

## Vish V. Krishnan



Sheryl and Harvey White Chair in Management Leadership  
Professor, Innovation, Technology, and Operations Area  
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### EDUCATION

Doctor of Science (Sc. D.)	Massachusetts Institute of Technology, 1993.
Master of Engineering (M. E.)	Carnegie Mellon University.
Bachelor of Technology (B. Tech)	Indian Institute of Technology, Madras.

### PRINCIPAL FIELDS OF SPECIALIZATION AND INTEREST

New Product Innovation, Operations Management, Technology Commercialization, Information Work Productivity.

### ACADEMIC EXPERIENCE

July 2005-Current	Professor of Management, University of California, San Diego
Dec. 1998-June 2005	Associate Professor of Management, University of Texas at Austin
Aug 1993- 1998	Assistant Professor of Management, University of Texas at Austin
Nov 2001-Current.	Associate Editor, Management Science.
Aug 2003-Current.	Department Editor, Production and Operations Management (POM).

### REFEREED ACADEMIC PUBLICATIONS

Krishnan, V. and W. Zhu, "Designing a Family of Development-Intensive Products" Management Science, Forthcoming.

Sawhney, M., S. Balasubramanian and V. Krishnan, "Creating Growth with Services", Sloan Management Review, Vol. 45, No. 2, (Winter 2004), 34-43.

Krishnan, V. and S. Bhattacharya, "Technology Selection and Commitment: The Role of Uncertainty and Design Flexibility", Management Science, Vol. 48, No. 3, (March 2002), 313-327.

Bhattacharya, S., V. Krishnan, and V. Mahajan, "Capturing the Effect of Technology Improvements on Product Positioning and Introduction Sequence Decision Making", European Journal of Operations Research, Vol. 149, (2003) 102-130.

Krishnan, V. and S. Gupta, "Appropriateness and Impact of Platform-Based Product Development", Management Science, Vol. 47, No. 1, (January 2001), 52-68.

Krishnan, V. and K. Ulrich, "Product Development Decisions: A Review of the Literature", Management Science, Vol. 47, No. 1, (January 2001), 1-21.

Balasubramaniam, S., V. Krishnan, and M. Sawhney, "New Offering Realization in the Networked Digital Environment", in Digital Marketing, edited by V. Mahajan and J. Wind, John Wiley & Sons, December 2000.

Gupta, S. and V. Krishnan, "Integrated Component and Supplier Selection For a Product Family", Production and Operations Management, Vol. 8, No. 2, (1999), 163-181.

Krishnan, V., R. Singh, and D. Tirupati, "A Model-Based Approach For Developing a Family of Technology-Based Products", INFORMS Journal on Manufacturing and Service Operations Management, Vol. 1, No. 2, (1999), 132-156.

Krishnan, V., "Modeling Ordered Decision Making in Product Development", European Journal of Operations Research, Vol. 111, No. 2, (December 1998), 351-368.

Bhattacharya, S., V. Krishnan, and V. Mahajan, "Managing New Product Definition in Highly Dynamic Environments", Management Science, Vol. 44, No. 11, (Nov. 1998 Part 2 of 2), S50-S64.

Gupta, S. and V. Krishnan, "Product Family-Based Assembly Sequence Design Methodology", IIE Transactions, 30, (1998), 933-945.

Krishnan, V., S. D. Eppinger, and D. E. Whitney, "Simplifying Iterations in Cross-Functional Design Decision Making", ASME Journal of Mechanical Design, Vol. 119, (No. 4, December 1997), 485-493.

Krishnan, V., S. D. Eppinger, and D. E. Whitney, "A Model-Based Framework for Overlapping Product Development Activities", Management Science, April 1997, 437-451.

Kalyanaram, G. and V. Krishnan, "Deliberate Product Definition: Customizing the Product Definition Process", Journal of Marketing Research, April 1997, Vol. XXXIV, 276.

Krishnan, V., "Managing the Simultaneous Execution of Coupled Tasks in Concurrent Product Development", IEEE Transactions in Engineering Management, Vol. 43, (No. 2, May 1996), 210-217.

Krishnan, V., S. D. Eppinger, and D. E. Whitney, "Accelerating Product Development by the Exchange of Preliminary Information", ASME Journal of Mechanical Design, Vol. 117, (December 1995), 491-498.

