Wind, Green, Shifflet, & Scarbrough, 1989), we used conjoint analysis among business and nonbusiness travelers to design the new Courtyard by Marriott hotel chain. It was the first attempt to use marketing science to supplement designers, architects and others in the creation of a new hotel. The study (which was a finalist for the Adelman Award) served as a model to subsequent hotel designs and design of other products and services involving large set of attributes (in the case of Courtyard by Marriott over 50 factors of 2–7 levels each).

Studies of consumer behavior have been at the core of my research for publications, consulting, and legal cases. These studies utilized a variety of research approaches from multidimensional scaling, conjoint analysis; psychophysics in *Experiments in the Multidimensional Psychophysics of Taste and Semantic Descriptions* (Green & Wind, 1972); the quantitative analysis of qualitative data in *Analyzing Free-Response Data in Marketing Research* (Green, Wind, & Jain, 1973); and the use of multiple approaches in the search for convergence validity in *A Comparison of Three Brand Evaluation Procedures* (Wind, Denny, & Cunningham, 1979).

In addition, my consumer behavior research included a number of conceptual developments, including:

- *Incongruency of Socioeconomic Variables and Buying Behavior* (Wind, 1969)
- *Models of Customer Behavior* (Wind, 1970)

- *Intentions to Buy as Predictors of Buying Behavior* (Douglas & Wind, 1971)
- *Preference Measurement of Item Collections* (Green, Wind, & Jain, 1972)
- *Brand-Features Congruence Mapping* (Green, Wind, & Claycamp, 1975)
- *Multiperson Influence and Usage Occasions as Determinants of Brand Choice* (Wind, 1975)
- *On the Usage of 'Modified' Personality Trait Measures in Consumer Research* (Wind & DeVita, 1976)
- *A 1975 Retrospective View of Bourne's 1957 "Group Influence in Marketing"* (Wind, 1977)
- *Brand Choice* (Wind, 1977)
- *Examining Family Role and Authority Patterns: Two Methodological Issues* (Douglas & Wind, 1978)
- *Sociology of Consumption and Trade-Off Models in Consumer Public Policy* (Nicosia & Wind, 1978)
- *A Note on the Relationship Between Perceived Problems, Severity, and Frequency of Occurrence* (Wind & Shubs, 1981)
- *Exploration Into the Time-Money Tradeoff: Concepts and an Application* (Deighton, Nicosia, & Wind, 1983)

One of the streams of my consumer research has been the changing dynamics of consumer behavior. Table 2 illustrates some of these changing dynamics and their importance to business and marketing strategy. In recent years, most of my research focused on the increased empowerment of the consumers and its implications to the traditional mental models of marketing and business strategy.

The empowered consumers are in control (Wind & Mahajan, 2002), and management has to adjust its strategies to provide platforms that engage consumers as co-designers (Dell), co-producers (user-generated content), co-distributors (diapers.com), and co-marketers (Ford Fiesta).

NEW PRODUCT MANAGEMENT

When I began researching product policy it had not yet received much attention, and was often viewed just as one of the 4Ps of marketing management.

In *Product Policy* (Wind, 1982) – one of the first textbooks in this area – I developed a theory and methodology for product policy, arguing that it should be viewed as an integral part of a business' growth strategy.

Table 2. Illustrative Changes in Consumer Dynamics.

- Increasingly empowered consumers
- Consumer as co-designer, co-producer, and co-markete
- Fear, lack of trust and confidence
- Market heterogeneity
- The blurring of the lines between B2C & B2B
- The emergence of social networks and C2C
- From Customer Relationship Management (CRM) to Customer Managed Relationship (CMR)
- The changing dynamics of the buying center
- The changing buying process for different buying situations
- The duality of cognitive and emotional appeals
- The power of Positive Psychology
- The impact of priming
- The importance of life time value and share of wallet
- The centrality of engagement, customer experience, and advocacy
- The paradox of choice
- Changing loyalties

One of the major areas of my research in the product policy domain developing was new analytical approaches to portfolio analysis. At the time, portfolio analysis utilized simplified models such as the Boston Consulting Group growth-share matrix; but in *An Empirical Comparison of Standardized Portfolio Models* (Wind, Mahajan, & Swire, 1983), we pointed out that the existing approaches were extremely sensitive to the way the market share and growth measures were defined and showed how these simplified portfolio models offered little valid guidance to the composition of the best portfolio of products.

A series of papers, *Planning Product Line Strategy: A Matrix Approach* (Wind & Claycamp, 1976) *Risk Return Approach to Product Portfolio Strategy* (Cardozo & Wind, 1985) and *Integrating Financial Portfolio Analysis with Product Portfolio Models* (Mahajan & Wind, 1985) showed how a risk-return portfolio analysis – originally developed in economics and finance – could be applied to product line decisions and directly relate corporate or divisional financial objectives of level and volatility of earnings to product/market choices. *Stochastic Dominance Rules for Product Portfolio Analysis* (Mahajan, Wind, & Bradford, 1982) extended the analysis beyond mean and variance to all the moments of the distribution.

We also expanded the product line portfolio focus to global strategies with *International Portfolio Analysis and Strategy: The Challenge of the 80s*

(Wind & Douglas, 1981) which outlined an operational approach to strategic planning for international marketing strategy utilizing portfolio perspectives.

With the publication of *Business Synergy Does Not Always Pay Off* (Mahajan & Wind, 1988), we provided an approach for the consideration of synergy within a portfolio. We also described how the search for synergy should be guided by a focus on specific synergistic dimensions, taking into consideration the type of business involved.

Marketing Applications of the Analytic Hierarchy Process (Wind & Saaty, 1980) introduced the Analytic Hierarchy Process (AHP) as an approach to the design of portfolios of products, market segments, and businesses.

Designing Product and Business Portfolios (Wind & Mahajan, 1981) provided an overview of the various approaches to portfolio analysis, including: (a) Standardized Portfolio Approaches, which included matrices composed of univariate dimensions (such as the BCG model), the composite dimensions approaches of GE/McKinsey of industry attractiveness and business strength, the business profit matrix composed of competitive marketing position and industry maturity and the directional policy matrix focused on profitability of the market segment and the competitive position in the segment, (b) Financial-Based Portfolio Approaches – The risk-return model and the stochastic dominance approach and (c) the Customized Portfolio Approach, including product performance matrix, conjoint analysis-based approaches, and the AHP-based approaches.

Assessing these diverse approaches, we recommended a shift toward the customized approaches and the use of multiple approaches. We also prepared a seven step approach for evaluating an existing portfolio model or designing an idiosyncratic approach.

Customerization: The Next Revolution in Mass Customization (Wind & Rangaswamy, 2001) proposed that the next stage of evolution of mass customization is customerization – a buyer-centric strategy that combines mass customization with customized marketing. Spurred by the growth of the Internet and related technologies, many leading companies (e.g., Dell and Nike) started deploying customerization on a large scale. In this chapter we defined customerization and described how it is different from the related strategies of mass customization, personalization, and one-to-one marketing. We also described the opportunities and challenges companies face in deploying a customerization strategy, and the potential benefits that they might realize.

In *The Challenge of 'Customerization' in Financial Services* (Wind, 2001), I explored customerization in financial service firms, noting that although it

raises a number of challenges that include issues of customer privacy, customerization also offers financial institutions tremendous opportunities to grow their companies and expand strategic relationships. The recent technological advances and the trend toward more empowered consumers make this topic even more timely and critical and applicable to *ALL* products and services.

In *On the Use of Attitude Research in Product Policy* (Wind & Tyebjee, 1977), we explored the way attitude research – the study of respondents' awareness, perceptions, beliefs, and other characteristics – may be used to improve an organization's design and control of its product policy. *Toward a Change in the Focus of Marketing Analysis: From a Single Brand to an Assortment* (1997), noted that the traditional focus on the purchase of a single brand as the dependent variable in marketing studies and brand choice models is misleading. In contrast, the focus should be on the assortment of brands considered, purchased, stored, used, and discarded.

The concept of product assortment was also explored in *Going to Market: New Twists for Some Old Tricks* (1980), which explored the importance of segmenting a company's constituents, understanding the different behaviors of the different segments, and developing a marketing strategy that will produce a desired positioning for each segment.

Product positioning and segmentation as a key foundation of product policy was featured in a series of works that included:

- *Positioning Analysis and Strategy* (Wind, 1990)
- *Got Emotional Product Positioning? There's More to Positioning Than Just Features and Benefits* (Mahajan & Wind, 2002)
- *Beyond Product Substitution: The Impact of Satellite Radio on Sale of CDs and Music Downloads* (Wind & Kreiger, 2008)

I also addressed concepts related to product and marketing analysis and planning in *Product-Marketing Planning Models: Concepts, Techniques, and Needed Development* (1979). In it, I suggested that marketing practitioners should not ask whether analytical approaches work, but should instead determine which of the many analytical approaches are better suited for their firm and the specific product/market situation that's being considered.

