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Gary L. Lilien, John H. Roberts, Venkatesh Shankar,

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Effective Marketing Science Applications: Insights from the ISMS-MSI Practice Prize Finalist Papers and Projects

Gary L. Lilien

Smeal College of Business, Pennsylvania State University, University Park, Pennsylvania 16802,
glilien@psu.edu

John H. Roberts

College of Business and Economics, Australian National University, Canberra, Australian Capital Territory 0200,
Australia; and London Business School, London NW1 4SA, United Kingdom, john.roberts@anu.edu.au

Venkatesh Shankar

Mays Business School, Texas A&M University, College Station, Texas 77843, vshankar@mays.tamu.edu

From 2003 to 2012, the ISMS-MSI Practice Prize/Award competition has documented 25 impactful projects, with associated papers appearing in *Marketing Science*. This article reviews these papers and projects, examines their influence on the relevant organizations, and provides a perspective on the diffusion and impact of marketing science models within the organizations. We base our analysis on three sources of data—the articles, authors' responses to a survey, and in-depth interviews with the authors. We draw some conclusions about how marketing science models can create more impact without losing academic rigor while maintaining strong relevance to practice.

We find that the application and diffusion of marketing science models are not restricted to the well-known choice models, conjoint analysis, mapping, and promotional analysis—there are very effective applications across a wide range of managerial problems using an array of marketing science techniques. There is no one successful approach, and although some factors are correlated with impactful marketing science models, there are a number of pathways by which a project can add value to its client organization. Simpler, easier-to-use models that offer robust and improved results can have a stronger impact than academically sophisticated models can. Organizational buy-in is critical and can be achieved through recognizing high-level champions, holding in-house presentations and dialogues, doing pilot assignments, involving multidepartment personnel, and speaking the same language as the influential executives. And we find that intermediaries often, but not always, play a key role in the transportability and diffusion of models across organizations.

Although these applications are impressive and reflect profitable academic–practitioner partnerships, changes in the knowledge base and reward systems for academics, intermediaries, and practitioners are required for marketing science approaches to realize their potential impact on a much larger scale than the highly selective sample that we have been able to analyze.

Key words: marketing models; decision making; marketing analytics; implementation

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1. Introduction

Over the past several decades, numerous marketing science models have been successfully adopted in practice. However, the breadth and depth of the impact of these models on the user organizations are often unclear, leading to several questions: Which types of models are typically adopted in practice? Why? Which types of models have had the greatest impact? Where and why? What can academics, practitioners, and intermediaries learn from the successful implementation of marketing science models?

The INFORMS (ISMS Society for Marketing Science) Practice Prize finalist projects provide a valuable database to address these questions. In 2003, ISMS introduced a Practice Prize to be awarded to the most outstanding implementations of marketing science concepts and methods. The methodology used had to be sound and appropriate for the management problem and organization, and the work had to have significant, verifiable, and preferably quantifiable impact on the client organization's performance. Although other awards (e.g., the Little and

Bass awards) recognize outstanding rigor in marketing science, the ISMS Practice Prize¹ recognizes relevance and organizational impact as well.

Since its inception, the Practice Prize has recognized 25 pieces of work as finalists and winners (see Table 1) in the competition. Each work represents, in its own way, a remarkable success story that illustrates the impact of marketing science, both in a specific situation and in its potential for broader application. The projects' success and organizational impact have been documented in presentations at the prize competition (available at <http://techtv.mit.edu/collections/isms>), and the details have, with one exception, been published in *Marketing Science*.

In this article, we address four objectives: (1) to identify common factors that characterize finalist papers and projects, (2) to cluster projects with common characteristics, (3) to develop a framework that characterizes the successful development and application of marketing science models, and (4) to offer insight into the diffusion and impact of marketing science models, with implications for academics, practitioners, and intermediaries. We blend three sources of data—the published papers, responses of the authors of the papers to a battery of survey questions, and in-depth interviews with the authors.

We find that effective marketing science applications span a wide range of managerial problems (e.g., marketing strategy, salesforce management, advertising, and direct marketing) using a variety of marketing science techniques. And these applications emerge in a number of ways, showing that there are multiple paths to success. Sometimes simpler, easier-to-use models that offer robust results have greater influence than more rigorous, sophisticated models do. As with any mode of operation new to the firm, organizational buy-in is critical; such buy-in can be achieved through high-level champions, in-house presentations and dialogues, pilot assignments, the involvement of personnel from multiple departments, and the use of the language of the influential executives. Finally, intermediaries—consultancies and market research firms—often play a vital role in the introduction of models and their diffusion across organizations.

In the next section, we summarize the related literature from the perspectives of three actors. In §3, we provide a synthesis of the award finalist projects—the problems addressed, methods used, and authors' perceptions of the project characteristics. To characterize the process of development and implementation of marketing science models in organizations, we then offer a framework that synthesizes the lessons that

the studies' authors draw from their specific projects. Next, we discuss the diffusion of marketing science models in practice, focusing on the gap between managers and academics with regard to adopting marketing science models and how that gap might be bridged. We close by highlighting the lessons from our review and suggesting ways forward for academics, managers, and intermediaries.

2. Literature Related to Three Sets of Actors in Marketing Science Practice

Over the past several decades, a number of authors have discussed the development and implementation of marketing decision models from the perspectives of three sets of actors: academics, practitioners (the ultimate model users), and intermediaries (analysts or firms that sit between academia and the firms implementing the marketing decision models). A recurring theme is that the lack of appropriate incentives may hamper academics' involvement in the development and execution of practice-oriented marketing science models. Reflecting on changes since his seminal decision calculus paper (Little 1970), Little notes that although technology, data, and methodology have changed dramatically, two things remain the same: "organizational inertia" and "academic promotion criteria" (Little 2004, p. 1858). Lodish (2001, p. S54) similarly describes his lessons from decades of building and applying successful models:

The criterion for a good, productive model is not whether it is theoretically or empirically perfect. It is, will the manager's decision, based on the model, improve productivity enough to justify the costs and resources devoted to developing and using the model? This orientation has made it difficult...to get some model descriptions into the best academic journals. However, I consider practical application to be one of the most important attributes of my academic work.

Lilien (2011) argues that the penetration of marketing science models in practice is far below its potential. For example, retailers have been slow to adopt pricing decision models even when they are shown to improve retail performance (Reda 2002). Sullivan (2005) reports that only 5%–6% of retailers use price-optimization models that their firms have purchased, and most prefer to rely on gut feelings for pricing decisions. Winer (2000, p. 143) reports,

My contacts in consumer products firms, banks, advertising agencies and other large firms say...that models are not used much internally. Personal experience with member firms of the Marketing Science Institute indicates the same... I have not seen the penetration of marketing modeling to which the authors [Leefflang and Wittink 2000] refer.

¹ Beginning with the 2011–2012 competition, the award was renamed the Gary L. Lilien ISMS-MSI Practice Prize.

