



DEPARTMENT OF MARKETING

2005-06 Research Highlights (07/2005 to 06/2006)

Dear Colleague,

We are pleased to present the research highlights of faculty members in the Department of Marketing for the academic year 2005-2006.

You will see that our colleagues are engaged in exploring exciting research questions in a rigorous manner and the findings have relevance for marketing and several other fields including engineering and psychology. By means of this and other communications, we hope that we can identify areas of common interest for fruitful dialogue and meaningful collaboration. If you or your colleagues have similar research interests and would like to explore collaborative research, we encourage you to contact us.

We look forward to hearing from you.

With best regards,

K. Sivakumar
Arthur Tauck Chair and Professor of Marketing
Chairperson, Department of Marketing

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Student-Focused · Research-Oriented

PUBLISHED OR ACCEPTED ARTICLES (PLEASE SEE ABSTRACTS ON PAGE 3)**Journal Articles**

- Reetika Gupta** (Co-author: Sertan Kabadayi) (2006), "Website Loyalty: An Integrated Framework and the Empirical Investigation of its Antecedents," *International Journal of Internet Marketing and Advertising*.
- K. Sivakumar** (Co-authors: Donnavieve Smith and Satya Menon) (2005), "Online Peer and Editorial Recommendations, Trust, and Choice in Virtual Markets," *Journal of Interactive Marketing*.
- K. Sivakumar** (Co-authors: Sangphet Hanvanich and G. Tomas M. Hult) (forthcoming), "The Relationship of Learning and Memory with Organizational Performance: The Moderating Role of Turbulence," *Journal of the Academy of Marketing Science*.

Book Chapters

- Franklin Carter** (Co-authors: Carol Motley, Alphonso Ogbuehi, and Jacqueline Williams) (2006), "An Application of a repeat Purchase Diffusion Model to the Pharmaceutical Industry," in *Advances in Business and Management Forecasting*.
- Nevena Koukova** (Co-authors: P. K. Kannan and Brian Ratchford) (2006), "Bundling and Unbundling of Electronic Content," in *E-Commerce and the Digital Economy*.

JOURNAL ARTICLES IN REVISE-AND-RESUBMIT STATUS

Journal of Marketing (**Ravi Chitturi**)

Journal of Marketing Research (**Ravi Chitturi**)

Journal of Retailing (**Nevena Koukova**)

Journal of the Academy of Marketing Science (**K. Sivakumar**)

Management Information Systems Quarterly (**Reetika Gupta**)

CONFERENCE PRESENTATIONS (PLEASE SEE ABSTRACTS ON PAGE 5)

- Franklin Carter** (Co-authors: Chris Mbah, Alphonso Ogbuehi and Charles Blankson) (May 2006), "An Exploration of Challenges of Market Orientation: Strategies Implementation in a Developing Country Context" International Academy of African Business and Development, Ghana Conference.
- Franklin Carter** (Co-author: James Dearden) (June 2006), "An Analysis of Detailing Intensity and Presentation order in the Pharmaceutical Industry" INFORMS Hong Kong International Hong Kong, China.
- Franklin Carter** (Co-author: James Dearden) (June 2006), "An Analysis of Detailing Intensity and Presentation order in the Pharmaceutical Industry" INFORMS Marketing Science Conference, Pittsburgh, PA.
- Ravi Chitturi** (Co-authors: Raj Raghunathan, Vijay Mahajan) (August 2005), "Form vs. Function: Implications of Product Design for Profitability and Market Share," Special Session, American Marketing Associations Summer Educators' Conference.