When I was asked to present the keynote address at the European Society for Opinion and Marketing Research, I used the occasion to highlight research in the area of product management and new product development as described in *The Contribution of Research to Product Management and New Product Development* (Wind, 1983). I noted that despite the increased

sophistication in product-associated research and analytical approaches, the rate of new product failure continued to be staggering. In the address I identified some of the major obstacles to the effective utilization of the available research and analytical approaches; and proposed 12 rules for increased effectiveness of research utilization for product management and new product development. These are summarized in [Table 3](#).

New Product Models: Practice, Shortcomings and Desired Improvements (Mahajan & Wind, 1992) assessed the role of new product research and models in supporting and improving the new product development process.

Marketing Hype: A New Perspective for New Product Research and Introduction (Wind & Mahajan, 1987), focused on marketing hype, and a set of prelaunch activities that can lead to the creation of a supportive market environment.

Issues and Opportunities in New Product Development: An Introduction to a Special JMR Issue (Wind & Mahajan, 1997) demonstrated that current

Table 3. How to Get More Out of Marketing Research and Modeling Approaches.

1. Assure the relevance of the research and modeling activities
2. Get user involvement in problem definition, research and model design and data interpretation stages
3. Get researcher involvement in strategy generation and evaluation
4. Management approval should be of expected output, not of a questionnaire
5. Design and analysis should reflect state-of-the-art methodology, reliance only on cross tabs can no longer be accepted
6. Focus on innovative research designs and data collection procedures but avoid fads
7. Assure the reliability, validity, and needed level of generalizability of the (research and modeling) results
8. Reduce reliance on a single comprehensive report, focus on short-specific reports and on the ongoing use of the data and modeling to answer management questions
9. Integrate data from all marketing research studies with relevant data bases (including secondary data, competitive analysis, internal data, etc.) in a decision support system
10. Coordinate marketing research with other research and data gathering and analysis activities of the firm
11. Consider switching from a "buy" mode (company researchers as brokers) to "make" mode (in-house research)
12. Conduct a periodic audit of the marketing research and modeling function, including the new product development activities

Source: *The Contribution of Research to Product Management and New Product Development*, Jerry Wind (1983).

approaches to new product development were inadequate, given the rapid technological and other changes that the business environment was undergoing. As marketing researchers and modelers approach their tasks, we called for a portfolio of both incremental and breakthrough innovations and for new research and modeling initiatives aimed at addressing the critical new product development issues such as the ones illustrated in **Table 4**.

With *Innovation Diffusion Models of New Product Acceptance: A Reexamination* (Mahajan & Wind, 1986) we suggested that the high failure rate of new product introductions indicated the need for further work in basic diffusion models; the use of analytical approaches that can assist in linking various types of sales data to the number of adopters; and the development of conceptual and analytical frameworks to study the impact of the timing of entry and exit of firms and their competitive strategies on a product's growth.

Table 4. Critical NPD Issues.

The Output of the NPD Process

1. Incremental innovation and breakthrough innovation
2. Speed and quality

The context of NPD

3. Design standardized multicountry products and design to meet the local market needs
4. Design for the \$10,000 club of countries and design for the rest of the world
5. Technology solutions and socio-technological solutions
6. The genius inventor and organizational efforts to innovate
7. Isolated NPD effort and organizational commitment to innovation

The Scope of NPD

8. Executive foresight (and technology "push") and customer insight (and market "pull")
9. Mass production and mass customization (and the impact of WWW)
10. Product proposition and value proposition
11. Internal R&D development and external development (including licensing, strategic alliance, etc.)
12. Customer and especially lead user focus and input and involvement of suppliers, distributors and other stakeholder

The Process of NPD

13. Stage gate process and concurrent development
14. Functional depth and cross-functional integration
15. Project portfolio and multigeneration portfolio and platforms
16. The use of decision tools (including expert systems) and creativity
17. First to market and market readiness
18. Teams and champions

Source: Wind and Mahajan (1997).

In *New Product Diffusion Models: From Theory to Practice* (Mahajan, Muller, & Wind, 2000) we continued to explore diffusion models, demonstrating that in addition to prelaunch forecasting, they could be useful in analyzing major strategic decisions that explicitly require considerations of life cycle dynamics over time.

We also argued for wider analysis of consumer characteristics in *Experiments in the Multidimensional Psychophysics of Taste and Semantic Descriptions* (Green & Wind, 1972), where we pointed out that analytical techniques – like multidimensional scaling, conjoint measurement, and multivariate analysis – could be utilized to gain a better understanding of multidimensional psychophysics and semantics related to the evaluation of beverage and food items. Further, these research procedures could be employed in the analysis of consumers' reactions to other nontaste physical stimuli, including visual, auditory, and skin responses.

Reflecting on this body of work suggests that while the concepts and methods we used are still valid, the focus on products has been too narrow and should be expanded to include services, total solutions, and customer experience.

MARKETING STRATEGY

In *Marketing Strategy: New Directions for Theory and Research* (Wind & Robertson, 1983), we looked beyond the then-dominant marketing management approach, and articulated a focus on marketing strategy. We pointed out that marketing management was fundamentally concerned with the design of the marketing program, or mix, bypassing issues like the mission of the firm and how to achieve consumer or competitive advantage.

In contrast, marketing strategy explicitly focused on the quest for long-run competitive and consumer advantage, and was positioned to be an integral part of an organization's overall business strategy, providing a marketing perspective that makes use of relevant marketing concepts and methods as input to the organization's strategic business decisions.

The overlap of business strategy and marketing strategy was further explored in *Customerization: The Next Revolution in Mass Customization* (Wind & Rangaswamy, 2000). Viewing customization as a business strategy that recasts a company's marketing and customer interfaces in a buyer-centric manner, letting an organization offer numerous product options that give customers a customized shopping, purchasing, and consumption experience that is under the control of customers and initiated by them.

In *Convergence Marketing: Meeting the Challenge of the New Hybrid Consumer* (Wind, 2005), I expanded the concepts of *Convergence Marketing* (Wind & Mahajan, 2002) and suggested that as new technologies emerge and develop, “hybrid” customers integrate them into their lives, changing their behavior in ways that companies may not anticipate. Companies need to combine strategies of standardization and customization both online and offline, in what is called “the five Cs” of convergence marketing:

- Managing the convergence of mass-produced, mass-marketed products and services with “customerization,” or the tailoring of product, service, and message to individual consumers.
- Converging with virtual and nonvirtual communities through online and offline efforts.
- Converging on channels by establishing multiple “touch points,” that let consumers connect electronically or in person, easily moving between the mediums.
- Converging on competitive value by integrating flexible pricing options – in addition to the traditional fixed price offering – into marketing strategies, and by enhancing value. Flexible pricing could include auctions, “name your own pricing” and other creative initiatives. Value can also be enhanced by expanding an offering beyond the product to include service, brand, speed, availability, and convenience.
- Converging on choice, or empowering consumers by giving them more choice and decision-making options with search engines that let them compare prices, and other online and in-person tools, like access to professional advice.
- I continued to integrate marketing strategy into overall business strategy with *Marketing as an Engine of Business Growth: A Cross-Functional Perspective* (Wind, 2005a), which described how, in an environment of rapid change, market insights could drive innovation. They may do so when marketing perspectives are integrated across the organization – touching research and development, finance, operations, and other aspects of the entire firm –while leveraging technology and marketing to create convergence and rethinking the customer experience and relationships.

I noted that creating these kinds of broader perspectives may not always mean dismantling existing organizational silos. One alternative might involve maintaining a disciplinary/functional structure, by creating linking processes, developing a matrix structure, changing the corporate culture and

incentive and reward systems, or engaging in creative reengineering and restructuring of the entire organization.

Although I was trying to advance the integration of marketing with broad business strategy, I was also reexamining the viability of the discipline of marketing itself in my acceptance address of the Buck Weaver Award at MIT which was published as *A Plan to Invent the Marketing We Need Today* (Wind, 2008b). There I noted that tools like conjoint analysis and data mining have raised the level of sophistication of marketing and enabled the discipline to provide the enterprise with greater insights. But many of the most rigorous marketing tools were developed years ago to address problems of the past, not of the present and future.