Table 1 ISMS–MSI Practice Prize Finalist Papers/Projects

Authors and year of publication	Finalist paper title ^a (Organization)	Managerial application (product category/industry)	Approach	Impact
Kumar et al. (2013)	“Creating a Measurable Social Media Marketing Strategy for Hokey Pokey: Increasing the Value and ROI of Tangibles and Intangibles” (Hokey Pokey)	Customer relationship management (ice cream retailing)	Regression and choice models	<p>Financial (F): 83% return on investment (ROI); 40% increase in sales</p> <p>Cultural (C): Creation of marketing spending accountability mind-set</p> <p>Transportable (T): Scalable model can be used by other types of retailers</p> <p>Methodological (M): Introduction of a new social media measure: Customer Influence Effect</p>
Skiera and Nabout (2013)	“A Bidding Decision Support System for Profitable Search Engine Marketing” (SoQuero)	Advertising (children’s products)	Optimization model	<p>F: Increase in profit per keyword per year by E33.12; increase in profit per campaign per year by E10.13–139.25</p> <p>C: From rules of thumb to optimal DSS with visualization to understand the decision’s impact</p> <p>T: Company positioned its services as a performance marketing agency extending to more clients.</p> <p>M: Newton search method to determine optimal bid per keyword</p>
Sinha et al. (2013)	“Category Optimizer: A Dynamic Assortment, New Product Introduction, Price Optimizer, and Demand-Planning System” (ASMI)	Category management (packaged goods)	Regression and optimization	<p>F: Profit increase of 70%, increased intangible assets (brand value) with no decrease in market share</p> <p>C: Used to support price increase strategy by CEOs in investor meetings</p> <p>T: Used with other clients such as Procter & Gamble (P&G), Johnson & Johnson, Home Depot, and Golden Circle with impact of more than \$9 billion</p> <p>M: Innovative methodology to simultaneously address price optimization, assortment/mix optimization, and the timing and order of new product introduction</p>
Fischer et al. (2011)	“Dynamic Marketing Budget Allocation Across Countries, Products, and Marketing Activities” (Bayer)	Advertising (pharmaceuticals)	Math programming	<p>F: Provided market share implications of price changes, more than \$100 million saved in operations, and \$16 million in resource allocation savings</p> <p>C: Provided more structure to allocation decision making, changed organizational thinking about key metrics, generated new heuristics used in budgeting decisions</p> <p>T: Organizational shifts in product and customer strategy were made based on new insight; model is appropriate for use in many industries including consumer durables and consumer packaged goods</p> <p>M: Allocation method for multiproduct budget setting process, thus solving the dynamic portfolio-profit maximization problem</p>
Danaher et al. (2011)	“Jetstar: Driving the Brand” (Jetstar)	Service design and advertising (airlines)	Choice models	<p>F: 57% increase in profit, 4.1% increase in market share</p> <p>C: Focused management on high return areas, helped develop a new service-minded orientation and develop new key metrics for employees</p> <p>T: Provided growth vehicle for QANTAS; put pressure on competitors within the industry; model has already been successfully applied in telecommunications, banking, and retirement fund industries and can be applied in many other contexts where repositioning is important</p> <p>M: Model accounts for unobserved heterogeneity of perceptions and relative importance of service attributes</p>

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Table 1 (Cont'd.)

Authors and year of publication	Finalist paper title ^a (Organization)	Managerial application (product category/industry)	Approach	Impact
Kumar and Shah (2011)	“Uncovering Implicit Customer Needs for Determining Explicit Product Positioning: Growing Prudential Annuities’ Variable Annuity Sales” (Prudential)	Positioning and sales (financial services)	Regression (structural equation modeling)	<p>F: More than \$453 million in sales lift, increased sales growth over competition by 8%</p> <p>C: Higher level of customer orientation and improved ability to understand, preempt, and address customer needs, even implicit needs</p> <p>T: Can be used for any financial service investment products company, especially if products can be positioned along implicit customer needs</p> <p>M: A new tool (Emotion Quotient Tool) that addresses managers to identify and quantify emotional states and react accordingly</p>
Wiesel et al. (2011)	“Marketing’s Profit Impact: Quantifying Online and Offline Funnel Progression” (Inofec)	Direct marketing (B2B capital equipment)	Time-series analysis and field experiments	<p>F: 14.18 times higher net profit increase</p> <p>C: Introduced more rigor to marketing fund allocation process, altered mental models of decision makers, increased the importance of marketing analytics in the organization</p> <p>T: Improved understanding of the role of marketing activities has led to strategic changes</p> <p>M: Model considers importance of multiple stages of purchase process, includes dynamic effects and ROI of online and off-line efforts in a business-to-business (B2B) context</p>
Kannan et al. (2009)	“Pricing Digital Content Product Lines: A Model and Application for the National Academies Press” (NAP)	Pricing (publishing)	Discrete choice models	<p>F: Increased revenue (14.4%), increased net sales (6.7%), higher prices on print sales</p> <p>C: Policy changes (free PDFs to developing countries, free PDFs of slow-moving titles)</p> <p>T: Models were applied to time-series data of overall book sales and other metrics</p> <p>M: Shows and accounts for the heterogeneity in perceptions of substitutability or complementarity of content forms among customers and how online retail contexts can be used to execute innovative experiments</p>
Du et al. (2009)	“PIN Optimal Auction Vehicle Distribution System: Applying Price Forecasting, Elasticity Estimation, and Genetic Algorithm to Used Vehicle Distribution” (JD Power ODAV)	Distribution (used durables)	Mathematical programming	<p>F: Increased profits (\$220 per car), improved operating cost</p> <p>C: Operational efficiency (managers freed from daily operational tasks), increased transparency, improved strategic decision-making capabilities</p> <p>T: Provides a blueprint for similar business challenges requiring supply and demand optimization</p> <p>M: Combines linear regression, autoregressive integrated moving average, and genetic algorithm in one model</p>
Kumar et al. (2009)	“Marketing Mix Recommendations to Maximize Value Growth at P&G Asia-Pacific” (P&G Asia-Pacific)	Distribution and pricing (packaged goods)	Regression analysis	<p>F: Increased profits (\$39.3 million, obtained via increased volume, distribution, and price)</p> <p>C: Shift from competing for market share to managing value growth</p> <p>T: Enables managers to instantly develop pricing, distribution, or sizing strategies with a knowledge of actual close-competing brands and stock-keeping units</p> <p>M: The first time a three-step weighted random coefficient regression is used on a system of equations</p>

Table 1 (Cont'd.)

Authors and year of publication	Finalist paper title ^a (Organization)	Managerial application (product category/industry)	Approach	Impact
Kumar et al. (2008)	“The Power of CLV” (IBM-CLV)	Customer account management (B2B IT)	Discrete choice models	<p>F: Increased revenue (\$19.2 million from a particular customer sample group), increased ROI (new ROI 160%)</p> <p>C: Alignment of marketing and sales activities, coordinated messaging strategy; shifted from consumer spending score to consumer lifetime value (CLV)</p> <p>T: Can be used in segmenting, profiling, and understanding customer migration</p> <p>M: The first integrated framework for CLV management that is also suitable for field implementation</p>
Silva-Risso and Ionova (2008)	“Incentive Planning System: A DSS for Planning Pricing and Promotions in the Automobile Industry” (J.D. Power DSSIP)	Promotion (B2C durables)	Discrete choice models	<p>F: Increased efficiency (lower discounts without loss in volume) \$4.6 million per month</p> <p>C: Less dependent on incentives and promotional programs, offers insights on consumer heterogeneity in preferences for different types of promotion applicable to many situations</p> <p>T: Characterizes price and promotion responsiveness in durables markets</p> <p>M: Model captures demand shocks, reducing endogeneity bias</p>
Shankar et al. (2008)	“BRAN * EQT: A Model and Simulator for Estimating, Tracking, and Managing Multicategory Brand Equity” (Allstate)	Advertising spending (financial services)	Discrete choice models, regression analysis	<p>F: ROI of 2,500%, short-term savings of \$10 million, increased brand awareness (18%), improved brand equity (5%), increased brand contribution to market capitalization (11%)</p> <p>C: More scientific view of and approach to branding and advertising, increased cross-functional interest in branding, greater managerial accountability; top management view of branding as an investment</p> <p>T: Can be applied to a good or service in either B2B or business-to-business (B2C) contexts, applicable across functions and across different brands</p> <p>M: The first model that estimates and tracks brand equity for multicategory brands. The model incorporates several new means of measuring brand equity</p>
Natter et al. (2008)	“Planning New Tariffs at tele.ring—An Integrated STP Tool Designed for Managerial Applicability” (tele.ring)	Positioning and segmentation (telecommunications)	Multidimensional scaling	<p>F: Increased share of new customers (23%), \$28 million additional profit (estimated)</p> <p>C: Easier internal dissemination of information</p> <p>T: Improved ability to position products competitively and target consumers accurately, can be used in a wide variety of contexts</p> <p>M: Segmentation–targeting–positioning is integrated into a single procedure rather than a linear sequence; insights into managerial usability are applied to perceptual mapping</p>
Ailawadi et al. (2007)	“Quantifying and Improving Promotion Profitability at CVS” (CVS)	Promotions (retailing)	Regression analysis	<p>F: Increased net profit of \$44.8 million (eliminated unprofitable category promotions), improved inventory management</p> <p>C: Promotions discontinued in 15 categories, increased scrutiny of requirements accompanying vendor funding, improved manager preparedness to negotiate with vendors</p> <p>T: Store-level model was applicable in all categories and drew important conclusions for all functions; the model is applicable for any retailer with multiple categories</p> <p>M: The model is among the first to examine promotion lift effects at a multicategory retailer level and accounts for stockpiling effects while considering gross lift and net impact of individual promotions</p>