- Ravi Chitturi** (Co-authors: Raj Raghunathan, Vijay Mahajan) (December 2005), "Product Form vs. Function: Preference Reversals in Choice vs. Willingness-to-Pay," PDMA India Conference on Innovation: Engineering Meets Marketing, IIT-Chennai, India.
- Ravi Chitturi** (Co-authors: Raj Raghunathan, Vijay Mahajan) (February 2006), "Form vs. Function: How the Intensities of Emotion Types Evoked in Functional vs. Hedonic Tradeoffs Mediate Product Preferences," Special Session, Society of Consumer Psychology 2006 Conference, Miami, Florida.
- Reetika Gupta** (Co-author: Sucheta Nadkarni) (June 2006), "Role of Telepresence in Web site Complexity Effects" INFORMS International Conference.
- Nevena Koukova** (Co-author: Rebecca Hamilton) (September 2005), "'Choosing Options for Products: The Effect of Mixed Bundling on Consumers' Inferences and Choices," Association for Consumer Research Conference.
- Nevena Koukova** (Co-authors: P. K. Kannan and Brian Ratchford) (June 2006), "Bundling and Unbundling of Electronic Content" INFORMS Marketing Science Conference and INFORMS International Conference.
- K. Sivakumar** (Co-authors: Zhen Zhu, Cheryl Nakata, and Dhruv Grewal) (February 2006), "Self-Service Technology Effectiveness: The Roles of Comparative Information, Interactivity, and Individual Differences" American Marketing Association Winter Educators' Conference.

RESEARCH LEADERSHIP

- K. Sivakumar**, Chair, *Product Development & Management Association* Annual Research Forum, 2005.
K. Sivakumar, Chair, *Product Development & Management Association* Annual Research Competition, 2006.

EDITORIAL BOARD ACTIVITIES

- Ravi Chitturi**, Guest Editor for *Design & Emotion Society*
K. Sivakumar, Editorial Board Member of five scholarly journals

CITATIONS

During 2005-06, marketing faculty members' research papers have been cited dozens of times in refereed journals in disciplines such as Accounting, Economics, Engineering, Ethics, HRM, Law, Management, Marketing, Operations Management, and some interdisciplinary journals. This demonstrates the cross-disciplinary impact of research by marketing faculty members.

ABSTRACTS OF PUBLISHED/ACCEPTED PAPERS

- Franklin Carter** (Co-authors: Carol Motley, Alphonso Ogbuehi, and Jacqueline Williams) (2006), "An Application of a repeat Purchase Diffusion Model to the Pharmaceutical Industry," *in Advances in Business and Management Forecasting*.

It is crucial for Managers in Detail Intensive Industries to find the optimal mix of detailing (personal selling) and other promotional efforts to forecast sales, meet sales projections, and avoid costly marketplace failures. To that end, we develop and test a repeat purchase diffusion model that allows for the individual and joint impacts of detailing, pricing,

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and other promotional activities (advertising and sampling) on the adoption of a new product. This model recognizes manager-defined segments of users and incorporates managers' judgments on the allocations of resources among these various segments. Users are categorized as potential new users and repeat users based upon sales-call attractiveness ratings provided by the sales organization. Market potential is then a function of sales call activity. Our results provide the marketing manager in a detail-intensive industry more feedback on the impact that variations in marketing activities could have on new product sales than previously available.

Reetika Gupta (co-author: Sertan Kabadayi) (2006), "Website Loyalty: An Integrated Framework and the Empirical Investigation of its Antecedents," *International Journal of Internet Marketing and Advertising*.

Recently, the notion of loyalty has become an important construct within the e-business framework because of customers' easy switching behavior on the web. Despite the increasing importance of website loyalty, substantive research employing this construct has been constrained by various factors. In this paper, a model where individuals' website loyalty is conceptualized by both their willingness to return to a website (revisit), and their desire to spend a longer time at a website (stickiness) is presented. In this model the relationships between website trust, satisfaction, flow, and loyalty is examined. Further, the antecedents of website trust, satisfaction and flow in online environment are investigated. The proposed model is tested by two different studies. The findings support the proposed relationships in the model. Managerial implications are also discussed.

Nevena Koukova (co-authors: P.K. Kannan and Brian Ratchford) (2006), "Bundling and Unbundling of Electronic Content," in *E-Commerce and the Digital Economy*.