I proposed seven strategies to improve the rigor and relevance of marketing research and practice:

- *Bridging disciplinary silos.* Bridging the artificial barriers between research and development, operations, finance, and marketing; between company and consumer; and between quantitative and behavioral approaches.
- *Shift from traditional management to network orchestration.* Marketing increasingly depends on an approach that connects with markets and resources across the boundaries of both enterprises and nations.
- *Expanding the enterprise-centric model of customer relationship management (CRM) to one that also empowers customers to manage their relationship with the enterprise – a customer managed relationship (CMR).* As part of this effort, the focus of marketing needs to evolve from its traditional solution development function to one that includes the creation of tools that enable customers to co-create their own solutions.
- *Shifting from company branded products to customer branded solutions.* Instead of the traditional focus on branded products, companies could brand integrated solutions to specific customer needs. Consider for example the typical case of a patient with multiple ailments such as high cholesterol, diabetes, and depression. Is the current offering of three different brands, one for each disease, the right solution? Or should we develop for this segment of patients one brand that includes the three drugs as well as exercise, diet, and life style information?
- *Revising return on investment analytics and metrics to move beyond today's backward-looking financial measures that are too narrow and too late.* Alternatives include developing customer profitability measures like share of customer's wallet and lifetime value of the customer. By linking these and other metrics to marketing activities and performance measures like

sales and share, the relationship of marketing initiatives to performance outcomes could be directly measured.

- *Adopting the adaptive experimentation philosophy* – or integrating research and action – in all of the organization's activities. Encouraging the use of diverse strategies – such as launching multiple experimental marketing initiatives at varying budget levels, instead of pouring the entire budget into a single strategy – can enable an organization to learn by comparing results from more than a single market initiative while establishing a foundation for additional experiments in successive periods.
- *Challenging and changing mental models*. Organizations need to rethink the way they interact with increasingly empowered customers – developing new ways to understand their behavior and capture and analyze data associated with it, and devising strategies to influence their behavior in a way that's consistent with the company's objectives.

A major part of my work on marketing strategy centered on the needed tools – both new concepts and methods – for effective design and implementation of marketing strategy and marketing driven business strategy. This included:

- *Models for Marketing Planning and Decision Making* (Wind 1986)
- *Effective Competitive Strategies: A Marketing Perspective* (Wind 1986)
- *An Analytic Hierarchy Process Based Approach to the Design and Evaluation of a Marketing Driven Business and Corporate Strategy* (Wind, 1987)
- *A Marketing Perspective for Competitive Strategy* (Wind, 1988)
- *Inducing Creativity and Innovation in Large Bureaucracies: Lessons from Marketing* (Wind, 1993)
- *Growth Strategies* (Wind, 1996)
- *The Challenge of Digital Marketing* (Wind & Mahajan, 2002)
- *Marketing as an Engine of Business Growth: A Cross-Functional Perspective* (Wind, 2005a)
- *Putting the Organization on Wheels: How SEI Uses Workplace Design and Art to Create a Corporate Culture that Drives Innovation and Growth* (West & Wind, 2007)
- *Marketing Strategy Models* (Wind & Lilien, 1993)
- *Marketing Strategy Analysis* (Wind, 2010)

In *Rethinking Marketing: Peter Drucker's Challenge* (Wind, 2009), I cited some of the legendary management consultant Peter Drucker's work to demonstrate how marketing can benefit from exposure to thinkers from

outside the discipline. Drucker pointed out that companies often get into trouble when the assumptions the business is based on, or the "theory of the business," no longer fit reality.

This highlights the limits that our "mental models" (Wind & Crook, 2005) place on our innovation, obstructing our ability to see emerging opportunities and threats that fall outside the current view.

Decentralization and specialization strategies originally arose because communication mechanisms were so poor and coordination costs were so high that a large company could not operate as a single unit. Instead, it was broken down into "manageable" component parts, divisions and strategic business units, brands and product lines. The supply chain itself was separated into suppliers, manufacturers, and buyers.

But advances in information technology are shattering walls between industries, shifting the balance of power to empowered consumers and creating a "global grid" of users and portals with free communications and scalability for even the smallest corporations.

In a similar way, marketing is bound by a set of core concepts, including marketing as exchange; the four Ps of product, price, place, and promotion; and the three Cs of company, customers, and competitors.

But these and other concepts are being challenged and changed by empowered consumers, heightened competition, globalization, rapid and radical advances in technologies, changing regulatory environment, the availability of unprecedented amount of data and new analytics, and the interdependency of all these forces.

Drucker believed, as I do, that marketing has to be the core of an interdisciplinary perspective, bridging corporate and functional silos. Doing this means rethinking strategy to escape narrow boxes like low-cost, differentiation, or focus. In a world that is changing rapidly, marketing has to combine traditional planning and research with a process of adaptive experimentation for more rapid learning. I wholeheartedly agree with Drucker, who once noted that marketing needs to be more entrepreneurial.

In challenging the conventional mental models of marketing and marketing strategy my current research challenges the mental models of business strategy to include:

- The co-creation model,
- The relationship model,
- The open innovation model,
- Network orchestration model,
- The competitive value model,

- The holistic model, and
- The emerging market innovation engines.

The mental models of marketing are also challenged to address question such as:

- Do you have a platform to engage consumers as co-designers and co-producers?
- Do you have a platform to engage consumers as distributors and salespeople?
- Do you have platform to engage consumers as your marketing advocates?
- Do you have platform to allow customers to determine the price and value of your offering?
- Do you have processes to listen to your customers and engage them in conversation?

And the mental models of advertising are constantly challenged by my Future of Advertising Project (Wind & Gardner, 2011), as illustrated in Fig. 3.

Old Advertising Model		New Advertising Environment
Mass Media (TV, Print, Radio)	→	All touch points and their interactions
Copy and Creative	→	Story/narrative /emotional appeal and creative execution
Target Consumer	→	Individuals and their lives, and stakeholders networks
Reaching	→	Reaching and Engaging
Convincing	→	Conversation, Collaboration and Co-creation
Campaigns	→	Platforms; Adaptive experimentation
Advertiser in Control	→	Platforms for empowered audiences
Silos	→	Network Orchestration (Curating)
Intrusive	→	Value Creating and Entertaining
U.S. Focus	→	Global
Advertising	→	“New” Empowering Advertising

Fig. 3. Toward a New Mental Model of Advertising.

SEGMENTATION

The most enduring finding in marketing with the strongest theoretical support is that *all markets are heterogeneous*. Thus, the breaking down of all markets into homogenous segments (and lately even into segments of one) is a must! *Market Segmentation* (Frank, Massy, & Wind, 1972), our seminal book on the topic, challenged the conventional thinking at the time that ignored the heterogeneity of all markets. Our key empirical generalizations about segmentation have withstood the test of time and include:

- All markets are heterogeneous.
- Benefits sought, augmented by buying/usage behavior and recognizing the context of the purchase and usage are the most powerful basis for segmentation.
- Demographic and psychographic variables are good segment descriptors, but are not that useful as bases for segmentation.
- Conjoint analysis-based segmentation studies augmented by simulation and optimization of product/service/experience/design for each target segment are among the best approaches for segmentation.
- Strategies for market segmentation are based on two key dimensions:
 - i. Method of targeting marketing effort, which includes not only controlled effort but also customer self-selection.
 - ii. Marketing tool variables, which include not only promotion, price, and channels, but also product characteristics and appeals.¹

Our understanding of segmentation was further developed with the publication of *Segmenting Media Buyers* (Wind & Silver, 1973), which demonstrated that although the concept of market segmentation was being implemented primarily in the consumer goods market, it applied equally well to industrial and other markets in which the buyers are members of formal organizations.

Issues and Advances in Segmentation Research (Wind, 1978) was the lead article in a special JMR issue on segmentation research that I edited. In the article I identified the major considerations involved in segmentation research. These are included in Table 5.

Thirty-three years later and with the enormous advances in marketing, consumers, and segmentation research the considerations identified in 1978 still hold. The difference of course is the richness of the available data, including individual level data, the emergence of single source data, and the advances in research approaches including data mining and text mining of consumer natural behavior on the web.

Table 5. Some Major Considerations Involved In Segmentation Research Studies.

I. Problem definition

- A. Managerial requirements
- B. A baseline vs. ongoing segmentation
- C. The segmentation model
 - 1. Selecting the variables for the model
 - 2. Traditional a-priori and clustering-based designs vs. the newer flexible and componential segmentation designs

II. Research design

- A. The unit of analysis
- B. Operational definitions
- C. Sample design
- D. Data reliability
- E. Segment stability
- F. Segment homogeneity
- G. Segmentability of the market
- H. Validation
- I. Cost considerations

III. Data collection

- A. Primary vs. secondary sources
- B. Conventional vs. newer procedures

IV. Data analysis

- A. For determining the segments: classification
- B. For establishing the segments' profiles: discrimination
- C. For simultaneous classification and discrimination

V. Data interpretation and implementation of results

- A. Determining the number of segments and selection of target segments
- B. Translating segmentation findings into strategy

Source: Wind (1978).

