

Gita Mathur, Ph.D.
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Organization & Management
College of Business, San Jose State University
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Professional Interests

Research Interests

Management of technological innovation and product development in science and technology based industries, with a focus on integration of efforts within and across projects.

Teaching Interests

Courses related to the management of technological innovation and product development. Introductory/Core courses in technology and operations management, organizational behavior and organization theory, and business and operations strategy

Academic Background

Ph.D. Rensselaer Polytechnic Institute, Troy, New York, Electrical Engineering, 1985
D.B.A. Harvard Business School, Boston, MA, Technology and Operations Management, 1996
M.B.A. University of California, Berkeley, CA, 1991
M.Tech. Indian Institute of Technology, Delhi, India, Electrical Engineering, 1981
B.Tech Indian Institute of Technology, Delhi, India, Electrical Engineering, 1978

Memberships

Academy of Management (AOM)
Institute for Electrical and Electronics Engineers (IEEE)
Project Management Institute (PMI)

WORK EXPERIENCE:

Academic Experience

Associate Director of Management Curriculum, Master of Biotechnology Program, College of Science, San Jose State University (2010 - 2013).

Associate Professor, San José State University (2002 - 2012). Fundamentals of Operations Management, Managing Product Development, and Management of Innovation in the Biotechnology Sector.

Guest Speaker, Case Study Conference (1996 - 2004). Participated in case study discussions as invited guest in the Management of New Product Development course in the Management Science and Engineering Department at Stanford University.

Guest Speaker, Case Study Conference (1996 - 2004). Presented and discussed issues on recruiting and human resource constraints at a technology-based start-up in a longitudinal case study in the Management in Perspective MBA course at the Harvard Business School.

Guest Speaker, Consulting to Technology-Based Companies (1996 - 2004). Presented 'Consulting to Technology-Based Companies' in the Management of Technology and Innovation MBA course at the University of Colorado'.

Guest Speaker, Equiptek (1996 - 2004). Developed 'Equiptek' case based on my consulting engagement and participated in the case discussion in the MBA Consulting course at the Haas School of Business, University of California, Berkeley.

Guest Speaker, Managing Product Development (1996 - 2004). Presented 'Managing Product Development' in the Software Engineering course and the Management of Software Development Workshop at the University of California, Berkeley.

Doctoral Student in the Department of Technology and Operations Management, Harvard Business School (1991 - 1996). *Designed and conducted field studies on the interaction between customers and suppliers in the development of semiconductor components, as part of my doctoral research

*Title: Determinants and Outcomes of Interorganizational Interaction in Technological Innovation: A Field Study of Custom Semiconductor Component Development *Committee: Professors Robert Hayes (chair), Richard Hackman, Eric von Hippel (MIT) *Developed case materials and teaching note for the MBA Operations Strategy course from my field research on Intel Corporation's process equipment sourcing strategy.

Doctoral Student in the Department of Electrical, Computer, and Systems Engineering, Rensselaer Polytechnic Institute (1981 - 1985). *Conducted NASA sponsored research on Gallium Arsenide Solar Cells as Ph.D. Thesis *Title: Thermal Effects in Gallium Arsenide *Thesis Adviser: Professor Sorab Gandhi *Trained new research students in experimental methods *Assisted with graduate courses in Electrical Engineering.

Non-Academic Experience

National

Consultant, Independent Management Consultant (2000 - 2002). Assisting high-technology clients with interim management and improvement of processes and organizational capabilities for development and deployment of new technologies and products.

Consultant, Consulting Tenure (1996 - 2002). Taught concepts of technology management, product development, and supply chain integration to executives, managers, and employees at several high-technology companies during my consulting tenure. Facilitated executive teams, product development teams, and project teams to guide application of these concepts through collaborative design and implementation of cross-functional processes.

Principal and Manager, Pittiglio Rabin Todd & McGrath (1996 - 2000). A leading international management consulting firm serving technology-based companies

Principal from January, 1998 to February, 2000

Manager from September, 1996 to December, 1997.

Manager / Wafer Fabrication / Engineering Supervisor / Process Development / Materials Engineer, Harris Microwave Semiconductor (1985 - 1991). *Managed the Gallium Arsenide wafer fabrication operation, including process development, manufacturing, and foundry activities *Successfully transitioned wafer fabrication operation from an R&D to a multiple-shift manufacturing environment *Led company's collaborative process development activities with electronic systems developers, equipment vendors, chemical suppliers, and other semiconductor manufacturers *Jointly developed new products with internal and external customers *Recruited, trained, and managed manufacturing and engineering personnel *Led industry taskforce to establish Gallium Arsenide wafer standards.