New technologies are enabling firms to market traditional products such as books and newspapers in different forms (e.g. print and electronic), and to sell these different forms either as separate products or/and as a bundle. Additionally, the electronic products can be easily unbundled and the unbundled components can be re-bundled with the traditional print products. For example, the publisher of Wall Street Journal currently offers the following subscription options – print WSJ, WSJ Online, and a bundle of the two. Theoretically, the publisher can also sell separate sections or articles of WSJ Online, and the unbundled electronic units can be re-bundled with the print WSJ as well (e.g. subscription to the print WSJ and the financial section in electronic form). The objective of this paper is to provide preliminary insights into the issue of bundling of electronic content with print content, and the unbundling and re-bundling of electronic content. We use choice-based conjoint analysis to obtain estimates of customer valuations of the different product options and thereby obtain useful insights. Our results show that when the same content is offered in two different forms (paper book and electronic book) and as a bundle (paper book and electronic book together), a significant number of consumers choose the bundle option, indicating that even though the content is the same, the forms tend to be viewed as imperfect substitutes or even complements. Print form still has the highest market share and has much lower own price elasticity than the bundle. Second, when the same content is offered in different forms and is also unbundled (electronic chapters), consumers become more price sensitive than in the case when the content is fully bundled. The electronic-chapters option is the one with the highest market share and the lowest own price elasticity, thus cannibalizing the print book option sales. We provide managerial implications of our findings and outline areas for further research.

K. Sivakumar (co-authors: Donnavieve Smith and Satya Menon) (Summer 2005), "Online Peer and Editorial Recommendations, Trust, and Choice in Virtual Markets," *Journal of Interactive Marketing*.

This research examines the influence of recommendations on consumer decision-making during online shopping experiences. Evidence from two empirical studies suggests that many online consumers seek and accept recommendations in order to effectively manage the amount of information available during online search processes. These findings suggest that consumers use the mere availability of peer recommendations as a decision making heuristic, irrespective of the peer recommender's personal characteristics. Findings also suggest that consumer preference for peer vs. editorial recommendations depends on the specific nature of the consumer's shopping goal: utilitarian or hedonic. Lastly, results from this study indicate that consumers prefer peer and editorial recommendations

over other types of effort reducing cues that might be available during online search. As such, retailers must consider a number of factors including recommender characteristics, shopping goals, and product characteristics in their bid to provide consumers with the appropriate type of recommendation for their respective decision-making task.

- K. Sivakumar** (co-authors: Sangphet Hanvanich and G. Tomas M. Hult) (forthcoming), "The Relationship of Learning and Memory with Organizational Performance: The Moderating Role of Turbulence," *Journal of the Academy of Marketing Science*.

Extensive research has documented how firms' learning orientation and memory are related to organizational performance. The objective of this study is to examine the moderating role of turbulence on the relationships between firms' learning orientation and memory and their organizational performance and innovativeness. The study also provides insight into the differential relationships of firms' learning orientation and memory to their performance and innovativeness. The results suggest that the extent to which learning and memory are associated with organizational performance is contingent on the level of environmental turbulence. Specifically, under low environmental turbulence, learning orientation and organizational memory appear to be related to performance and innovativeness; however, under high environmental turbulence, only learning orientation is a useful predictor.

ABSTRACTS OF CONFERENCE PRESENTATIONS

- Franklin Carter** (Co-authors: Chris Mbah, Alphonso Ogbuehi and Charles Blankson) (May 2006), "An Exploration of Challenges of Market Orientation: Strategies Implementation in a Developing Country Context" International Academy of African Business and Development, Ghana Conference.

The purpose of this research was to explore the market orientation profiles and strategies implementations of a single Nigeria-based company, in the context of International Monetary Fund's structural adjustment programs. The design enabled broader understanding of the challenges facing an individual company adopting and implementing market orientation strategies in an unstable economy of a developing country. Based on lack of parsimonious market orientation definition, construct and assessment model in extant literature, this study assessed firm market orientation in this case, by the identification of market orientation instances, aggregation of properties of key market orientation components, and integration of environmental influences using proposed explicative market orientation model.

Data processing and analysis in this qualitative case study was presented through multiple approaches. To facilitate this process, all market orientation properties and patterns identified in the in-depth interviews, and firm documents were presented in the list of market orientation action themes, using thematic aggregation and content analysis. Inter-functional involvements in firm market orientation and strategies implementations were assessed using simple correlation analysis. The findings of this study can help policy makers, international organizations and scholars in assisting individual organizations to more effectively navigate the adoption and implementations of market orientation strategies in an emergent economy undergoing market restructuring.

- Franklin Carter** (Co-Author: James Dearden) (June 2006), "An Analysis of Detailing Intensity and Presentation order in the Pharmaceutical Industry" Informs Hong Kong International, Hong Kong, China.