Product Positioning and Market Segmentation: Marketing and Corporate Perspectives (Wind, 1979) and *Going to Market: New Twists for Some Old Tricks* (Wind, 1980) are examples of a stream of research that focused on the dual decisions of segmentation and positioning. These papers offered guidance on integrating analytical tools into a marketing/business strategy; focusing on the interdependency of segmentation and positioning.

With the publication of *Marketing Applications of the Analytic Hierarchy Process* (Wind & Saaty, 1980) we integrated our segmentation research with an analytical approach, the Analytic Hierarchy Process (AHP), which

utilizes management subjective judgments to structure any multiperson, multicriterion, and multiperiod problem in a hierarchical manner and prioritizes the identified decision options. The AHP has been applied to the questions of segment identification and prioritization including how best to allocate resources among the segments. The AHP allows the resulting hierarchies to reflect likely environmental scenarios, corporate objectives, current and proposed product/market alternatives and various marketing strategy options. AHP provides a framework and methodology for the determination of key corporate and marketing decisions, offering specific guidelines for resource allocation among the firm's current and potential market segments and distribution outlets, among various new product concepts, and among various marketing mix strategies under alternative environmental conditions and various objectives. One of the key benefits of the AHP is the ability to conduct sensitivity analysis of the results. Today, the AHP has been extended to the Analytic Network Process (ANP) and is supported by sophisticated and user-friendly software (<http://www.decisionlens.com/>).

Market segmentation is still one of the foundations of all marketing and business strategies. Understanding the segments' evolving needs, perceptions, preferences, and behavior are key input to marketing and business decisions. A review of the segmentation field was prepared by me in 1995 in *Market Segmentation* and updated with David Bell, *Market Segmentation* (Wind & Bell, 2007; Bell & Wind, 2011). To appreciate the range of decisions involved in this important area, see the illustrative segmentation audit in **Table 6**.

In considering the concept of segmentation, one should realize that it applies not only to consumers of B2C and B2B but to all stakeholders such as employees, suppliers, analysts, shareholders, and partners.

GLOBALIZATION

At the time of my doctoral studies in marketing during the mid-1960s, many American marketing executives and scholars viewed the subject of international marketing through an American sales prism: if an item was successful in the United States, it would likely sell overseas with minimal, if any modification. Even as late as the early 1970s, American car manufacturers continued to export cars – built for the U.S. market with the steering wheel on the left side – to nations where the driver sits on the right. At the time U.S. companies were also exporting products that ran on 110 volts of

Table 6. A Segmentation Audit.

Practice	Completely Describes us	Somewhat Describes us	Does not Describe Us at All	Do Not Know
1. Our business strategies recognize the need to prioritize target segments				
2. Our marketing plans include specific plans for each of the selected segments				
3. We have specific product offerings for each target segment				
4. We have a process for updating the information of our segments of an ongoing basis				
5. Our segments balance the unique country needs with potential synergies across countries				
6. We have an effective process for implementing segmentation research				
7. We have an effective process for implementing segmentation strategies				
8. We have P&L reports and accountability by segment				
9. We have detailed information about segments, including:				
• Current size of segment				
• Potential size of segment				
• Key business needs of the segment				
• Information systems needs of the segment				
• Their prioritized needs/benefits sought				
• Their prioritized preference for product and service features				
• Demographic characteristics of the segments				
• Product/system ownership and usage				
• Competition's strength in each segment				
• Perceived positioning of each competitor by the members of the segment				

Table 6. (Continued)

Practice	Completely Describes us	Somewhat Describes us	Does not Describe Us at All	Do Not Know
10. Information about the target market segments are incorporated effectively into the following strategies:				
• Positioning				
• Product and service offerings				
• Pricing				
• Promotion				
• Advertising				
• Distribution				
• Distribution				
• Sales force				

Source: Wind and Bell (2007).

electricity, the American standard, even if the targeted overseas markets utilized a 220 volt standard.

In developing the foundation to this emerging field, my collaborators and I first addressed the issue of what to compare and how to make the comparison in *On the Meaning of Comparison: A Methodology for Cross-Cultural Studies* (Wind & Douglas, 1971). With the publication of *Environmental Factors and Marketing Practices* (Douglas & Wind, 1973), we pointed out the deficiencies of then-current research methodology, which typically relied on results from single-country studies to infer comparisons with other nations.

In contrast, we found that countries at similar levels of development or with similar cultural patterns did not tend to have similar marketing practices. Further, even within a country there was a wide variation of marketing practices that could only be properly studied by considering their relationship to firm characteristics and market structure.

We built on that concept with *Guidelines for Developing International Marketing Strategies* (Wind, Douglas, & Perlmutter, 1973) which examined the ways that the firm's ethnocentrism, polycentrism, regioncentrism, or geocentrism orientation could serve as guidelines in developing effective international marketing strategies. Our findings showed that international orientation alone does not appear to provide sufficient guidelines for

developing international marketing strategies and has to be augmented with the marketing orientation of the firm.

As international marketing activities continued to gain momentum, *Some Issues in International Consumer Research* (Wind & Douglas, 1974) addressed the issue of what international marketers needed to do to identify the relevant needs and wants of international consumers. We concluded that marketers needed to go beyond the study of national culture to consider social class and roles, group influences and other factors. We also suggested that training for international consumer researchers should encompass behavioral concepts, and knowledge of modern marketing research techniques.

In *Comparative Consumer Research: The Next Frontier?* (Wind & Douglas, 1982) we examined three approaches: "Emic," which holds that attitudinal or behavioral phenomena are expressed uniquely in each culture and are therefore best understood in their own terms; "Etic," which is primarily concerned with "culture free" methods of universal concepts; and the "Hybrid" approach that develops country, culture or subculture-specific concepts and measures that are compared, combined, or modified to develop, wherever possible, "pan-cultural" concepts that do not have a specific cultural bias. We also advocated for devoting more resources to comparative consumer research, both within a country – comparing subgroups, regions, and institutions – and across countries or country groupings.

We followed up with a warning against the then-prevailing tendency to see all customers as being alike. In *The Myth of Globalization* (Douglas & Wind, 1987) we argued against the then-perceived belief that the key to success was to develop "global" or standardized products and brands. Although we agreed it was imperative to adopt a global strategy, we said it would be naïve and simplistic to embrace universal standardization. Instead, we suggested focusing on establishing a diverse team that could *think globally but act locally*.

We addressed the issue of selecting the "right" international markets with a four step theoretical model described in *Selection of Global Target Markets: A Decision Theoretic Approach* (Douglas, Le Maire, & Wind, 1972). This approach formalized and integrated the intuitive decision roles and criteria used by management into a systematic approach for evaluating global market opportunities.

Much of my research on globalization tested and extended concepts and methods we first employed in the United States. These efforts were based on my continuous beliefs that:

- Every company should consider the world as the arena for their operations. [A decision to stay local is fine only if reached after considering other global options.]
- Countries and markets are heterogeneous.
- Global strategies should reflect a balance between the idiosyncratic needs of a local market, a global strategic view, and the potential for leveraging initiatives across markets and countries.

Given these beliefs some examples for concepts and tools tested and expanded globally include:

- *Multinational Trade Off Segmentation* (Robinson & Wind, 1977).
- *Research for Multinational Product Policy* (Wind, 1977) – international product decisions and the associated research needs they entailed.
- *International Portfolio Analysis and Strategy: The Challenge of the 1980s* (Wind & Douglas, 1981) – a new approach to developing international product portfolios by combining stochastic dominance and analytical hierachal process.
- *Developing Marketing Expert Systems: An Application to International Negotiations* (Rangaswamy, Eliashberg, Burke, & Wind 1989) – NEGOTEXT – an expert system designed to help international marketing specialists prepare for negotiation discussions.
- *Marketing Strategy in the Global Information Age* (Wind, 1999) – highlighting the need to select, hire, develop, motivate, and retain a diverse workforce and stakeholders that represent different parts of the world and who are sensitive to different cultures. They also need to be able to operate capably and comfortably anywhere in the world, utilizing available information technology tools that are rapidly changing.

With the publication of *The Invisible Global Market* (Mahajan, De Morales, & Wind, 2000), we considered another aspect of marketing – the largely untapped demand for products and services among developing-nation consumers that make up about 86 percent of the global market. The challenge, as we pointed out, is for a company to rethink its entire marketing and business strategy, custom tailoring it for the individual marketplace. The need to focus on untapped market opportunities was also discussed in *Capturing the Ricochet Economy* (Mahajan & Wind, 2006).