International

Quality Control Engineer, Continental Device India Ltd. (1978 - 1979).

Consulting

2000: Independent Management Consultant,

Assisted high-technology clients with interim management and improvement of processes and organizational capabilities for development and deployment of new technologies and products

- * Assisted a provider of enterprise software solutions with the development and implementation of a capabilities roadmapping process

- * Guided the cross-functional effort to develop and pilot a benchmarking methodology for operational efficiency and scalability by a software company in its clients' operations

- * Provided management consultation and interim management services to an internet software start-up as it grew from its founding team to 75 employees. Facilitated and participated in development of cross-functional processes and the planning and execution of projects for technology, product, and content development. Assisted with development of functional processes and participated in recruiting and training across all functions

- * Performed assessment of product development and product management practices in an e-commerce company facing rapid growth and diversification and developed a process and organizational structure to integrate the efforts across functions and business units

1996: Pittiglio Rabin Todd & McGrath,

- * Led and conducted 15 consulting engagements to assist high-technology companies in the assessment and development of their business processes and organizational capabilities

- * Areas of practice included technology management, product development, supply chain integration, and customer service and support

- * Clients included start-up and multi-division companies in the computer, internet, life science, semiconductor, software, and telecommunication industries

- * Managed client relationships and participated in new business development
- * Contributed significantly to evolving the firm's product development practice and offerings
- * Led semiconductor segment of an international product development performance benchmarking study
- * Recruited, trained, and supervised consulting staff
- * Served as university liaison to Haas School of Business, University of California, Berkeley

TEACHING:

Courses Taught

Courses from the Teaching Schedule: Fundamentals of Operations Management, Management of Innovation in the Biotechnology Sector

INTELLECTUAL CONTRIBUTIONS:

Refereed Articles

- Mathur, G. & Jugdev, K. (in press, 2013). Bridging situated learning theory to the resource-based view of project management. *International Journal of Managing Projects in Business*, 6 (4).
- Mathur, G., Jugdev, K., & Fung, T. (in press, 2013). Project management assets and project management performance outcomes: Exploratory factor analysis. *Management Research News*, 36 (2).
- Jugdev, K. & Mathur, G. (2012). Classifying Project Management Resources by Complexity and Leverage. *International Journal of Business Data Communications and Networking*, 5 (1), 105-124.
- Mathur, G., Jugdev, K., & Fung, T. (2007). Intangible Project Management Assets as Determinants of Competitive Advantage. *Management Research News*, 30 (7), 460-475.
- Mathur, G. (2007). Introduction to Project Management by Kathy Schwalbe: A book review. *Academy of Management Learning & Education*, 6 (4), 572-574.
- Mathur, G. (2007). Problem solving Interdependence in Technological Innovation: An Examination of Interorganizational Interaction in Semiconductor Component Development. *International Journal of Intelligent Enterprise*, 1 (1), 98-113.
- Jugdev, K., Mathur, G., & Fung, T. (2007). Project Management Assets and their Relationship with the Project Management Capability of the Firm. *International Journal of Project Management*, 25, 560-568.
- Mathur, G. (2006). Classroom Application of the Post-Project Review Practice. *California Journal of Operations Management*, IV (1), 33-38.
- Jugdev, K. & Mathur, G. (2006). Project Management Elements as Strategic Assets: Preliminary Findings. *Management Research News*, 29 (10), 604-617.

Refereed Proceedings

Full Paper

- Jugdev, K., Mathur, G., & Fung, T. (2011). Project Management Assets and Project Management Performance: Preliminary Findings. *Portland International Conference on Management of Engineering and Technology*.
- Jugdev, K. & Mathur, G. (in press, 2011). A Framework for Classifying Project Management Resources. *Administrative Sciences Association of Canada*.
- Mathur, G. (in press, 2007). Task partitioning decisions in collaborative component development projects. *International Journal of Operations and Production Management*.
- Denzler, D. R., Park, T., Zhou, M., Loomba, A. S. , & Mathur, G. (2007). A New Direction Of Operations Management Course: Operations And Supply Chain Management. *CSU-POM*.
- Mathur, G. & Jugdev, K. (2006). A Factor Analysis of Tangible and Intangible Project Management Assets. *PMI (Project Management Institute) Research Conference*.
- Mathur, G. (2005). Reuse of Technical Solutions Resulting from Collaborative Product Development Projects. *PICMET*.
- Mathur, G. . (2005). Reuse of Technical Solutions Resulting from Collaborative Product Development Projects. *PICMET*.