## PAPERS UNDER JOURNAL REVIEW

Bhaskaran, S. and Krishnan, V., "Managing Technology Uncertainty in Multi-Firm New Product Development" Re-submitted to Management Science.

Krishnan, V. and K. Ramachandran, "Credible Commitment in Modular Sequential Innovation with Integrated Product Design and Pricing" in preparation for re-submission to Management Science.

Krishnan, V. and K. Ramachandran, "A Product-Architecture based Approach to Managing Sequential Innovation" in preparation for re-submission to M&SOM.

Bardhan I., V. Krishnan, and S. Lin, "A Model to Measure the Business Value of Information Technology: The Case of Project and Information Work" Under review at Information Systems Research.

Krishnan, V., I. Bardhan, and S. Lin, "Project Performance and the Enabling Role of Technology: An Empirical Study on the Role of Fit" Under review at M&SOM.

Balasubramaniam, S., V. Krishnan, and M. Sawhney, "The Implications of Digitization for Markets and Marketing", under revision for re-submission to Journal of Marketing.

Balasubramaniam, S., S. Bhattacharya, and V. Krishnan, "A Theory of Pricing for Information Intensive Offerings", under revision for re-submission to Marketing Science.

### **PAPERS IN PREPARATION FOR JOURNAL SUBMISSION**

Krishnan, V. and W. Zhu, "Integrating Products and Services In Vertically Differentiated Markets" preparation for submission to Management Science.

### **PUBLISHED (REFEREED) CONFERENCE PROCEEDINGS**

Krishnan, V., S. D. Eppinger, and D. E. Whitney, "Iterative Overlapping: Accelerating Product Development by Advance Information Exchange", *Proceedings of ASME Design Theory and Methodology Conference*, Fall 1993.

Krishnan, V., S. D. Eppinger, and D. E. Whitney, "Towards a Cooperative Design Methodology: Analysis of Sequential Decision Strategies", *Proceedings of ASME Design Theory and Methodology Conference*, Fall 1991.

Rinderle, J. R. and V. Krishnan, "Constraint Reasoning in Concurrent Design, *Proceedings of ASME Design Theory and Methodology*, Fall 1990.

### **CASE STUDIES AND BUSINESS ARTICLES**

Thomke, S, V. Krishnan, and A. Nimgade, "Product Development at Dell Computer Corporation", Harvard Business School Case N9-698-113, June 1998 (currently on the Harvard Business School best-selling cases list).

Krishnan, V. and I. Bardhan, "[Clearly Productive: Research using the CLEAR index finds effectiveness just as important as efficiency in improving productivity](#)," Optimize Magazine, Issue 39, January 2005

Krishnan, V. and J. Skilbeck, "Cynosure technologies: E-Procurement Strategy", The University of Texas at Austin Business School Case, June 1999, Rev. June 2000.

Krishnan, V., "E-Business Innovation at Golfsmith", The University of Texas at Austin Business School Case, June 1999, Rev. June 2000.

### **HONORS AND AWARDS**

Associate Editor, *Management Science*, Design and Operations area, Nov 2001-Current.

Department Editor, Production and Operations Management (POM), Aug 2003-Current.

Member of the Editorial Review Board, IEEE Transactions in Engg Management, Oct 2001-Current.

Member of the Editorial Review Board, Production and Operations Management, April 1998-Aug 2003.

Referee for Management Science, Operations Research, ASME Journal of Mechanical Design, IIE Transactions, Production and Operations Management, 1992-Current.

CBA Foundation Research Excellence Award for Assistant Professors, University of Texas Graduate School of Business, 1997.

Best Instructor in the Executive Masters Program at the IC2 Institute, The University of Texas at Austin. 1997, 1998.

Graduate Business Council Outstanding Elective Instruction Recognition, The University of Texas Graduate School of Business, Fall 2002.

Trammell/CBA Foundation Teaching Excellence Award for Assistant Professors, The University of Texas Graduate School of Business, 1997.

Teaching Excellence Award from the University of Texas Graduate Business Council in recognition of excellence in teaching in the MBA core curriculum, 1993. Business school nominee for the teaching award for the "Best Assistant Professor in Core teaching" in 1995 and 1996.

Invited as an expert lecturer in Round Table Group's bootcamp on New Product and Business Innovation.