I continued to address the challenges of operating in a global marketplace with *Network Orchestration for a Flat World: Preparing for a Future of "Defining Moments" at Li & Fung* (Wind, 2008a), the story of one of the oldest trading companies in Hong Kong. Li & Fung has a network of over

12,000 factories in over 40 countries. Without owning any of them, it is able to orchestrate optimal supply chains that deliver the best product at the best price at the right time for its global customers. Anchoring it all is Li & Fung's commitment to renewing itself as it responds to critical changes in market conditions.

My own views on globalization have evolved. In the 1960s and 1970s the study of international marketing [as was the study of industrial/organizational marketing management] was viewed as secondary to marketing consumer goods in a domestic environment; *The Step Children of Marketing: Organizational and International Customers* (Wind, 1972) reflect this situation. As a result of this, I championed the development of a separate systematic approach to international marketing [and organizational buying] and the identification of appropriate international market segments as a way to improve a firm's marketing effectiveness and efficiency.

My international research activities were linked to the establishment in 1980 of the Wharton Center for International Management Studies, which was designed to stimulate international research. This was followed by the establishment in 1983 of the Joseph H. Lauder Institute of Management and International Studies which offered an innovative dual degree program (MBA and MA in International Studies) dedicated to the preparation of business leaders who are comfortable and effective in leading organizations around the world (<http://lauder.wharton.upenn.edu/>).

Since that time, and with the increased globalization of business and enormous advances in communication and information technologies and transportation systems, I am no longer focusing on the global market as a separate topic. Instead I have integrated the international dimension in each of the topics studied.

Thus, while the selection of a global portfolio of markets is still an important business decision, all decisions should be made with a global perspective. The world, despite all the effort for local protectionism and bilateral agreement is moving toward a flat world (Friedman, 2005) and the need to *Compete in a Flat World* (Fung, Fung, & Wind, 2007).

MARKETING RESEARCH AND MODELING

Marketing research and modeling have been the core tools of my research, teaching, and consulting. I have been fortunate enough to work with some of the brightest and most innovative researchers who as mentors, colleagues, and students shared my desire to continuously improve the current research

and modeling approaches and assure their relevance to the solution of important management challenges.

In this continuous search for *Rigor and Relevance*, we focused on innovating and applying new concept-testing designs, experimentation, methods for preference measurement, analyzing free response data, and building models.

In *Marketing by Experiment* (2007), I put forth my long-held belief (which has been at the core of my MBA Marketing Strategy course) that instead of implementing a single strategy, management needs to engage in *adaptive experimentation*, a philosophy that integrates research and action experiments of diverse strategies. Such an approach is critical in today's fast-changing business environment, where no optimal strategy is likely to exist. Only adaptive experimentation that encourages experimentations with alternative (and ideally innovative) strategies provides the following benefits:

- Assures ability to learn and improve decisions over time.
- Encourages the design of innovative strategies.
- Forces the discipline to measure the outcomes.
- Creates a culture of creativity and innovation by making it okay to fail (since not all experimental treatments are going to succeed).
- Provides a competitive advantage since the competitors do not have access to the experimental design.

With the publication of *Experimentation as a Tool for the Retailer* (Wind, Douglas, & Ascoli, 1971) we took on the presumption that the analysis of applying modern U.S. marketing retail management techniques to non-U.S. retailing would not be efficiently accomplished because of the cost, administrative effort, and time required. A study conducted in multiple locations of an Israeli discount store demonstrated, however, that such experiments could be conducted with minimal expenditures, that it could be administered in a simple manner, and the results analyzed with nothing more complicated than a hand calculator – remember this was 1971 (Wind, Douglas, & Ascoli, 1971). This led us to advocate for greater and more widespread use of experiments as a means to improved management decisions.

In *Multivariate Analysis of Variance in Research on the Effectiveness of TV Commercials* (Wind & Denny, 1974) we focused on the need for measuring advertising effectiveness on a number of relevant criteria, showing how multivariate analysis of variance and covariance could be a useful approach in marketing and advertising experiments.

Although my research and modeling activities have encompassed a wide range of topics, a major stream of research has focused on assessing consumer preferences using conjoint analysis. Probably the best known of these papers is the HBR paper *New Way to Measure Consumers' Judgments* (Green & Wind, 1975).

Yet this chapter was preceded by a number of papers developing the conjoint analysis methods and widening its application. These papers included:

- *Preference Measurement of Item Collections* (Green et al., 1972), where we showed how these collections could be analyzed with conjoint measurement techniques.
- *Consumer Menu Preference: An Application of Additive Conjoint Measurement* (Green et al., 1972)
- *Benefit Bundle Analysis* (Green et al., 1972)
- *Subjective Evaluation Models and Conjoint Measurement* (Green, Carmone, & Wind, 1972)

Following these and other related initial articles and our book, *Multi-Attribute Decisions in Marketing: A Measurement Approach* (Green, Wind, & Carroll, 1973), we conducted hundreds of commercial applications of conjoint analysis to a wide range of consumer and industrial products in areas that included:

- *Consumer Nondurables*, where products ranged from bar soaps to facial tissues, and from shampoos to gasoline pricing.
- *Financial Services*, which encompassed bank services, auto insurance policies, travel and entertainment packages, and financial planning.
- *Consumer Durables*, where we considered subjects like automotive styling, pickup truck design, apartment design, and commercial lawn mowing.
- *Health Care/Pharmaceuticals*, that included numerous ethical drugs, diagnostic equipment, and health maintenance organizations.
- *Industrial Goods*, where we examined copying machines, printing equipment, facsimile, and data transmission.
- *Other Services* that included hotel (Courtyard by Marriott), car rental agencies, telephone services and pricing, and employee benefits packages.
- *Transportation*, which encompassed domestic and transcontinental airlines, passenger, and freight train operations.

In these applications, conjoint analysis was used in diverse areas such as product and service design, brand equity, quality function deployment, and

customer satisfaction/referenceability. Our research also encompassed legal matters, where it included noteworthy cases like AA Screen Position; Chrysler – Windshield Wiper; P&G not made from concentrate orange juice; and Italian Trade Commission pasta's country of origin case.

These and other conjoint analysis applications encompassed almost all marketing decisions, including: Market Segmentation as a basis for segmentation ("benefit" segmentation), as a descriptor of segments; and in novel application of flexible segmentation; componential segmentation, and models such as SIMOPT.

We also considered conjoint analysis as it relates to product decisions in areas like positioning, concept evaluation, product development guidelines, and quality function development. Our studies also focused on pricing decisions relating to areas like price sensitivity, and the value of different models of pricing.

Our research into market applications of conjoint analysis also extended to promotional decisions (where we considered semantic equivalents), distribution decisions (which included the value of different outlets and design of a product/service mix for distribution outlets), management (decision criteria, which encompassed product portfolio, new product evaluation, allocation of resources, business strategy, and brand equity), and consumer behavior (where our studies included consumer choice of items and item collections, allocation of time and money among activities, and satisfaction/referenceability).

Conjoint analysis studies have often been integrated with simulations, as illustrated in many of the applied studies such as *Courtyard by Marriott: Designing a Hotel Facility with Consumer-Based Marketing Models* (Wind et al., 1989) and *Buyer Choice Simulators, Optimizers, and Dynamic Models* (Green, Wind, & Krieger, 2003).

In 2001, Paul Green, Abba Krieger, and I assessed the state of progress in this area in the paper *Thirty Years of Conjoint Analysis: Reflection and Prospects* and followed it with an e-book: *Adventures in Conjoint Analysis: A Practitioner's Guide to Trade-Off Modeling and Applications* (Wind, Krieger, & Green, 2004).