Table 1 (Cont'd.)

Authors and year of publication	Finalist paper title ^a (Organization)	Managerial application (product category/industry)	Approach	Impact
Natter et al. (2007)	“An Assortmentwide Decision-Support System for Dynamic Pricing and Promotion Planning” (bauMax)	Pricing and promotion (packaged goods)	Regression analysis	<p>F: Increased gross profit and sales (varies by time period, but average profit over last three periods increased 8.1% and sales increased 2.1%)</p> <p>C: Management now sees price in a much richer context and has adopted a more rigorous, formal, and disciplined pricing process</p> <p>T: Model can be used to plan price and promotions for virtually any frequently purchased consumer good (given certain data requirements)</p> <p>M: Reference price models are expanded upon and elaborated in several ways, including the use of a management-driven explicit weighting scheme</p>
Kitts et al. (2005) ^b	“The Right Product for the Right Person: Product Recommendation from Infrequent Events” (Clickthrough)	Account management (various)	Stochastic models	<p>F: Increased profit by 40%, revenue by 38% units sold by 61%; response rate increase of more than 100%</p> <p>C: New system replaced static product offering with dynamic offerings</p> <p>T: Applicable to a wide range of direct marketing applications</p> <p>M: Leading-edge probabilistic recommendation agent</p>
Tirenni et al. (2007)	“Customer Equity and Lifetime Management (CELM)” (Finnair/IBM)	Customer account management (airlines)	Mathematical programming	<p>F: Reduced marketing costs (>20%), improved response rates (10%)</p> <p>C: More strategically planned marketing campaigns and allocation of marketing resources</p> <p>T: Applicable in any industry where companies can identify customer and engage in direct marketing efforts</p> <p>M: Using cross validation for model selection, we are able to build a robust Markov decision process taking into account the uncertainty of the parameters of the model and its impact on predictive performance</p>
Zoltners and Sinha (2005)	“Sales Territory Design: 30 Years of Modeling and Implementation” (ZS Associates)	Salesforce management (various)	Mathematical programming	<p>F: More than 1,500 projects for more than 500 companies in 39 countries; revenue increases of 2%–7%, leading to over \$5 billion in incremental sales; saved selling time equivalent to over 12,500 salespeople; 100% implementation</p> <p>C: Increased sales force coordination and efficiency</p> <p>T: Can be used in almost any salesforce alignment situation; allows for better execution of marketing strategy</p> <p>M: Combination of established models (SmartAlign™, SmartSize™, MAPS®) and a framework for their implementation</p>
Sinha et al. (2005)	“Attribute Drivers: A Factor Analytic Choice Map Approach for Modeling Choices Among SKUs” (Campbell Soup Company)	Category and portfolio management (packaged goods)	Discrete choice models	<p>F: Increase in sales (2%), ROI of 3,300% (estimated)</p> <p>C: Improved ability to get shelf space (demonstrated value to vendors)</p> <p>T: Has been used in multiple categories, can be used to examine and adjust product attributes for multiple product types</p> <p>M: Greater generalizability and managerial usefulness</p>
Divakar et al. (2005)	“CHAN4CAST: A Multi-Channel Multi-Region Forecasting Model and Decision Support System for Consumer Package Goods” (PepsiCo)	Price and promotion forecasting (packaged goods)	Regression analysis	<p>F: \$11 million (estimated) savings from productivity enhancement and redeployment of personnel</p> <p>C: Altered the “top-down” approach to sales forecasting, bringing more rigor and reality to forecasting and planning; heightened accountability for the sales organization</p>

Table 1 (Cont'd.)

Authors and year of publication	Finalist paper title ^a (Organization)	Managerial application (product category/industry)	Approach	Impact
Tellis et al. (2005)	“Modeling the Effects of Direct Television Advertising” (Futuredontics)	Advertising evaluation (professional services)	Regression analysis	<p>T: Generalizable to any consumer packaged good, the model has impacted shared best practices within the company</p> <p>M: Model captures the effects of nontraditional variables, adjusts for known forecast irregularities, and adjusts for the relationship between weekly sales and wholesale shipments</p> <p>F: 30%–35% media savings from staffing shifts, \$1 million savings from going off air, 25% savings in creative budget</p> <p>C: Creative aspects were easier to design to fit specific targets</p> <p>T: Model was successfully applied in other business units as well as other companies</p> <p>M: Joins consumer behavior and econometric modeling to simultaneously address issues in advertising such as medium, timing, repetition, age of the market, ad age, and ad creative cues</p>
Foster et al. (2004)	“Will It Ever Fly? Modeling the Takeoff of Really New Consumer Goods” (Whirlpool)	New product management (consumer durables)	Diffusion models	<p>F: Saved major marketing investment by planning for a longer takeoff, possibly saved a new product from being abandoned prematurely</p> <p>C: Allowed managers to understand the time horizon for product takeoff and plan accordingly</p> <p>T: Can be used for any new product to predict time-to-takeoff</p> <p>M: First to model new product takeoff, an elbow-shaped irregularity early in the sales curve (product life cycle)</p>
Roberts et al. (2004)	“Defending Marketing Share Against a New Entrant” (Telstra)	Market share retention/defensive strategy (telecommunications)	Discrete choice models, diffusion models	<p>F: Provided market share implications of price changes, more than \$100 million saved in operations, \$16 million in resource allocation savings</p> <p>C: Bills were redesigned, customer-based site visits were initiated, and service improvements were made</p> <p>T: The results affected allocation, decision for multiple functions within the company; the model can be used for a variety of circumstances and product or company types</p> <p>M: The model accounted for environmental phenomena as well as the more common managerial decision variables</p>
Elsner et al. (2004)	“Optimizing Rhenania’s Direct Marketing Business Through Dynamic Multi-Level Modeling (DMLM) in a Multi-Catalog-Brand Environment” (Rhenania)	Direct marketing (direct retailing)	Mathematical programming	<p>F: Project saved the company, it went from number 5 to number 2 in the industry</p> <p>C: More effective microsegmentation, more targeted offerings</p> <p>T: Effective across different brands, helped with resource allocation across the organization, and is potentially useful in any catalog-like marketing situation</p> <p>M: Dynamic multilevel models introduced to multicatalog-brand environment and examines optimal levels of various marketing activities</p>

^aThe titles here reflect those of the competition entries, not the published papers.

^bThis entry did not appear in *Marketing Science*.

The use of some models is widespread, whereas the application of other models is not so common. Thus, Roberts (2000, p. 130) asks the following:

What is it about conjoint analysis, customer satisfaction models and discriminant-based segmentation approaches that has led to their managerial adoption while in relative terms diffusion models, game theoretic competitive analysis and multi-equation econometric models have languished in the hands of the manager?