Chaired invited sessions on Managing Product Development in ORSA-TIMS conferences in Fall 1992, Spring 1994, Spring 1995, and Spring 1997 conferences. Invited to chair a cluster of sessions on product development for the Fall 1997 conference in Dallas and Fall 2002 conference in San Diego.

Cited in numerous business publications including the Wall Street Journal and the San Jose Mercury.

## GRANTS

Research grant from Ford Foundation to identify methods to improve new product development, Fall 2000 - five year grant at \$50,000 per year.

Grant from IBM to prepare teaching material on the impact of e-business on operations, Fall 2000 - \$30,000 one-time grant.

Research grant from Dell Computer Corporation to study the impact of information technology on new product development, 1999-2000 (LARIAT program).

Research grant From Ford Motor Company to study product development flexibility, 1999- one of eight nationally selected proposals.

Research grant From National Instruments for research on product family development, 1996.

Research grants from the International Motor Vehicle Program at MIT for research on product development and supply chain management, 1995.

Research award from the Marketing Sciences Institute - one of six nationally selected proposals, co-authored with R. Singh and Vijay Mahajan, April 1995.

## INDUSTRY EXPERIENCE

**Amylin Pharmaceuticals, San Diego CA**

**Nov. 2005-Current**

Engaged in the design and dissemination of metrics-based management in this drug discovery and development company. Also, studying the multi-firm product development context to identify challenges and opportunities.

**Sony Electronics, USA**

**Nov. 2004-Current**

Collaborative work in the diagnostic assessment and integration of product groups for achievement of growth and profitability.

**Dell Computer Corporation, Austin, TX**

**Jan. 1994 - June 2005**

Involved in developing and implementing a program for the systematic pursuit of new product operations. Helped disseminate the program to Dell's U. S, European, and Japanese locations. Resulted

in multiple research grants, consulting engagements, and a published Harvard business school case-study.

**Texas Instruments Corporation (TI), Dallas TX** **June 1999-Current**  
Ongoing interactions with TI to help in the areas of product and operational excellence. Worked on the development of an Executive MBA program customized to TI's needs. Currently involved in developing and delivering a set of programs under the "Execution Track".

**3M Corporation, Austin, TX** **April 1996 - Aug 2003**  
Ongoing relationship with 3M improving the product lifecycle management in 3M's telecom and electrical products divisions.

**Motorola, Inc., Austin TX** **May 1999-June 2004**  
Ongoing research project on improving the company's innovation and new product development areas.

**Golfsmith, Inc., Austin TX** **Jan. 1999-June 2003**  
Advised the company CEO and vice-president on the company's business processes and organization.

**Xora.com, Palo Alto CA** **Dec. 1999-Current**  
Member of the board of advisors of this Palo-Alto based wireless Internet driven supply chain company.

**nMinds.com, Chicago IL** **February 2000**  
Featured on the web-site as a faculty expert on new product development.

**Verizon Wireless, Dallas TX** **Jan 1998-December 1998**  
Pursued a consulting project to streamline the Primeco division's product development processes.

**National Instruments Inc., Austin, TX** **June 1994-June 2002**  
Collaborated on a research program for the concurrent development of a *family of products*. Resulted in a research grant and the company served as a field site for three Ph. D. students.

**Motorola Inc., Boynton Beach, FL** **1992-1993**  
Investigated the product development practices in the development of pagers, and identified opportunities for improvement in the development process as a part of doctoral dissertation. This experience is reported in a paper that appeared in Management Science (April 1997).

**Chrysler Technology Center, Auburn Hills, MI** **Fall 1991-1993**  
Studied, measured, and analyzed the process of development of an automobile. Made recommendations for improving the process as a part of doctoral work. The results from this study appeared in ASME Journal of Mechanical Design (Dec. 1995), Management Science (April 1997) and IEEE Transactions (May 1996).

**Xerox Systems Sciences Laboratory, Rochester, NY** **Summer 1991**  
Developed a grammar based approach to solving the line-breaking problem in document processing. Also studied the process of collaborative design decision making.

**Wolfram Research Inc., Champaign, IL** **June-December 1989**  
Developed a package to search for optima using Simulated Annealing and Genetic Algorithms in the symbolic programming environment of Mathematica.

**Tata Engineering and Locomotive Company (TELCO), Pune, India** **Summer 1987**  
Worked as a summer intern in the design and development of small passenger cars at this leading Indian automobile company.