Cases

- Mathur, G. (2012). Case: CEI Energy Alternatives Division, California Employment Development Department as a part of the Green Innovation Challenge Grant Program.

Presentation of Refereed Papers

International

Jugdev, K., Mathur, G., & Fung, T. (2011). Project management assets and project management performance: Preliminary findings. Portland International Conference on Management of Engineering and Technology, Portland, Oregon.

Jugdev, K. & Mathur, G. (2011). A framework for classifying project management resources. Administrative Sciences Association of Canada, Montreal, Canada.

Mathur, G. (2005). Reuse of Technical Solutions Resulting from Collaborative Product Development Projects. PICMET, Portland, Oregon.

State

Mathur, G. (2006, February). A Classroom Application of the Post-Project Review Practice. CSU-POM Conference, Monterey Bay, California.

Presentation of Non-Refereed Papers

International

Mathur, G. (2007). Clinical Trial Management as a Professional Service. DSI, Pittsburgh, Pennsylvania.

Mathur, G. (2005, November). Managing Management Overhead in Product Development Projects. Decision Sciences Institute, San Francisco, California.

Mathur, G. (2004, October). Reuse of Technical Solutions Resulting from Collaborative Product Development Projects. INFORMS, Denver, Colorado.

Local

Mathur, G. (2007). Clinical Trials in the Drug Development Process. San Jose State University, San Jose State, California.

Mathur, G. (2003, November). Interactive Learning Cycles in Semiconductor Chip Development Projects. San Jose State University, San Jose, California.

State

Mathur, G. (2012). Product development as an evolving capability: Use of an industry best practices framework in product development course design. CSU-POM Conference, San Jose, California.

Grants

2004 [1 of 2]: Mathur, G., Summer Research Grant, San Jose State University, San Jose, CA

2004 [1 of 1]: Mathur, G., O&M Department Research Release Time Grant, San Jose State University, San Jose, CA

2003 [1 of 1]: Mathur, G., Junior Faculty Career Development Grant, San Jose State University, San Jose, CA

2003 [1 of 2]: Mathur, G., Summer Research Grant, San Jose State University, San Jose, CA

1994 [1 of 1]: Mathur, G., Beverly P. Stobaugh & Robert B. Stobaugh Fellowship, Harvard Business School, Boston, MA

1993 [1 of 1]: Mathur, G., Richard M. Hexter Memorial Fellowship; John C. Schaie Memorial Fellowship; Sidney J. Weinberg - Goldman, Sachs & Co. Fellowship, Harvard Business School, Boston, MA

1992 [1 of 1]: Mathur, G., Sidney J. Weinberg - Goldman, Sachs & Co. Fellowship, Harvard Business School, Boston, MA

1991 [1 of 1]: Mathur, G., Harvard Business School Doctoral Fellowship, Harvard Business School, Boston, MA

1981 [1 of 1]: Mathur, G., 1981 ECSE Doctoral Fellowship, Rensselaer Polytechnic Institute, Troy, NY, Rensselaer Polytechnic Institute, Troy, NY

1979 [1 of 1]: Mathur, G., M.Tech. Electrical Engineering Scholarship, Indian Institute of Technology, Delhi

1978 [1 of 1]: Mathur, G., 1978 Rajeev Bambawale Award for best senior dissertation project in Electrical Engineering, Indian Institute of Technology, Delhi, India

Funded

2012: Mathur, G., O&M Department Research Release Time Grant.

2011: Mathur, G., SolarTech Workforce Innovation Collaborative Grant. Curriculum development grant
2010: Mathur, G., O&M Department Research Release Time Grant.
2009: Mathur, G., O&M Department Research Release Time Grant.
2008: Mathur, G., Course Development sub-grant from Sloan Foundation Grant for Advancing Professional Master's Degrees in the California State University System.
2008: Mathur, G., O&M Department Research Release Time Grant.
2007: Mathur, G., O&M Department Research Release Time Grant.
2007: Basu, A. & Mathur, G., Lucas Graduate School of Business Fellowship, Lucas Graduate School of Business
2006: Mathur, G., O&M Department Research Release Time Grant.
2006: Basu, A. & Mathur, G., Lucas Graduate School of Business Fellowship, Lucas Graduate School of Business
2005: Mathur, G., O&M Department Research Release Time Grant.
2005: Mathur, G., Master of Biotechnology Program Course Development Grant.

