

## **Dr. Kalyan Singhal**

Doris E. and Robert V. McCurdy Chair and Distinguished University Professor

Merrick School of Business, University of Baltimore

Founder and Editor in Chief: *Production and Operations Management*

Founder and Coeditor in Chief: *Management and Business Review*

### **Education**

- Doctor of Business Administration, Kent State University, 1972.
- Master of Business Administration, Kent State University, 1970.
- B. Tech. with Honors, Indian Institute of Technology (IIT), Bombay, 1967. (CBS' 60 *Minutes* described the IITs as "Harvard, MIT, and Princeton put together.")

### **Honors and Awards**

- Kalyan Singhal Annual Award (\$30,000) for the best innovation in a company, established in Singhal's name by Production and Operations Management Society.
- Fellow of the Institute for Operations Research and Management Sciences (INFORMS) since 2004. INFORMS Fellows include many Nobel laureates.
- Fellow of the Production and Operations Management Society since 2004.
- Lifetime editor-in-chief of the journal, *Production and Operations Management* (POM) since 1992. This journal is one of the top 20 business journals on the *Business-Week* list. Singhal is the longest serving editor among the editors in the history of the 20 journals. POM is also one of the top 24 journals on the University of Texas at Dallas list and one of the 50 business journals on the *Financial-Times* list.
- Lifetime coeditor in chief, *Management and Business Review* (MBR). MBR has 235 advisers, including editors of prominent research journals and 15 professors from Wharton; 13 from Harvard; nine from Carnegie Mellon; eight from Dartmouth; seven each from MIT and Stanford; five from Michigan and UCLA; four each from Chicago, Columbia, Northwestern, and NYU; three each from Duke, INSEAD, and Virginia; and two each from the University of California at Berkeley, China Europe International Business School, Cornell, London Business School, and Yale. Please see a [story](#) on MBR in *Forbes*:
- Founding President, Production and Operations Management Society, 1989-1994.

### **Academic Experience**

- University of Baltimore, Distinguished University Professor since 2025. Doris E. and Robert V. McCurdy Chair in Business since fall 2007; Professor since fall 1983:

Coordinator, Production and Operations Management area 1984-98; Codirector, Center for Production/Operations Management & Engineering, 1989-91.

- University of Arizona. Professor, Fall 1981; Associate Professor, 1979-81.
- Indian Institute of Management, Bengaluru, India. 1974-78, Associate Professor; Founder-Chair, Department of Manufacturing and Operations Management, 1975-77.
- Kent State University: 1972-73, Assistant Professor; 1971-72, Full-time Instructor; 1969-71, Graduate Assistant/Teaching Fellow.
- One-year visits: 1973-74, University of Houston; 1978-79, University of North Carolina at Greensboro.

### **Business Experience**

- **Union Carbide India Limited, Systems and Industrial Engineer:** February 1968 to August 1969.

Participated in implementing the IBM software that was the progenitor of the MRP and ERP software. Worked on supply chain management, information systems for costing, distribution and manufacturing planning, technology transfer, project evaluation, process redesign and work measurement, and developing of new products and processes.

- **Premier Automobiles India Limited, Summer Intern, 1966.**

Worked in a plant that manufactured passenger cars in collaboration with Fiat of Italy. Assignments included a review of the entire plant: production of parts, layout, material handling, and assembly.

- **Josts Engineering, Bombay, Summer Intern, 1965.**

Worked in a plant that manufactured material handling equipment.

### **National and International Impact**

#### **Founder and Co-Editor-in-Chief of *Management and Business Review*: A Journal for Executives Supported by Leading Schools**

The *Management and Business Review* (MBR) is a peer-reviewed journal directed at executives, managers, and scholars. MBR's editors-in-chief are Christopher Ittner, Wharton School; Hau Lee, Stanford University and former *editor-in-chief of Management Science*, and Kalyan Singhal. Its website is [www.mbrjournal.com](http://www.mbrjournal.com).