Little (1979) argues that good marketing decision models are not enough but must be embedded in marketing decision support systems (MDSS) that also feature data, analytic tools, and computing power. Wierenga and Van Bruggen (1997, 2000) argue that decision aids for marketing managers must match the thinking and reasoning processes of the decision makers who use them, suggesting that there can be no such thing as a “best” MDSS. In a similar vein, Albers (2012) notes that to be effective, academic models and discussion should shift focus from reducing bias in statistical estimation to calibrating models for optimization by managers.

Most of these issues appear implicitly or explicitly in the Wierenga et al. (1999) framework for determining the success of applying MDSS to marketing decision models. In particular, these authors recognize demand-side issues, supply-side issues, design characteristics of the MDSS, the implementation process, and success measures. This extensive set of factors, along with the many drivers in Rogers’s (2003) adoption criteria, suggests there are a number of potholes in the road to the successful implementation and use of marketing decision models.

From the intermediary’s perspective, marketing science models represent an opportunity to bridge the gap between academics and practitioners. Roberts et al. (2009) use the term “marketing science value chain,” including the key role of marketing science intermediaries in diffusing new technology and methodology throughout marketing. They cite two articles—by Guadagni and Little (1983) and Green and Srinivasan (1990)—as exemplifying high academic and high managerial impact, and they show the key role intermediaries played in generating that managerial impact. These intermediaries, each with different business models and incentives, include infrastructure vendors (e.g., IBM SPSS), boutique vendors of model solutions (e.g., Management Decision Systems (MDS), MarketShare), large generalist firms (e.g., Boston Consulting Group, McKinsey), implementation-oriented firms (e.g., Accenture), accounting firms (e.g., Deloitte), and market research suppliers (e.g., Nielsen). As our analysis of the Practice Prize finalist projects will show, these intermediaries are often central to the effective development and

implementation of marketing science models and methods.

3. Characteristics of the Finalist Projects

Table 1 includes details about projects’ financial and organizational impact as well as the transportability (and methodological novelty) of the finalists. Most of the finalists report substantial levels of economic benefits from the projects, with an average reported profit increase of 64%, revenue increase of 44%, share increase of 24%, and cost savings of 44%. The other benefits vary significantly in size and type. ZS Associates reports completing more than 1,500 projects (with 100% implantation) for more than 500 companies in 39 countries, with revenue increases of 2% to 7%, leading to more than \$5 billion in incremental sales. Rhenania reports a system that saved the company, moved its position in the industry from number five to number two, and significantly increased its active customer base. AS Marketing International (ASMI), in addition to increasing profit by 70% with no decrease in sales, reports a major increase in intangible assets/brand value.

In Table 2, we classify these projects along two dimensions: the level and nature of marketing decisions and the type of methodologies adopted to make those decisions, while noting marketing problem type and industry.

Analysis of the information summarized in Tables 1 and 2 shows that the finalist projects cover applications ranging from positioning/product/brand management (36%) to customer relationship management (16%). The methodologies include regression models (36%), choice models (36%), and optimization (32%). The projects span industries, including consumer packaged goods (20%), consumer durables (12%), retailing (12%), telecommunications (8%), and B2B equipment (8%). The organizational benefits include profit increase (64%), revenue generation (44%), and cost savings (44%), among numerous other benefits. In addition, the projects represent a mix of large (40%) and small (60%) firms. The main gaps in the coverage of the finalist projects include digital marketing applications (problem type), game theoretic analysis (method), and B2B services (industry).

To investigate the genesis, implementation details, and impact of these projects, including reasons for their continued adoption or disadoption by the organization, we administered a survey and interviewed key project members from each team, consistent with Bell et al. (2002). (See Web Appendix 1, available at <http://dx.doi.org/10.1287/mksc.1120.0756>, for the cover letter, questionnaire, and interview protocol.) In each case, one author conducted the interview

Table 2 Project Portfolio: Marketing Issue vs. Analytical Method and Breakout by Characteristics

Analytical method	Marketing issue/decision (Strategic → Tactical) ^a										
	Response to new entry	Positioning	Forecasting	Branding products/ NPD	Category portfolio	Customer relationship mgmt.	Pricing	Advertising	Channels	Sales force/ direct	Promotion
Mapping/multidimensional scaling		Prudential (B2CS) tele.ring (B2CS)									
Regression model		Prudential (B2CS)	PepsiCo (Fmcg)	Allstate (B2CS)		Hokey Pokey (Fmcg)	bauMax (Fmcg) P&G Asia-Pacific (Fmcg) PepsiCo (Fmcg)	Futuredontics (B2BS) PepsiCo (Fmcg)	P&G Asia-Pacific (Fmcg)		bauMax (Fmcg) CVS (retailing) PepsiCo (Fmcg)
Choice model	Telstra (B2CS)			Jetstar (B2CS)	Campbell Soup Company (Fmcg)	IBM-CLV (B2BS) Hokey Pokey (Fmcg)	NAP (B2BD)	Jetstar (B2CS) Allstate		Inofec (durables)	J.D. Power DSSIP (B2CD)
Stochastic process						Clickthrough (various)					
Diffusion model	Telstra (B2CS)			Whirlpool (Durables)							
Optimization/math programming model					ASMI (Fmcg)	Finnair/IBM (B2CS)		Bayer (pharma) SoQuero (durables)	J.D. Power ODAV (B2BD)	Rhenania (retailing) Campbell Soup Company (Fmcg) ZS Associates (various)	

Note. B2CS, business-to-consumer service; B2BD, business-to-business durables; B2BS, business-to-business services; Fmcg, fast-moving consumer goods; NPD, new product development.

(averaging 45–60 minutes, though one interview involved two one-hour sessions).² The interviews were recorded and transcribed and provide the data for much of our qualitative analysis and discussion.

Question 11 of the questionnaire (see Web Appendix 1) comprises items with closed-ended answers to characterize and classify the projects. The items and the summary statistics of the questionnaire responses appear in Figure 1. Interestingly, the average Practice Prize organization was not analytically strong, used few if any marketing-mix optimization models, and had no recognized reward structure for those who introduced marketing science models. In contrast, most projects required a strong internal advocate to succeed.

An exploratory factor analysis on the items, using principal components analysis with varimax rotation, revealed a three-factor solution, according to both