Research Reports

2007: Mathur, G., A book review: Introduction to Project Management by Kathy Schwalbe., submitted to Introduction to Project Management.

Working Papers

Mathur, G. (2012). "Managing the overhead of management oversight in product development".
Mathur, G. (2012). "Examining clinical trial management as an evolving capability".
Mathur, G. (2012). "Task partitioning decisions in collaborative component development projects".
Mathur, G. & Jugdev, K. (2012). "Analysis and extension of guidance from PMBOK on lessons learned from projects".
Mathur, G., Jugdev, K., & Fung, T. (2012). "The relationship between project management process characteristics and performance outcomes".

Intellectual Contributions-Other

Discipline-Based Scholarship

2012: . Other Research Activities.
Replication of findings on project management process as a source of project performance and firm competitive advantage using data from IT project managers (collaboration with Kam Jugdev).

2012: . Other Research Activities.
Examination of the mediating influence of project-level performance on the relationship between project management assets and firm-level performance (collaboration with Kam Jugdev).

SERVICE:

Service to the University

Department Assignments

Member:

2006 – 2007: Task Force for development of Professional Master of Science Program in Medical Product Development Management
2005 – 2009: Operations Management Faculty Search Committee
2002 – 2011: Operations Management Committee
2002 – 2010: Organization & Management Department Curriculum Committee
2002 – 2009: Undergraduate High Technology Management Sub-committee

Other Institutional Service Activities:

2010 – 2013: Fundamentals of Operations Management: Course Chair
2007 – 2010: Project Management: Course Chair

College Assignments

Member:

2012 – 2013: Graduate Curriculum Committee:
2010-2011: BAT Revision Discussion
2010-2011: Core Course Community
2010-2011: Graduate Curriculum Committee
2005 – 2013: Master of Biotechnology Advisory Board
2005 – 2010: Biotechnology Advisory Board: College of Science, San Jose State University
2004 – 2013: Silicon Valley Center for Entrepreneurship Steering Committee: Served as volunteer, business plan evaluator, and judge for several SVCE events

Other Institutional Service Activities:

2010 – 2011: Management Curriculum: Associate Director of Management Curriculum, Master of Biotechnology Program

University Assignments

Member:

2010 – 2013: University Library Board
2007 – 2010: University Institutional Review Board

Other Institutional Service Activities:

2003 – 2005: Management of New Product Development course in the Management Science and Engineering Department:
1994 – 1995: Chancellor's Task Force on Engineering and Management Education:

Service to the Profession

Chair: Committee / Task Force

2006: Joint Venture: Silicon Valley Network/2006 State of the Valley Conference, San Jose, California.

Chair: Conference / Track / Program

2006: CSU-POM Conference.

Member: Committee/Task Force

2006: San Jose BioCenter/Partnering with Big Companies: Values and Risk, San Jose, California.
2005: Developing New Services. Professional event sponsored by Product Development Management Association.
2005: Silicon Valley / San Jose Business Journal - Venture and Technology Conference, San Jose, California.
2003 – 2005: PICMET. Served by invitation on the Program Committee and as a reviewer. Reviewed 10 papers.
2004: Engineering Advances for our Future. Symposium organized by the Silicon Valley Engineering Council..
2004: NPD Education Preparing Students for Leadership in a Cross-functional Environment. Conference se.
2002: Production and Operations Management Society(POMS).

Other Professional Service Activities

2007: Abbott Divisions and CSU, Santa Clara, California. Participated in a meeting between Abbott Divisions and CSU to discuss Workforce Needs and Professional Science Masters Programs
2007: Participated in the College of Business Teaching Fair at San Jose State University.
2007: Participated in the Lucas Fellows and College of Business Seminars at San Jose State University.
2007: Participated in a meeting between Abbott Divisions and CSU to discuss Workforce Needs and Professional Science Masters Programs.
2004: Offshoring: What it is and how it effects Product Development Teams. Professional event sponsored by.
2004: Managing Product Enhancements. Professional event sponsored by Product Development

Management Assoc.

2004: Service Innovations for the 21st Century. Conference organized by IBM Almaden Research Center..

2003: Looking into the Future of Nanotechnology and Biotechnology. GIRVAN Institute of Technology's open.

2002: INFORMS.

Reviewer: Ad Hoc Reviewer for a Journal

2012: Portland International Conference on Management of Engineering and Technology.