In addition to conjoint analysis, my research and modeling publications included a wide range of tools including:

- Concept testing
 - *A New Procedure for Concept Evaluation* (Wind, 1973)
 - *Concept Testing as Input to Strategic Market Simulations* (Wind, Jolly, & O'Connor, 1975)

- New Product Diffusion Models
 - *Industrial Product Diffusion by Market Segment* (Wind, Robertson, & Fraser, 1982)
 - *An Approach to Repeat-Purchase Diffusion Analysis* (Mahajan, Wind, & Sharma, 1983)
 - *New Products Diffusion Models with Stochastic Parameters* (Eliashberg, Tapiero, & Wind, 1985)
 - *Innovation Diffusion Models of New Product Acceptance: A Reexamination* (Mahajan & Wind, 1986)
 - *New Product Diffusion Models: From Theory to Practice* (Mahajan et al., 2000)
- New Product Forecasting Models
 - *A Reexamination of New Product Forecasting Models* (Wind & Mahajan, 1981)
 - *New Product Forecasting Models: Directions for Research and Implementation* (Mahajan & Wind, 1988)
- Market Response Model
 - *A Customized Market Response Model: Development, Estimation, and Empirical Testing* (Rao, Wind, & DeSarbo, 1988)
- Resource Allocation
 - *Determination of the Size and Allocation of Marketing Research Budgets* (Wind & Gross, 1978)
- Market Segmentation Research
 - *Issues and Advances in Segmentation Research* (Wind, 1978)
- Product Positioning Research
 - *Positioning Analysis and Strategy* (Wind, 1990)
- Advertising Research
 - *Advertising Measurement and Decision Making* (Wind, Dalby, & Gross, 1968)
 - *Risk Behaviour and Optimum Advertising with a Stochastic Dynamic Sales Response* (Tapiero, Eliashberg, & Wind, 1987)
- Legal Cases
 - *Parameter Estimation in Marketing Models in the Presence of Influential Response Data: Robust Regression and Applications* (Mahajan, Sharma, & Wind, 1984)
 - *Combining Multiple Estimates: An Application to Damage Assessment Litigation* (Schmittlein & Wind, 1991)
 - *Marketing Research in the Courtroom: A Case Study Shows How Analytical Methods Can Be Applied to the Law* (Green, Krieger, & Wind, 2002)

- *Survey Methods Help to Clear Up Legal Questions* (Green, Krieger, & Wind, 2002)
- *Dual Considerations* (Krieger, Green, & Wind, 2003)
- Pricing Research
 - *A Friction Model for Describing and Forecasting Price Changes* (DeSarbo, Rao, Steckel, Wind, & Colombo, 1987)
- Social Networks
 - *Marketing and Social Networks* (Arabie & Wind, 1994)
- Expert Systems
 - *A Knowledge-Based System for Advertising Design* (Burke, Rangaswamy, Wind, & Eliashberg, 1990)
- Advances in Multivariate Approaches including:
 - *Higher Order Factor Analysis in the Classification of Psychographic Variables* (Wind, Green, & Jain, 1973)
 - *Overlapping Clustering: A New Method for Product Positioning* (Arabie, Carroll, DeSarbo, Wind, 1981)
 - *Diffusion of New Products in Heterogeneous Populations: Incorporating Stochastic Coefficients* (Eliashberg, Tapiero, & Wind, 1983)
 - *Why and When to Use Tobit Analysis* (Fraser & Wind, 1986)
 - *Applying Qualitative Data* (Green, Wind, Krieger, & Saatsoglou, 2000)
 - *Who Competes with Whom? A Demand-Based Perspective for Identifying and Representing Asymmetric Competition* (DeSarbo, Grewal, & Wind, 2006)

In addition, over the years, I have written a number of papers and given various presentations on the state of the art of marketing research and modeling focusing on current problems and proposed remedies. In *Rx for Marketing Research: A Diagnosis of and Prescriptions for the Recovery of an Ailing Discipline in the Business World* (Mahajan & Wind, 1999), among the remedies we suggested are the bringing together of:

1. qualitative *and* quantitative;
2. marketing research *and* modeling;
3. marketing research *and* decision support systems;
4. marketing research *and* adaptive experimentation;
5. market research *and* databases; and
6. marketing research *and* other information sources.

These suggestions are still as relevant today and in fact, given the increased availability of huge amounts of data and the advances in data analysis, the urgency in moving in these directions and in continuing to

innovate is greater than ever. This is illustrated for example by some of my current research initiatives, such as development of games as a way to obtain the needed marketing research information, or the incorporation of the results of text mining of consumer natural conversations in the marketing insight process and dashboard.

FUTURE OF MARKETING

Marketing had its ideological roots as a business philosophy that focused on the customer (and was often referred to as the “marketing concept” or “marketing orientation”). Unfortunately, this shifted toward the operations of a marketing function.

In *The Marketing Concept Revisited: A Decade Recap of Its Development and Meaning* (Schutte & Wind, 1968), we described a new model that would account for all the elements of the marketing system: the customers, the retail, wholesale, and other intermediate marketing organizations, the firm's intra-organizational constraints, and the overall environment.

In *Marketing and the Other Business Functions* (1981) I noted that then-contemporary marketing literature neglected to consider the theoretical and research implications of the interrelationship between marketing and other business functions. The dependency of many marketing decisions on considerations involving other business functions, although widely recognized by marketing practitioners, had been widely ignored in the academic marketing literature, and research was primarily left to the business strategy literature. Yet, the efficient and effective marketing decisions require the incorporation of the considerations of other, nonmarketing, business functions in the design and implementation of marketing research, marketing models and planning and control systems, management information systems, marketing strategies, and marketing organization. Greater interface between marketing and other disciplines would not only enrich our discipline, but could also lead to greater relevance of the results of research in marketing.

In my acceptance address of the Charles Coolidge Parlin Award – *The Marketing Challenge* (1985) – I tried to break down the artificial barriers between marketing and society and the need to utilize market knowledge and tools to help solve not only management challenges but the problems that face society. Today, this point is more critical than ever given the numerous challenges facing society – unemployment, poverty, healthcare, education, terrorism, and other factors contributing to our complex and uncertain reality.

Although the consumer remains the major focus of marketing, any marketing strategy should also focus on other players, including the entire company and its employees, current and potential customers and competitors, cooperative arrangements with businesses and other organizations, channel members, and other stakeholders.

Such a strategy would feature a market-driven integration of creativity, analytical skills, and practical business considerations and, if accompanied by a view of marketing as a risk taking, opportunity creating function and philosophy, could enable practitioners and researchers to enjoy the process while successfully meeting the marketing challenges facing us all.

In *The Challenge of Digital Marketing* (Wind & Mahajan, 2002), we noted that the digital revolution had shaken marketing to its core, presenting companies with the need to reexamine the unique benefits and characteristics of their products and services. At the same time, with customers having many options to choose from and fewer personal relationships online, we argued that they would turn to trusted and trustworthy brands that represent more intangible qualities. But to earn this trust, we added, companies would have to set up creative mass customization platforms that allow consumers to design their own products, services, and pricing.

The challenge is that as the digital revolution advances, companies have tended to look at the technology, and paid less attention to the implications for marketing. But by understanding the new global digital reality and focusing on the new and evolving "rules" of marketing, marketing academics could begin to reclaim some of their lost relevance and corporate executives could increase their likelihood of success.

I returned to the theme of marketing's unnecessary and self-imposed limitations with *Marketing as an Engine of Business Growth: A Cross-Functional Perspective* (Wind, 2005a).

Although increased rigor of management publications has created deep insights, frameworks, and powerful tools, this disciplinary focus has also created blinders that limit creativity in developing holistic and relevant solutions to business challenges.

The silos are not only between the marketing academics and the practitioners but also within these camps. Organizations tend to be siloed, yet they can build linking processes among the different functional areas. Building bridges across the current departmental structure, though, may be an interim solution. Although the ideal approach might be to form more of a network structure that involves researchers from different backgrounds in solving common problems, these types of structural and cultural changes take a long time and a lot of effort to implement. As a first step, building

bridges to create a more networked organization can achieve a cross-functional perspective without having to change the underlying architecture.

The silos are also prevalent in academia and we are unfortunately seeing growing separations between the quantitative, the behavioral, and the strategy domains of marketing, not to speak about the disciplinary silos between marketing and operations. To bridge the various silos and move forward to greater relevance and rigor of marketing will require challenging the prevailing mental models of marketing.

During the last decade, much of my research and teaching centered on mental models. Our initial work was published as *The Power of Impossible Thinking* (Wind & Crook, 2004) and was influenced by work in neuroscience and our finding from our *Wharton Fellows* program that the major obstacle to successful business transformation are the mental models of the executives and managers involved.

In the context of marketing, I addressed this issue in *Challenging the Mental Models of Marketing* (Wind, 2005b). In this chapter, we encouraged marketing scholars and practitioners to challenge their current mental models and activities and reexamine them to better fit the changing world.

There have been enormous advances in marketing research and modeling, and by moving in the right direction we can broaden the usefulness, relevance, and impact of marketing.

In *A Plan to Invent the Marketing We Need Today* (Wind, 2008b), I suggested that the discipline of marketing has not kept up with the rapid changes facing 21st century businesses. New scholarship does not have enough management relevance, and practicing marketers are too often forsaking rigor.

As difficult as the relevance challenge may be, we have no choice but to rethink marketing if we are to be relevant to the challenges of this transformed world and produce rigorous and relevant solutions to address these challenges.