When pharmaceutical sales representatives detail drugs to doctors the important decisions are how often to call on each doctor and the order in which to detail each drug. One important issue to pharmaceutical companies is the strategic detailing response by competitive drug manufacturers to changes in the company's own detailing. This strategic interaction will affect the product lifecycles of drugs. Recent papers investigate strategic interaction where advertising affects overall category market demand and market shares. The results indicate that if the advertising affects overall category demand, then the firms' advertising intensities are strategic substitutes (i.e., if one firm increases its advertising, then the others respond by decreasing theirs). Alternatively, if advertising affects market shares, then the advertising intensities are strategic complements (i.e., if one firm increases its advertising, then the others do also). The issue of

detailing is fundamentally different from that of advertising in that representatives are constrained by being able to detail three drugs (and the order of detailing matters in the first slot is better than the second, which in turn is better than the third). So, we can examine strategic complements and substitutes not only in detailing intensity but also in the order of detailing presentation. With a rich data set of pharmaceutical detailing order, intensity and doctor's prescription intensity, we can measure the competitive interactions among pharmaceutical representatives. In doing so, we can characterize whether and why detailing exhibits strategic complements or substitutes

Ravi Chitturi (Co-authors: Raj Raghunathan, Vijay Mahajan) (August 2005), "Form vs. Function: Implications of Product Design for Profitability and Market Share," Special Session, American Marketing Association's Summer Educators' Conference.

In this research, the authors explore how the design of a product can lead to greater profitability or market share. Recent research has shown that customers value form and function differently in buying and selling situations. In this research, we study the role of uncertainty on consumer profit margins and market share. The results show that, a) consumers are more likely to choose a functionally superior product under uncertainty, but expect the aesthetically superior one to be priced higher at retail, b) consumers are more likely to choose a functionally superior product, but are willing to pay more for the aesthetically superior product, c) as the level of uncertainty with product functionality reduces, the consumer preference shifts from a functionally superior product to an aesthetically superior product. In other words, the choice and willingness to pay are aligned when uncertainty is low and both product choices meet or exceed functional needs. In conclusion, this research has theoretical and practical implications for product design strategies to maximize financial performance.

Ravi Chitturi (Co-authors: Vijay Mahajan, Raj Raghunathan) (December 2005), "Product Form vs. Function: Preference Reversals in Choice vs. Willingness-to-Pay," PDMA India 2005 Conference on Innovation: Engineering Meets Marketing, IIT-Chennai, India.

Product designs are bundles of utilitarian (function) and hedonic (form) features. In a series of four studies, the authors show and explain how consumers exhibit preference reversals when choosing between aesthetically vs. functionally superior mobile phones. Findings show that (1) when consumers are uncertain about their product needs, they tend to choose functionally superior products, but would pay more for aesthetically superior ones, (2) when uncertainty is reduced, consumer preferences shift from seeking higher functionality to seeking higher hedonics, and (3) in general, consumers who choose an aesthetically superior product are willing to pay more than those who choose a functionally superior one. Implications for profit margin management, design decisions related to form and function, and market segmentation are discussed.

Ravi Chitturi (Co-authors: Raj Raghunathan, Vijay Mahajan) (February 2006), "Form vs. Function: How the Intensities of Emotion Types Evoked in Functional vs. Hedonic Tradeoffs Mediate Product Preferences," Special Session, Society of Consumer Psychology 2006 Conference, Miami, Florida

This paper tackles the following important question: under what conditions will consumers prefer a more functional product to a less functional—but more hedonic—one? We address this question by examining the emotional consequences of making hedonic vs. functional tradeoff, and by drawing the implications of these consequences for consumption behavior. We find that contexts involving hedonic vs. functional evoke a variety both negative and positive emotions, including guilt/anxiety and sadness/disappointment, cheerfulness/excitement and confidence/security. An analysis of the intensities of these emotions reveals the following additional insights: (1) under conditions where the options in a choice-set meet or exceed both functional and hedonic cutoffs, consumers tend to attach greater importance to the hedonic attribute, a finding we term the principle of hedonic dominance, and (2) whereas the functionally superior option is preferred in choice tasks, the hedonically superior one is preferred in willingness-to-pay tasks.