2012: Journal of Supply Chain Management and Operations Management.

2011 – 2012: Management Research News.

2011: IEEE International Technology Management Conference.

2010: California Journal of Operations Management.. Reviewer

2008 – 2009: International Journal of Knowledge Management Studies.

2007 – 2009: International Journal of Manufacturing Technology and Management.

2008: International Journal of Operations and Production Management.

2007: Management Research News.

Reviewer: Book / Textbook

2007: Academy of Management. Introduction to Project Management by Kathy Schwalbe: A book review

Service to the Community

Member of a Committee

2005 – 2010: Silicon Valley Center for Entrepreneurship, Member of Steering Committee- Served as volunteer, business plan evaluator, and judge for several SVCE events

Faculty Development

Professional Seminars / Workshops

2012: SJSU Social Innovation Leadership Forum. San Jose, California.

2011: Global Innovation Forum: Silicon Valley: Innovation and the Digital Generation. Sponsored by SJSU, SRI, and IBM. San Jose, California.

2010: BioExec Institute 2010. Executive Education Program, University of Berkeley. Berkeley, California.

2007: Abbott Divisions and CSU to discuss Workforce Needs and Professional Science Masters Programs
Participated in a meeting between Abbott Divisions and CSU to discuss Workforce Needs and Professional Science Masters Programs. Santa Clara, California.

2007: SRII Symposium. Attended the meeting
The Challenges and Opportunities of Services Research. Santa Clara, California.

2006: Focus Group on Clinical Research Management with Bioscience Industry and SJSU. Focus Group on Clinical Research Management with Bioscience Industry and SJSU. Mountain View, California.

2006: Partnering with Big Companies: Values and Risk. Industry Roundtable at the San Jose BioCenter. 2006 State of the Valley Conference. San Jose, California.

2005: Product Development Management Association. Developing New Services. Unknown, Unknown.

2005: Managing Management Overhead in Product Development Projects. Presented at the Decision Sciences Institute Annual Meeting 2005. San Francisco, California.

2005: Reuse of Technical Solutions Resulting from Collaborative Product Development Projects. Presented at the PICMET'05 Conference Technology Management: A Unifying Discipline for Melting the Boundaries. Portland, Oregon.

2005: Venture and Technology Conference. Professional event sponsored by Silicon Valley / San Jose Business Journal. San Jose, California.

2005: Developing New Services. Professional event sponsored by Product Development Management Association. San Jose, California.

2004: Reuse of Technical Solutions Resulting from Collaborative Product Development Projects. Presented at the INFORMS Annual Meeting. Denver, Colorado.

2004: Service Innovations for the 21st Century. Conference organized by IBM Almaden Research Center. San Jose, California.

2004: NPD Education - Preparing Students for Leadership in a Cross-functional Environment. Conference session at INFORMS 2004 (Institute for Operations Research and Management Sciences). Denver, Colorado.

2004: Engineering Advances for our Future. Symposium organized by the Silicon Valley Engineering Council. Silicon Valley, California.

2004: Managing Product Enhancements. Professional event sponsored by Product Development Management Association. Unknown, Unknown.

2004: Offshoring: What it is and how it effects Product Development Teams. Professional event sponsored by Product Development Management Association. San Jose, California.

2003: Interactive Learning Cycles in Semiconductor Chip Development Projects. Presented at the Organization and Management Research Seminar Series. San Jose, California.

2003: Looking into the Future of Nanotechnology and Biotechnology. GIRVAN Institute of Technology's open house held at the NASA Ames Research Park. Moffett Field, California.

2002: INFORMS. Conference session at INFORMS 2002 (Institute for Operations Research and Management Sciences). San Jose, California.

2002: Production and Operations Management Society. Annual Meeting. Vancouver, Canada.

Honors & Awards

Award

2012: Master Teacher Award College of Business, San Jose State University.

2011: SJSU Difference in Pay Leave for Research San Jose State University.

2010: Master Teacher Award College of Business, San Jose State University.

2008: Awarded by Editorial Team for paper entitled, 'Intangible Project Management Assets as Determinants of Competitive Advantage,' Management Research News, 30, 7, 460-475, 2007. (co-authored with Kam Jugdev and Tak Fung) Management Research News.

2008: Master Teacher Award College of Business, San Jose State University.

Honor

2008: Course Development Grant from SJSU Research Foundation (Sloan Foundation Grant for Advancing Professional Master's Degrees in the California State University System) San Jose State University.

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