The overriding theme of the need for change in reshaping the future of marketing is also reflected in many of my other writings and articles including:

- Management Education
 - *Educating for International Management: The Joseph H. Lauder Institute* (Gaudiani & Wind, 1987)
 - *The Globalization of Management Education: Options, Trade Offs, and an Agenda for Implementation* (Wind & Thomas, 1989)

- *The Restructured Wharton MBA: Inventing a New Paradigm* (Wind, 1991)
- *Reinventing the Business School for the Global Information Age* (Wind, 2000)
- *Reinventing Training for the Global information Age* (Wind & Reibstein, 2000)
- *The Integrative Thinking Challenge for Management Education and Research* (Wind, 2002)
- Reinventing the corporation
 - *Reinventing the Corporation* (Wind & West, 1991)
 - *Pace-Setting 21st Century Enterprises: A Glimpse of What Might Emerge* (Wind, Holland, West, & Gunther, 1993)
- The shift to network strategies
 - *Network Orchestration for a Flat World: Preparing for a Future of "Defining Moments" at Li & Fung* (Wind, 2008a)
 - *The Network Imperative: Community or Contagion?* (Introductory chapter in *The Network Challenge: Strategy, Profit and Risk in an Interlinked World*, eds. Kleindorfer & Wind, 2009)

Moving forward to address the management challenges of a more uncertain, more volatile, more complex, structurally different world (IBM, 2010), we need to undertake three key initiatives:

- (1) Take stock of what we know and do not know, what works and does not work. This requires increased focus on *empirical generalizations*. Consider for example, the special *Marketing Science* issue that Frank Bass and I edited in 1995 on *Empirical Generalizations in Marketing* and recently, the 2009 special issue of *Journal of Advertising Research – What We Know about Advertising* – that Byron Sharp and I edited.
- (2) Re-examine and *challenge the mental models of marketing*. As articulated, for example, in the *Journal of Marketing* guest editorial Dave Reibstein, George Day and I recently wrote, *Is Marketing Academia Losing its Way* (Reibstein, Day, & Wind, 2009).
- (3) *Undertake bold experiments* and initiatives to tackle the critical challenges facing management and society. In doing so, let's accept the value of open innovation, enlisting the wisdom of diverse and relevant crowds and in seeking not only the maximization of long-term shareholder value but concurrently also the solution to society's ills – the long awaited need to move toward *socially responsible capitalism*.

CONCLUSIONS

Writing this chapter offers me an unusual opportunity to reflect on almost five decades of marketing and the role I have played in it, as well as to briefly outline my wish list for our discipline and my own activities in the next few years.

REFLECTIONS

My first exposure to marketing was 50 years ago, in 1961, as a master student of the business administration program at the Hebrew University, Jerusalem. It continued as a research assistant in a new product development course and got its first full exposure in 1963–1964 in a unique Ford Foundation sponsored program at Stanford's International Center for the Advancement of Management Education. These first years saw the shift of the field to a more managerial and analytical approach. My doctoral years at Stanford (1964–1966) expanded significantly my views of the field working with Bill Massy, Ron Frank, Henry Claycamp, and Bob Davis and expanding my exposure to the behavioral sciences, operations research, and the challenges facing real corporations – especially Motorola and Varian Associates – the two companies I studied for my dissertation. Although my research in these early years centered on the evolving area of organizational buying behavior, with the move to Wharton in December 1966 and the opportunity to continue working with Ron Frank, starting a lifelong collaboration with Paul Green, my mentor and friend, and working with numerous marvelous coauthors from academia and industry, my research interests expanded to other areas of marketing as briefly discussed in this chapter with a focus on the three themes identified in [Fig. 1](#).

Reflecting on the past five decades, marketing has matured in many ways. The fledgling area of consumer behavior that was at its infancy in the early 1960s has developed to a full fledge discipline. Marketing research and modeling has emerged as marketing science with a first-rate journal and professional association that assures the continued development of advanced models for this age of data proliferation and increased needs for analytics, insights, and foresights. There are numerous marketing journals and the number of marketing scholars and practitioners has expanded around the globe. Marketing strategy is increasing in its importance for every profit and nonprofit organization. Marketing expenditures are in the billions with increased demand for accurate measures. The marketing research industry is

changing with numerous companies dedicated to data collection and measurement. Marketing courses are proliferating and are an integral part of every management program and the number of doctoral programs in marketing is expanding around the world. The Marketing Science Institute (MSI) that was founded in affiliation with Wharton is celebrating this year its 50th anniversary.

Our discipline has also established a significant number of “marketing truths” – concepts, findings, and methods that met the test of time. These include, for example:

- The importance of the marketing concept as a business philosophy.
- The fact that all markets are heterogeneous and require careful segmentation.
- The centrality of the consumer and the importance of understanding not only their current but also evolving needs.
- The importance of creativity and innovation. Creative advertising is more effective and innovative companies do succeed.
- Numerous empirical generalizations (Bass & Wind, 1995; Wind & Sharp, 2009; Hanssens, 2009), yet while many of them still hold, the dramatic changes of the business environment require constant examination of the continued relevance of these findings.
- Marketing science has the tools that can help management make better decisions.

I hope that I have been able to contribute to what we know about marketing, to the development of the discipline and to the practice of marketing and marketing science through my writings, mentoring, collaborating with generations of marketing professionals and scholars, my consulting to numerous firms, my pro bono activities with nonprofit organizations, and through my continuous work on reinventing marketing and management education.

Yet, with all these developments and enormous progress, marketing, as a discipline, is at a crossroads. Our customers – business and organizational leaders – rarely look for academic marketing publications. Marketing, with few notable exceptions, rarely has a seat at the corporate strategy table, and many of our publications do not address the key challenges facing business and society.

This situation is getting worse given the continuous and intensified changes such as:

- Increased importance of the empowered and skeptical consumer (with the corresponding shift in power and control from the firm to the consumer).
- The continuous advances in technology with associated proliferation and advances in media, channels, and consumer touch points.
- The changing business environment with the wake-up call of the financial crisis of 2008.
- The pressure for accountability and return on marketing investments.
- The changing geopolitical and economic landscape with the emergence of the BRIC and other emerging countries as the new economic centers.
- The changing business and revenue models, including the shift from a firm-centric view to a network orchestration (Kleindorfer & Wind, 2009).
- The increased challenges facing society in all domains of our life – education, health, unemployment, poverty, digital and economic divide, terrorism, government deficits, and deteriorating infrastructure.

These interrelated forces of change are challenging the traditional mental models of marketing and require, more than ever, rethinking of the traditional theories and concepts, findings, methods, and the organization of the discipline.

If as a discipline we will not be responsive to the changing needs of our customers, management of profit, new profits, and government organizations, we are likely to repeat our loss of important management domains such as quality and customer satisfaction which were lost to operations, data mining which was lost to computer science, customer insights which we now share with behavioral economics and marketing-driven business strategy which we are at a risk of losing to the business strategy area.

A WISH LIST FOR THE “NEW MARKETING”

Although we marvel at the changes we have been experiencing in the past decade – the impact of the iPad, iPhone, and Google, the digitization of everything; and other dramatic changes – we cannot even imagine what the world will look like in 2020. My deep concern is that marketing (and the business disciplines and management education in general) is too slow to react and change, let alone anticipate and lead these changes.

Finance has not changed its traditional theories and teaching despite the evidence during the last financial crisis that the key assumptions of the discipline do not hold. Similarly marketing is very slow in addressing the

impact of the empowered consumers and the shift in control from the firm to the consumer.

Thus, my wish for the discipline is that our thought leaders, and especially the young scholars and practitioners, will devote some quality time (and ideally effort) to ask themselves questions such as:

- What is the impact of the changing business environment on our current theories, concepts, and methods? – What do we have to change when the power and control shifts from the firm to the consumer?
- What is the world going to look like in 5–10 years, and what are the implications of these expected scenarios on our marketing theories concepts methods and modes of operations?
- How can we bridge the artificial and damaging divide among the three silos of the marketing discipline – the behavioral, the quantitative, and strategy?
- How can we bridge the current artificial divide between marketing and the other business functions which prevent us from developing meaningful solutions to the challenges facing business and society?
- How can we bridge the divide between marketing academics and practitioners?

Only when we, as individuals and as a discipline, effectively address these questions will we increase the relevance and rigor of our discipline. It is only than that the collective contribution of the “legends” presented in this volume will provide the needed foundation for changing the mental models of marketing and move us to the next phase of marketing as a central node in the networks of disciplines and players. We can make the needed difference but we must have the courage to challenge, and as needed change, our mental models of marketing.

NOTE

1. This conclusion was first presented in Frank, Massy, and Wind (1972).

REFERENCES

Note: This list includes a few illustrative references for each of the sections of the chapter. In addition, all the articles and books referred to in the chapter are available in full on my website: <http://marketing.wharton.upenn.edu/people/faculty/wind.cfm>

A. Organizational Buying Behavior

Webster, F.E., Jr., & Wind, Y. (1972). A general model for understanding organizational buying behavior. *Journal of Marketing*, 36(April), 12–19.