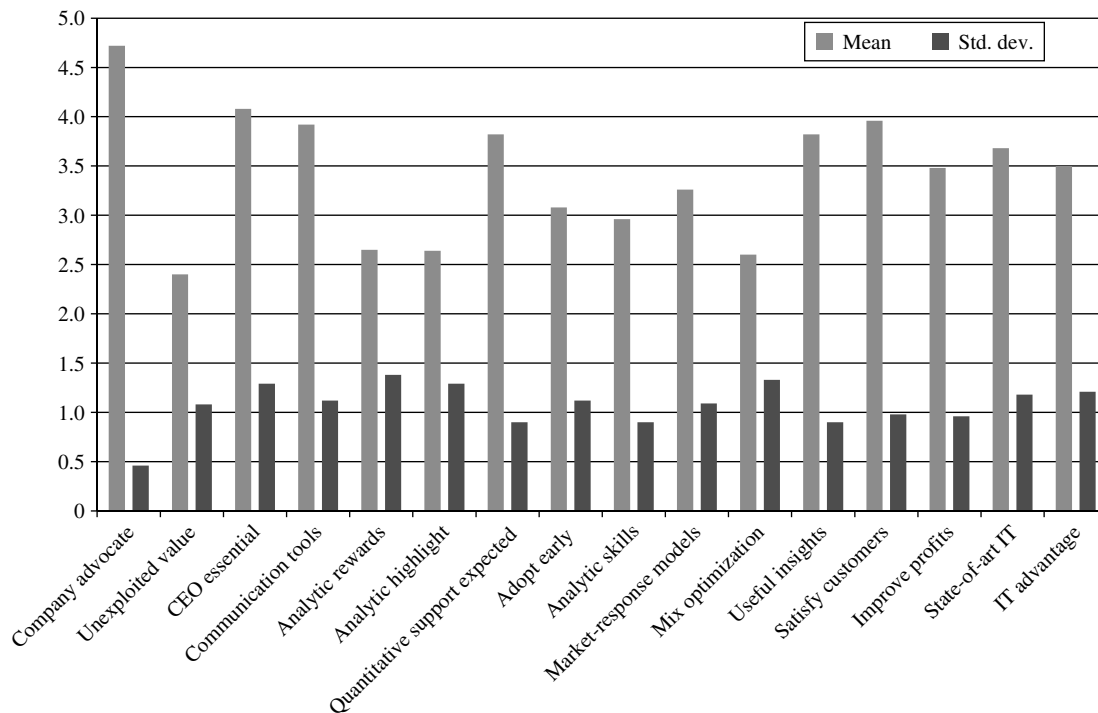
the scree plot and interpretability criteria (each factor explains at least 10% of the variance based on eigenvalues and scree plot, and each factor is interpretable in terms of the items that load highest on it). Three factors emerged from the analysis—namely, the degree of (1) *client analytic resources*, (2) *strategic leverage gained by client from analysis*, and (3) *advocacy of analytics within the client*.³ If we plot finalists' scores on the first and second factors, for example (see Figure 2), we find that some organizations are far more advanced than others in their analytic capabilities, whereas others derive more strategic leverage. (Note that operational leverage can also lead to large financial impact.) Based on these scores, we divide firms into four quadrants. We call firms with high analytic skills and high strategic leverage (e.g., Allstate, P&G) “analytic leveragers,” those with high analytic skills but low strategic leverage (e.g., CVS, NAP) “operationally focused,” those with high strategic leverage but low analytic skills (e.g., Hokey

² Two of the authors have been finalists for the award. Each was interviewed by a different author. All the authors of this article have served as judges in the competition.

³ Factor loadings are provided in Web Appendix 4.

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Figure 1 Summary of Characteristics of ISMS-MSI Practice Prize Finalist Projects



Notes. Based on responses to the following questionnaire statements (scale: 1=strongly disagree, 2=disagree, 3=neither agree/disagree, 4=agree, 5=strongly agree):

1. This project would never have gotten off the ground without a strong advocate within the firm. (Company advocate)
2. While the project was impactful, I feel that there was a lot of value in the study left unexploited. (Unexploited value)
3. Top management support (at the CEO level) was essential to the success of this project. (CEO essential)
4. The key to the realization of the benefits was having a series of communications tools with which to diffuse the insights throughout the organization. (Communication tools)
5. The firm has a recognized reward structure for those who contribute to its analytical capabilities. (Analytic rewards)
6. The firm's annual reports and other publications highlight the use of analytics as a core competitive advantage. (Analytic highlight)
7. The firm's senior management expects quantitative analysis to support important marketing decisions. (Quantitative support expected)
8. The firm adopts new modeling and data analysis approaches soon after they become available. (Adopt early)
9. The firm has mastery of many different quantitative marketing analysis tools and techniques. (Analytic skills)
10. The firm has market response models in place for most of its major products. (Market-response models)
11. The firm has marketing-mix optimization models in place for most of its major products. (Mix optimization)
12. The firm has found that the insights it obtains from marketing analytics are almost always very useful. (Useful insights)
13. The firm generally feels confident that the use of marketing analytics improves its ability to satisfy its customers. (Satisfy customers)
14. The firm feels that if it reduces its marketing analytics activities, its profits will suffer. (Improve profits)
15. The firm has a state-of-the-art IT infrastructure. (State-of-art IT)
16. The firm uses IT to gain a competitive advantage. (IT advantage)

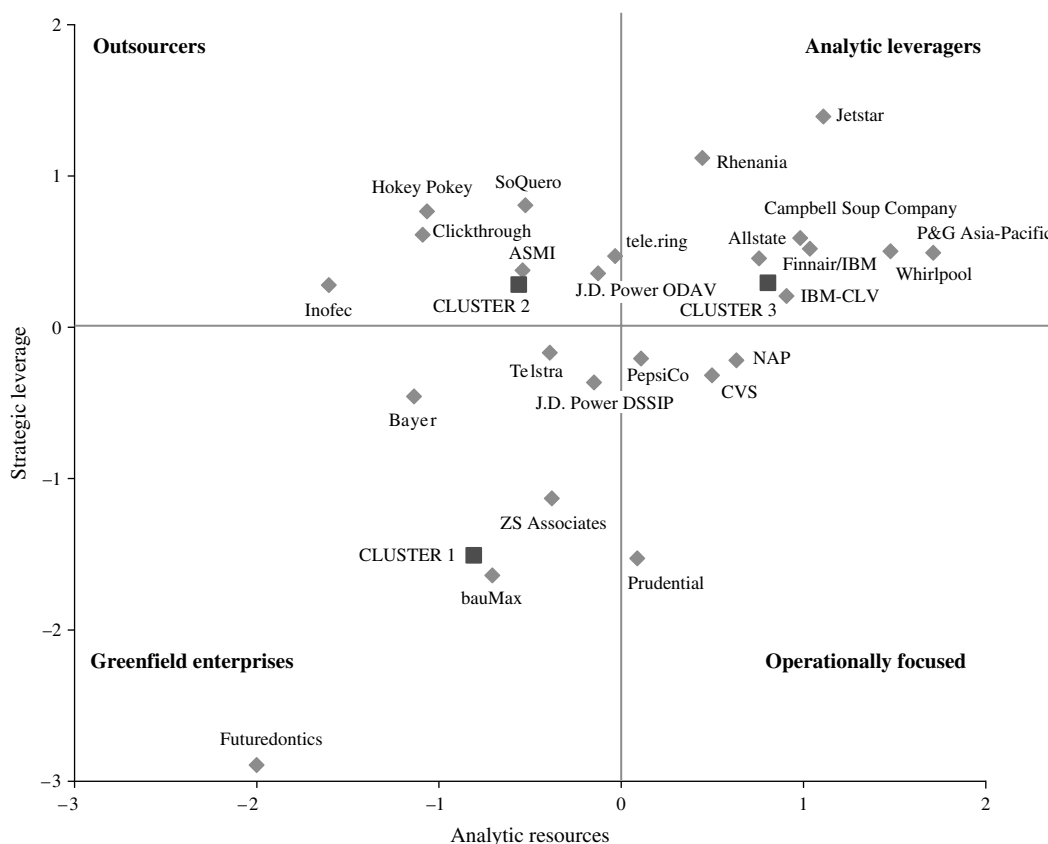
Pokey, SoQuero) “outsourcers” (of marketing science models), and those that score low on both strategic leverage and analytic capabilities (e.g., bauMax, Bayer) “greenfield enterprises” (concerning marketing science).

To investigate internal differences across applications, we cluster-analyzed finalists and found a three-cluster solution using *k*-means cluster analysis (see Table 3).⁴ Cluster 1 scores very low on the *essential role of the CEO* (relative to Clusters 2 and 3), whereas Cluster 3 reveals a low score for *use of mix optimization*

and *market-response models*, relative to Cluster 2 in particular. These results suggest alternative avenues to success. A project may have the active engagement of the CEO (Clusters 2 and 3), but if it lacks this level of engagement, there must be good penetration of modeling elsewhere, perhaps external to the organization. Consulting firms such as ZS Associates and J.D. Power (as well as bauMax and Futuredonics) constitute this cluster (Cluster 1). Nor is it necessary for an organization to have deeply embedded marketing modeling skills, which can be outsourced, as in Cluster 2. But for this strategy to succeed, the CEO must be actively engaged (Bayer, Hokey Pokey, SoQuero, etc.). Finally, in Cluster 3 both drivers are at work; this cluster has a large proportion of firms that

⁴ We chose a three-cluster solution based on maximum the Bayesian information criterion value, the number of members in each cluster, and interpretability.