Reetika Gupta (Co-author: Sucheta Nadkarni) (June 2006), "Role of Telepresence in Web site Complexity Effects" INFORMS International Conference.

This research examines how the two facets of telepresence (arrival and departure) experienced at a web site mediate the effects of web site complexity on the evaluations toward the web site. The findings indicate that while structural complexity at a web site leads to a stronger effect on attitudes than intention to revisit, through the arrival facet of telepresence, outcome complexity has a stronger effect on the intention to revisit, through the departure facet of telepresence.

Nevena Koukova (Co-author: Rebecca Hamilton) (September 2005), ""Choosing Options for Products: The Effect of Mixed Bundling on Consumers' Inferences and Choices," Association for Consumer Research Conference.

For several product categories like cars, computers, and new homes, consumers choose not only the product itself, but also various options. These options can be offered individually or in bundles of multiple options. We examine the effects of cues such as whether options are offered both individually and as part of a bundle and the description of the bundle on consumers' inferences and choices. We show that consumers are more likely to choose options offered both in a bundle and individually, and that the bundle description affects consumers' choices by shaping their inferences about the appropriateness of the options.

Nevena Koukova (Co-authors: P. Kannan and Brian Ratchford) (June 2006), "Bundling and Unbundling of Electronic Content" INFORMS Marketing Science Conference and INFORMS International Conference.

Content providers such as publishers of books, newspapers and magazines have started to offer products in electronic form, and even individual electronic sections, in addition to their print products. For example, consumers can now subscribe to the online Wall Street Journal besides the print WSJ, plus they get a discounted subscription to the online WSJ if they are current print subscribers. Hypothetically, WSJ can add subscription to separate sections of the online WSJ (e.g. Money & Investment) to its current product line, as well as bundle this option with its current print offer. This paper investigates the attractiveness of product lines of items such as books and newspapers available in conventional and electronic media. We employ a choice experiment to develop a profit-maximizing configuration of products and prices. Similar approaches to the product line pricing problem have been employed for conventional products, but not when bundling of different forms of a product is an option, and not when the different products may be complements rather than substitutes. Further, the issues that our specific application raises can not be answered satisfactory using the findings of the bundling literature so far because of the unique cost structure, the possibility of various bundles (combinations of forms) and consumer expectations on what a fair price for the digital content would be. Our study provides important insights to marketers on how to profitably market digital content, and has interesting implications in the area of personalization of product offering and customization in the digital goods domain.

K. Sivakumar (Co-authors: Zhen Zhu, Cheryl Nakata, and Dhruv Grewal) (February 2006), "Self-Service Technology Effectiveness: The Roles of Comparative Information, Interactivity, and Individual Differences," American Marketing Association Winter Educators' Conference.

As self-service technologies (SSTs) such as in-store kiosks become an increasingly critical component of services marketing, both researchers and practitioners are recognizing the need to understand the effectiveness of these computer-based tools—particularly how to strengthen the perceived control customers have when using SSTs and influence their evaluations of the experience. Drawing on cognitive resource literature, the authors examine both technology and human elements in SST interfaces. They hypothesize interactive effects of two SST features—comparative information and interactivity—on customers' perceived control and interface evaluation. They then propose moderating roles for two individual traits, prior experience and technology readiness. The hypotheses are tested in two separate computer-based experiments with samples of the general U.S. population in a shopping environment, which

support the proposed hypotheses. These findings enhance the knowledge base in this emerging domain and have important implications for managers and researchers.

RESEARCH INTERESTS OF MARKETING FACULTY

Franklin Carter, *Assistant Professor of Marketing*

Business-to-business Marketing, Salesforce Management, Diffusion of Innovation

Ravi Chitturi, *Assistant Professor of Marketing*

Technology & Innovation, Design & Consumer Emotions, Brand Value & Marketing Strategy

Reetika Gupta, *Assistant Professor of Marketing*

Complexity in Interactive Consumption Environments, Consumer Learning of New Products

Nevena Koukova, *Assistant Professor of Marketing*

Pricing, Bundling, Digital Products, Consumer Decision Making

James Maskulka, *Associate Professor of Marketing*

Marketing Communications, Branding, Media

K. Sivakumar ("Siva"), *Arthur Tauck Chair & Professor of Marketing*

Pricing, Global Marketing, Innovation Management