Wind, Y. (1970). Industrial source loyalty. *Journal of Marketing Research*, 7(November), 450–457.

Wind, Y., & Thomas, R. J. (1991). Strategy-driven industrial marketing research. In: V. Zeithaml (Ed.), *Annual review of marketing* (pp. 411–454). Chicago: American Marketing Association.

Wind, Y. J. (2007). Blurring the lines: Is there a need to rethink industrial marketing? *Journal of Business and Industrial Marketing*, 21.7, 474–481.

B. Consumer Behavior

Green, P. E., Wind, Y., & Jain, A. K. (1972). Preference measurement of item collections. *Journal of Marketing Research*, 9(November), 371–377.

Nicosia, F.M., & Wind, Y. (1978). Sociology of consumption and trade-off models in consumer public policy. In: W. M. Denney & R. T. Lund (Eds), *Research for consumer policy* (Vol. 24, pp. 141–184). Cambridge, MA: Center for Policy Alternatives, Massachusetts Institute of Technology.

Villani, K. E. A., & Wind, Y. (1975). On the usage of 'modified' personality trait measures in consumer research. *Journal of Consumer Research*, 2(December), 223–228.

Wind, Y. (1976). Preference of relevant others and individual choice models. *Journal of Consumer Marketing*, 3(June), 50–57.

Wind, Y., & Mahajan, V. (2002). Convergence marketing. *Journal of Interactive Marketing*, 16.2(Spring), 64–79.

C. New Product Management

Mahajan, V., Muller, E., & Wind, Y. (2000). New product diffusion models: From theory to practice. In: V. Mahajan, E. Muller & Y. Wind (Eds), *New-product diffusion models* (pp. 3–24). Boston: Kluwer Academic Publishers.

Mahajan, V., & Wind, Y. J. (2002). Got emotional product positioning? There's more to positioning than just features and benefits. *Marketing Management*, 11.3(May/June), 36–41.

Wind, J., & Mahajan, V. (1997). Issues and opportunities in new product development: An introduction to the special issue. *Journal of Marketing Research*, 34(February), 1–12.

Wind, Y. Product policy: Concepts, methods and strategies (Addison-Wesley Marketing Series). Reading: Addison-Wesley, 1982. Reviewed in the *Journal of Marketing*, Summer 1981.

Wind, Y., & Mahajan, V. (1981). Designing product and business portfolios. *Harvard Business Review*, 59.1(January–February), 155–165.

Wind, Y., Mahajan, V., & Swire, D. J. (1983). An empirical comparison of standardized portfolio models. *Journal of Marketing*, 47(Spring), 89–99.

D. Marketing Strategy

Wind, J. (2009). Rethinking marketing: Peter Drucker's challenge. *Journal of the Academy of Marketing Science*, 37, 28–34.

Wind, J., & Rangaswamy, A. (2001). Customerization: The next revolution in mass customization. *Journal of Interactive Marketing*, 11.1(Winter), 13–32.

Wind, Y. (1986). Models for marketing planning and decision making. In: V. P. Buell (Ed.), *Handbook of modern marketing* (2nd ed.). New York: McGraw-Hill49-1–49-12.

Wind, Y., & Gardner, C. (2011). *Rethinking advertising*. Wharton School Working Paper.

Wind, Y., & Robertson, T. S. (1983). Marketing strategy: New directions for theory and research. *Journal of Marketing*, 47(Spring), 12–25.

Wind, Y. J. (2005). Marketing as an engine of business growth: A cross-functional perspective. *Journal of Business Research*, 58, 863–873.

Wind, Y. J. (2008b). A plan to invent the marketing we need *today*. *MIT Sloan Management Review*, 49(4), 21–29.

E. Segmentation

Frank, R. E., Massy, W. F., & Wind, Y., (1972) *Market segmentation (international series in management)*. Englewood Cliffs: Prentice Hall. Reviewed JMR, November 1972; August 1974.

Wind, J., & Bell, D. (2007). Market segmentation. *The marketing book* (6th ed.). Burlington, MA: Butterworth Heinemann, November.

Wind, Y. (1978). Issues and advances in segmentation research. *Journal of Marketing Research*, 15(August), 317–337.

Wind, Y., & Saaty, T. L. (1980). Marketing Applications of the analytic hierarchy process. *Management Science*, 26.7(July), 641–658.

F. Globalization

Friedman, T. L. (2005). *The world is flat: A brief history of the twenty-first century* (Print). New York: Farrar, Straus and Giroux.

Rangaswamy, A., Eliashberg, J., Burke, R. R., & Wind, J. (1989). Developing marketing expert systems: An application to international negotiations. *Journal of Marketing*, 53.4(October), 24–39.

Wind, Y. (1977). Research for multinational product policy. In: W. J. Keegan & C. S. Mayer (Eds), *Multinational product management* (pp. 165–184). Chicago: American Marketing Association.

Wind, Y. (2008a). Network orchestration for a flat world: Preparing for a future of “Defining moments” at Li & Fung. *Effective Executive* (February), 14–18.

Wind, Y., & Douglas, S. (1971). On the meaning of comparison: A methodology for cross-cultural studies. *Quarterly Journal of Management Development*, 2.4.1(June), 105–121.

Wind, Y., & Douglas, S. (1981). International portfolio analysis and strategy: The challenge of the 80s. *Journal of International Business Studies*, 12(Fall), 69–82.

Wind, Y., Douglas, S. P., & Perlmuter, H. V. (1973). Guidelines for developing international marketing strategies. *Journal of Marketing*, 37(April), 14–23.

G. Marketing Research and Modeling

Arabie, P., Carroll, J. D., DeSarbo, W., & Wind, J. (1981). Overlapping clustering: A new method for product positioning. *Journal of Marketing Research*, 18(August), 310–317.

Burke, R. R., Rangaswamy, A., Wind, J., & Eliashberg, J. (1990). A knowledge-based system for advertising design. *Marketing Science*, 9.3(Summer), 212–229. [B] Earlier version published as “Expert Systems for Marketing.” Marketing Science Institute Report 87–107, November 1987.

Green, P. E., Krieger, A. M., & Wind, Y. (2002). Marketing research in the courtroom: A case study shows how analytical methods can be applied to the law. *Marketing Research*, 14.1(Spring), 28–33.

Green, P. E., & Wind, Y. (1975). New way to measure consumers’ judgments. *Harvard Business Review*, 53(July–August), 107–117.

Mahajan, V., & Wind, J. (1999). Rx for marketing research: A diagnosis of and prescriptions for the recovery of an ailing discipline in the business world. *Marketing Research*, 11.3(Fall), 7–13.

Mahajan, V., & Wind, Y. (1988). New product forecasting models: Directions for research and implementation. *International Journal of Forecasting*, 4, 341–358.

Wind, J. (2007). Marketing by experiment. *Marketing Research*, 19(1), 10–16.

Wind, J., Green, P. E., Shifflet, D., & Scarbrough, M. (1989). Courtyard by Marriott: Designing a hotel facility with consumer-based marketing models. *Interfaces*, 19.1(January–February), 25–47.

Wind, Y. (1973). A new procedure for concept evaluation. *Journal of Marketing*, 37(October), 2–11. [B] Translated and reprinted in French as “Une nouvelle procédure d’évaluation des idées de nouveaux produits. *La Revue française du Marketing*. 1974: 1–12.

Wind, Y., Dalby, H., & Gross, I. (1968). *Advertising measurement and decision making*. Boston: Allyn & Bacon.

Wind, Y., & Denny, J. (1974). Multivariate analysis of variance in research on the effectiveness of TV commercials. *Journal of Marketing Research*, 11(May), 136–142.

H. Future of Marketing

Bass, F. M., & Wind, J. (1995). Introduction to the special issue: Empirical generalizations in marketing. *Marketing Science*, 14.3.2, G1–G5.

Reibstein, D., George, D., & Wind, J. (2009). Is marketing academic losing its way? *Journal of Marketing*, 73.4(July), 1–3.

Wind, J. (1985). The marketing challenge. Charles Coolidge Parlin award acceptance speech. Philadelphia [B] Wharton school working paper, 1985. [C] Excerpts appeared in The Marketing News August 1985.

Wind, Y. (1981). Marketing and the other business functions. *Research in Marketing*, 5, 237–264.

Wind, Y. J. (2002). The integrative thinking challenge for management education and research. *Rotman Magazine*, Fall, 18–19. [B] Reprinted in *A New Way to Think: The Best of Rotman Magazine*, Winter 2005.

Wind, Y. J. (2005). Challenging the mental models of marketing. In: J. N. Sheth & R. S. Sisodia (Eds), *Does marketing need reform? Fresh perspectives on the future* (pp. 91–104). Armonk, NY: M. E. Sharpe.