Figure 2 Positioning of Finalist Projects



are large and well established, with strong strategic thinking and analytical capabilities (P&G, Whirlpool, Prudential, Jetstar, CVS, IBM-CLV, Finnair/IBM, etc.). Firms embody a good balance of rigor and relevance of marketing science models. This cluster also includes a few sophisticated, smaller organizations (e.g., NAP, tele.ring, and Rhenania).

4. A Framework for the Development and Application of Marketing Science Models

We used our review of the relevant literature and the open-ended sections of the interviews in addition to the quantitative analysis above to develop a view of the organizational diffusion of innovations for the development and adoption of marketing science models (see Figure 3). In that framework, each project starts with the identification of a marketing decision problem, either by company executive(s) or by academic(s), or by both, followed by commissioning the project and adoption of a marketing science approach to address it. The project then exerts an impact on the organization, often leading to decisions to continue the implementation in the same area and transport it to other areas. Triggers, drivers, barriers,

and enablers influence progression between the different stages of this process. We use this framework to identify characteristics common to many Practice Prize finalist projects.

4.1. Project Triggers

Projects start when connections develop between marketing decision makers and marketing scientists. Some projects begin because a new set of executives receives the mandate to effect a major change in the organization. In the Allstate project, the newly hired chief marketing officer challenged the organization to estimate and demonstrate the value of its brand. Tasked with this challenge, the lead executive reached out to an academic because such an approach required cutting-edge thinking in that area.

Some projects start because an academic or intermediary develops a new technique and searches for an appropriate problem (e.g., ZS Associates and tele.ring) to which it could add value in the decision-making process. Other projects start as a follow-up to a student project; the NAP project was an extension of an MBA field study led by the academics involved. Many projects emerge from ongoing relationships between client organizations and academics or intermediaries (e.g., CVS, IBM-CLV, J.D. Power DSSIP, Finnair/IBM, Clickthrough, and the Campbell

Table 3 Cluster Means and Profiles by Project Characteristics and Cluster Membership

Characteristic	Cluster		
	1 CEO independent	2 CEO involved and high analytic skills	3 CEO involved and low analytic skills
Company advocate	4.50	4.80	4.73
Unexploited value	2.50	2.90	1.91
CEO essential	2.75	4.20	4.45
Communication tools	3.50	3.80	4.18
Analytic rewards	1.58	1.83	3.78
Analytic highlight	3.00	1.50	3.55
Quantitative support expected	2.63	3.80	4.27
Adopt early	1.75	2.90	3.73
Analytic skills	2.00	2.90	3.36
Market-response models	3.25	2.75	3.73
Mix optimization	2.50	2.20	3.00
Useful insights	3.00	4.10	3.86
Satisfy customers	2.50	4.30	4.18
Improve profits	2.00	3.70	3.82
State-of-art IT	2.75	3.20	4.45
IT advantage	2.00	3.15	4.36

Notes. The figures in the cell are cluster means of project characteristics measured on a scale from 1 to 5 with a higher number indicating a more favorable score on the project characteristic.

The numbers in bold represent scores of 4.00 and higher.

Cluster 1: ZS Associates, J.D. Power-DSSIP, bauMax, Futuredontics.

Cluster 2: PepsiCo, Allstate, J.D. Power ODAV, Bayer, Inofec, Clickthrough, Telstra, SoQuero, ASMI, Hokey Pokey.

Cluster 3: tele.ring, Rhenania, Campbell Soup Company, Finnair/IBM, CVS, IBM-CLV, Whirlpool, NAP, Jetstar, P&G Asia-Pacific, Prudential.

Soup Company). Yet others evolve from a personal encounter between academics and firm executives (e.g., Inofec, PepsiCo, NAP, and Bayer).

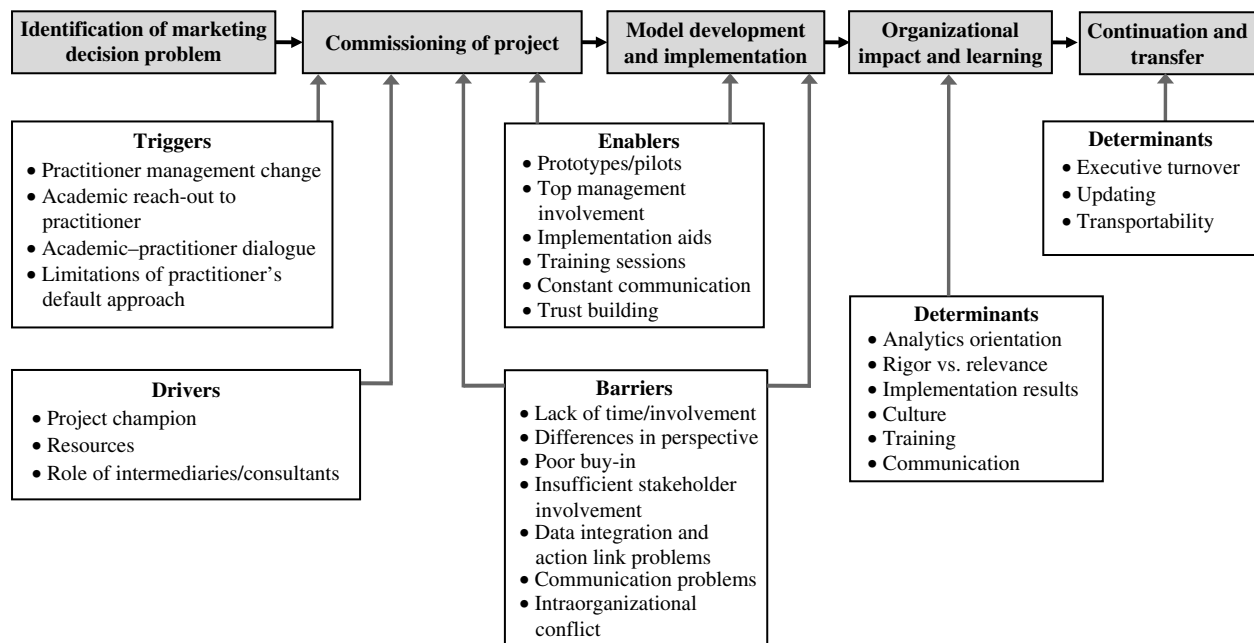
In a number of cases, academic-practitioner connections are mediated by intermediaries. Some emerge through direct intermediary contacts (e.g., bauMax), whereas others evolve in response to a commercial request for proposal (e.g., Whirlpool, Jetstar, and Telstra).

Many projects start when the default approach becomes unacceptable and firms differ in their predictions about what they would have done without the benefit of a marketing science approach. Some (e.g., Allstate, J.D. Power DSSIP, IBM-CLV, and Finnair/IBM) would have carried on with business as before, whereas others (e.g., Bayer, Telstra, and PepsiCo) indicate that they would have used an off-the-shelf method to address the problem. Still others had no alternative: there were no options. Rhenania needed a new approach to save the company, and Whirlpool would have stopped marketing its product without the project.

4.2. Project Drivers

When a practitioner-marketing scientist link has been established, the project still cannot start without some powerful drivers such as models, statistics, data, and optimization (Little 1979) as well as key stakeholder engagement. Sometimes, consultants themselves are important drivers (e.g., as in ZS Associates, J.D. Power DSSIP, J.D. Power ODAV, Finnair/IBM, Clickthrough, Campbell Soup Company). However, projects by Allstate, Bayer, Whirlpool, NAP, P&G Asia-Pacific, IBM-CLV, Prudential, Inofec, Rhenania, and tele.ring used no outside consultants, and for the projects involving CVS, Telstra, Jetstar, and bauMax,

Figure 3 Framework for the Development and Application of Academic-Practitioner Marketing Science Models



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academics partnered with the consultants. Additionally, in almost all cases, there was at least one clear internal project champion.

4.3. Project Barriers

For firms like Allstate, J.D. Power ODAV, and Bayer, the lack of executives' time and the need for on-site involvement presented significant barriers. Many projects required changes to the culture or mental models of relevant executives (e.g., Allstate, J.D. Power ODAV, Whirlpool, NAP, IBM-CLV, P&G Asia-Pacific, Clickthrough, tele.ring, and Inofec). Academics and practitioners differ considerably in terms of the time horizon of their work. Many academics treat firm projects as they would a traditional research project, focusing on rigor and due diligence, with less regard for timeliness. In contrast, practitioners expect concentrated focus and quick results. The time horizon thus became a significant issue in the Bayer, PepsiCo, and Telstra projects. Furthermore, different perspectives and social norms characterize the academic and practitioner communities; in some academic circles, working on practical, applied research projects has negative connotations, whereas in the practitioner community, executives working on projects involving leading-edge methodology may be viewed as impractical.

Some projects cannot gain traction without the involvement of multiple stakeholders or buy-in from key executives in other functional areas (e.g., finance, operations, and IT, in particular). At Allstate, a strategic project required the approval and involvement of the finance and accounting departments. In the J.D. Power DSSIP project, automobile dealer involvement was necessary for project success. At ZS Associates, field sales representatives constituted a major, critical stakeholder community; and at the Campbell Soup Company, retailers were key to successful outcomes.

Data collection, integration, and management can also pose hurdles. At Inofec and bauMax, these issues presented formidable challenges, and at the Campbell Soup Company the time and cost of ensuring data availability were critical. Connecting insights from the data to marketing actions can also be difficult. The lack of links in some cases resulted from significant communication problems (e.g., such as those for J.D. Power ODAV, ZS Associates, Finnair/IBM, and IBM-CLV), both within the organization and between organization and client. At J.D. Power DSSIP, Telstra, CVS, Clickthrough, and IBM-CLV, barriers between the marketing and sales organizations presented major hurdles.

4.4. Project Enablers

Project buy-in by key stakeholders requires a strategy, such as a pilot or proof-of-concept exercise (as was

done for Rhenania and Inofec) or some credible, well-planned set of actions. The Inofec team reported that "we took them on a journey," whereas Finnair/IBM "did lots of training sessions and made results accessible." Top management involvement (observed for Jetstar, Prudential, Inofec, Rhenania, Telstra, Allstate, and Bayer) and early demonstration of value or a high return on investment (observed for Inofec, J.D. Power DSSIP, IBM-CLV, Pepsi, Rhenania, and Bayer) were critical enablers. For example, according to J.D. Power DSSIP: "The executive who championed the effort mentioned that with just this one test they [Chrysler] made more than they paid for the project." Other key tactics included practical solutions and applied wisdom (e.g., observed for ZS Associates), implementation aids such as visualization tools (e.g., tele.ring), Web-based dashboards (e.g., J.D. Power DSSIP and Jetstar), training sessions (e.g., Telstra), and .Net and Excel applications (e.g., PepsiCo).

Cultural immersion also provided a strong facilitator at Finnair/IBM, resulting in trust. According to the leader of the Campbell Soup Company project, "The firm does not need to look under the bonnet. They just need to trust the people that do."

4.5. Short- and Long-Term Impact of the Project on the Organization

All the projects had significant short-term impacts on their respective organizations, but some projects went further and continue to be used (e.g., Allstate, Rhenania, J.D. Power DSSIP, Bayer, ZS Associates, NAP, Jetstar). However, a few firms terminated their projects, for reasons such as an industry slump or executive turnover.

Although all the projects had substantial positive impacts, those impacts differed considerably. The Jetstar project enabled the firm to earn profits even amid industry-wide losses, and the Campbell Soup Company project helped the firm grow sales faster than its category. P&G Asia-Pacific already enjoyed value growth, but its project offered a new approach to managing that growth. At Inofec, the project helped transform the company from ad hoc decision making to highly analytical approaches; at NAP, the project resulted in an analytical pricing structure in a nonprofit organization in place of simplistic, ad hoc methods. For J.D. Power ODAV, the project-based distribution system enabled the firm to reroute more than two million vehicles at greater profit. At Allstate, top management and the finance department began viewing brands as assets and marketing spending as investments. And the Telstra project provided a framework for management to successfully combat an unknown new entrant prior to its launch.

Many models had immediate financial impact, such as the promotion models for J.D. Power, bauMax,

Clickthrough, and CVS. At J.D. Power DSSIP, the project contributed to new learning about a menu approach to automobile promotional strategies. The promotion decision support system at bauMax significantly improved both sales and profits, and the Clickthrough project achieved a transformative online promotions strategy. The CVS promotional tool application identified the categories that should *not* be promoted for greater overall profitability.

With regard to medium- or long-term impact, the sales territory design model developed by ZS Associates involved cumulative learning from model insights and expert judgments from hundreds of clients over three decades. The Allstate project helped establish a strong marketing–finance collaborative approach to address strategic issues within the organization. As a result of its implementation of a forecasting model, PepsiCo developed a system that combined analytical modeling with practical relevance for rapid, fact-based decision making. The application of multilevel direct marketing modeling at Rhenania was so successful that it allowed the firm to buy several competitors. The CEO of tele.ring “flew to the U.S. with the [perceptual-preference] map in his pocket that enabled him to command a considerably higher valuation for the company.”

Some benefits were unexpected. The tele.ring project introduced a visually oriented, analytic culture to the firm for its tariff development or pricing decisions. At IBM-CLV, a stronger customer-oriented culture took hold in a firm that had been deeply rooted in technology. And the customer lifetime value-based optimization model at Finnair/IBM created a new mind-set for managing loyalty programs for the long term, rather than simply managing promotional campaigns with the loyalty database.

4.6. Organizational Learning from the Project

Some firms considered directional insights just as important as quantitative guidance. Rhenania asserted that “management needed to optimize long-term profitability, not customer satisfaction,” noting it went from a culture of “less is more” (focusing only on customers profitable in the short run) to “more is more” (including many customers unprofitable in the short run but profitable in the long run because it grew the customer base).

Some of the applications demonstrate the trade-off between rigor and relevance. To quote a Finnair/IBM informant, “It is important to move away from the mathematics barrier to innovation. . . . It should not be a show of technical prowess; it should be much more a show of what makes [an application] seem useful.” At J.D. Power ODAV, an informant stated, “We were academics; we were not talking their talk. I remember one client who told me, ‘I hear all the

music but I don’t hear the song.’” And a ZS Associates executive explained, “Most academic work is not valuable to companies. . . . In some cases you optimize, but most often you satisfice. We found that if you come out of a computer with an alignment for a sales force of 100 people, 85 of them are going to want to kill you.”⁵

The extent of organizational learning depends on many factors: analytics orientation, rigor–relevance trade-off, implementation results, culture, training, and communication. If the organization is inclined to use results from quantitative analyses of marketing data, then it is more likely to implement marketing science models faster and wider across the organization (Germann et al. 2012). Companies focusing on the suitability of the marketing model to their context tend to adopt faster and realize immediate gains. Moreover, initial positive results drive the pace and scope of further adoption. Furthermore, firms steeped in a data-driven tradition with strong internal dissemination of analytical insights are better positioned to improve their decision-making capabilities.

4.7. Determinants of Project Continuation and Transfer

When a project has been implemented successfully, there are substantial challenges to sustain momentum. At bauMax, after the key executives left, project adoption slowed and eventually stopped. At PepsiCo, the driving executives were recruited away by other organizations. Although their successors wanted the academic authors to continue the project, those executives also expected the authors to participate in running the business, slowing the penetration of the work within the firm. In the Campbell Soup Company project, the model needed continuous updating, requiring a transition from the development team. These types of stories recurred in many organizations, suggesting that, even after initial project success, without a plan for ongoing management and transportability (like at ZS Associates, which reports nearly 100% client retention), success will likely be short term. Additionally, not all problems are recurrent.

5. Conclusions and Recommendations

Effective marketing science applications as represented by the finalists in the ISMS-MSI Practice Prize competition span a wide range of managerial problems and use an extensive set of marketing science techniques. We view that finding as very good news for the marketing science profession. There is no one successful approach, though, as our application framework in Figure 3 indicates, there are many

⁵ We provide a rich collection of additional comments and quotes from the interviews in Web Appendix 2.

pathways by which a project can add value to its client organization. The marketing scientists whom we interviewed reported great personal and professional satisfaction with the work while also acknowledging the challenges involved.

These 25 projects (and the other entrants that did not become finalists) are showpieces of the marketing science profession, demonstrating the practical value of some of our most important developments. They represent fruitful (and remarkably effective) partnerships between marketing scientists and practicing managers. But the upside potential for such partnerships and applications remains largely unfulfilled. For example, seven academics were involved with at least two finalists and one academic (V. Kumar) had a hand in four, including the 2011–2012 winner. When compared with the more than 1,100 marketing scientists who attended the 2012 ISMS conference, it would seem that the group of academics represented in the competition should be more diverse. We sketch some lessons from this review and the literature that precedes it so that such collaborations occur more regularly and provide more value for the academics, practitioners, and intermediaries involved.

5.1. Implications/Lessons for Academics

Marketing is an applied profession. If its practice is important, then the lessons from projects such as those described in this paper suggest that some weight should be given to “impact on practice” in the tenure and promotion process, alongside the traditional dimensions of research, teaching, and service. Such an incentive would encourage academics to work with the intermediaries who implement the latest marketing models. The Practice Prize competition and publication of finalists’ papers in *Marketing Science* represent a step in that direction.

A key limitation for many marketing academics is data. One way to obtain data is to consult with firms for the use of data in publications. Although the firm enjoys cost-effective consulting, the “payoff” for academic is strongly differentiated, top-quality, high-impact publications. Academics should be prepared to overcome additional challenges relating to navigating confidential data through suitable nondisclosure agreements, turnover of personnel, and issues of data quality.

We should also consider a version of the medical school model, in which both faculty and students (i.e., MBA and Ph.D. students in marketing) engage in ongoing work that involves real problems in real organizations. Schools of education do something similar by opening their own primary schools. Although there are ethical issues involved in letting students treat medical patients, we can develop our

methods and skills by serving corporate “patients” even as we continue writing articles.⁶

We offer six recommendations for academics (for further discussion, see Roberts 2010): (1) place some weight on “impact” in our promotion and tenure process, at least for promotion to full professor; (2) encourage leaves and sabbaticals for practice work, especially with intermediaries; (3) add internships to doctoral programs; (4) encourage letters from nonacademic referees in promotion and tenure dossiers; (5) consult in return for data and problem access (rather than just for money); and (6) consider some form of the medical or education school model that integrates practice into both research and education.

To elaborate on the second recommendation, the need for academics to remove themselves from the confines of the university and immerse themselves in the problems of practitioners has never been greater. Marketing managers today are confronted by new challenges, including harnessing big data, leveraging social and digital media, and maximizing brand and customer assets. These challenges call for original solutions from informed, leading-edge academics.

5.2. Implications/Lessons for Practitioners

Practitioners are the ultimate consumers of marketing models: if they do not comprehend the potential benefit of academic developments (directly or through intermediaries), then why should practitioners bother? If an academic–intermediary partnership succeeds, it creates higher visibility of the potential and benefits of marketing models, a prerequisite for adoption and use.

Nor will practitioners generally use models whose approaches they do not understand (if not the detail they contain). Managers have an ongoing need for education, which should encompass both “just-in-case” education (e.g., as in MBA and executive MBA programs, which give managers concepts and tools) and “just-in-time” education, such that knowledge of available and appropriate models is communicated to the manager as business problems arise.

As recommendations for practitioners, we thus propose the following: (1) engage academics in just-in-time education to learn marketing concepts and models in the context of their own problems; (2) document and communicate both short- and long-term (and soft and hard) benefits of such interactions; (3) take marketing analytics courses which link methodology, insight, and decision making; (4) document model and MDSS failures, as well as successes,

⁶For an example of how such an arrangement can work, see <http://www.informs.org/Connect-with-People/Speakers-Program/Search-for-a-Speaker/Search-by-Location/West-U.S./Woolsey-Gene-Colorado-School-of-Mines>.

to enable future success that addresses those failures; and (5) experiment with marketing models. Some may fail. But as Hogarth (1987, p. 199) notes, “When driving at night with your headlights on, you do not necessarily see too well. However, turning your headlights off will not improve the situation.”

5.3. Implications/Lessons for Intermediaries

Intermediaries can provide fertile ground for the diffusion of marketing science tools because they are in business to make money, and methodology provides one of the major bases with which they can differentiate themselves. But if academics partner with them, copresent with them at conferences, and coauthor papers with them, intermediaries can generate the reputational capital that makes clients listen more closely to them when they describe the benefits of leading-edge models and methods. We recognize at least two barriers: (1) intermediaries find little incentive to write for academic journals, and (2) they often fear the loss of intellectual property through such disclosures.

Academics can answer the first barrier through coauthorships facilitated by internships and industry sabbaticals. Intermediaries that share their methodology rarely lose business to rivals; rather, they tend to increase the size of the overall market. When Silk and Urban (1978) published their work on Assessor, they helped legitimize the market for pretest market models; the intermediary MDS reaped the benefits.

Of the vast amount of data that intermediaries collect, some are of little commercial value after they go out of date, yet they often retain significant academic value. Proactively publicizing the availability of such data for academic purposes might motivate high-quality research. The availability of the PIMS (Profit Impact of Market Strategy) database to academics, offered by the Strategic Planning Institute (see http://www.pimsonline.com/about_pims_db.htm) spawned considerable research (e.g., Boulding and Staelin 1990), and IRI has done something similar with its data set initiative through ISMS (<http://www.informs.org/Pubs/mktsci/Online-Databases>).

Thus, for intermediaries we recommend the following: (1) recognize the possibility of breakthrough work that could lead to new lines of business, achieved by working with academics; (2) leverage the publicity and social currency of copublishing with academics; (3) seek appropriate academic partners at both academic conferences (i.e., many academics, few appropriate partners) and industry conferences (attending academics are likely attractive partners); (4) offer internships to faculty and Ph.D. students; and (5) seek creative business relationships with business schools (e.g., research/consulting blends).

George Box (1979, p. 202) pointed out, “All models are wrong, but some are useful.” The quest for useful marketing models, while far from easy, can provide significant rewards to both the individuals and the organizations involved. But both need the courage and determination to begin the journey. The academics, practitioners, and intermediaries represented in the Practice Prize competition have demonstrated that courage and determination and have provided a model that others can follow. We hope these pioneers see even more company in the future.

Electronic Companion

An electronic companion to this paper is available as part of the online version at <http://dx.doi.org/10.1287/mksc.1120.0756>.

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