MBR is the result of a grassroots initiative with a wide participation by many schools and companies and sponsored by twelve leading business schools. MBR complements the *Harvard Business Review* (HBR). However, in an article written by John Byrne, former

editor in chief of *Business Week*, *Forbes* enthusiastically described MBR as [a rival](#) to HBR.

Sage Publications is now hosting MBR at <https://journals.sagepub.com/loi/MAB> Please review MBR as we have made all issues open access until September 2025. The 2021 debut volume contains articles from professors at all top business schools.

MBR has about 250 advisers. Among them are editors and former editors of prominent journals that appear on the *Bloomberg Business Week* and *Financial Times* lists, as well as over one hundred professors from Berkeley, Carnegie Mellon, Chicago, China Europe International Business School, Columbia, Cornell, Dartmouth, Duke, Harvard, INSEAD, London Business School, Michigan, MIT, New York, North Carolina, Northwestern, Rochester, Stanford, Texas, Virginia, Wharton, and Yale.

MBR's advisers also include eleven executives from Accenture, act2, Alidade, Ashridge Strategic Management Centre, Bain & Company, Deloitte, General Electric, Good Growth Capital, IBM, Mercer, and Monitor Deloitte. They have published articles in leading journals, as well as bestselling books for executives.

MBR's special issues have been edited by Jerry Wind of Wharton and Google's VP for Advertising Jerry Dischler, Stanford's Glenn Carroll, and Stanford's Hau Lee.

### **Founder Editor of a Leading Research Journal**

Founded the journal, *Production and Operations Management* in 1992 and have been serving as its editor-in-chief since then. *Business Week* includes it on the list of 20 premier journals that it uses to determine intellectual capital, which is one of the three factors in *Business Week's* rankings of MBA programs in business schools. The *Financial Times* includes it on its list of top 50 journals, and the University of Texas at Dallas includes it [among the 24 journals it uses to rank business schools](#)

In 1996, the deans of the Harvard Business School and the UCLA School of Management and senior professors from Columbia, Cornell, Harvard, MIT, Stanford, and Wharton wrote a letter to business school deans stating that *Production and Operations Management* had "become one of the leading research journals in the POM field" and encouraged them "to consider it as one of the top-tier journals when making retention, promotion, and tenure decisions."

The journal is also held in high esteem by the national business community. In 1996, John Pepper, chairman of Proctor and Gamble, wrote letters to senior executives and deans of business and engineering schools commending Singhal's work on *Production and Operations Management*. He did so as the chair of a national group of more than 20 chairmen of major corporations who were pursuing an initiative to improve teaching and research in business and engineering schools.

## Founder of an International Professional Society

Founded of the Production and Operations Management Society (POMS) in 1989 and served as its president from 1989 to 1994. POMS publishes the journal, *Production and Operations Management*.

## Publications in Journals

- Singhal, K., Singhal, J. (2025). Portfolio Scenarios for Interrelated Projects. *IEEE Transactions on Engineering Management*, 72, 1154-1162.
- Singhal, K. and Singhal, J. (2022). Technology, knowledge, and manufacturing before the Industrial Revolution. *Production and Operations Management*, 31(12), pp.4262-4275.
- Singhal, K. and Singhal, J. (2022). Technology and manufacturing-and-service operations since the Industrial Revolution. *Production and Operations Management*, 31(12), pp.4276-4282.
- Kumar, S., Singhal, J. and Singhal, K. (2022). A programmed method for generating new product ideas from an existing product line. *Decision Sciences*, 53(4), pp.771-776.
- Rachel R. Chen, Subodha Kumar, Jaya Singhal, Kalyan Singhal (2021) Note: The Value and Cost of the Customer's Waiting Time. *Manufacturing & Service Operations Management* 23(6):1539-1542.
- Vipin K. Agrawal, Poonam Khanna, and Kalyan Singhal (2020) The Role of Research in Business Schools and the Synergy Between Its Four Subdomains. *Academy of Management Review*, 45(4) 896-912.
- 2019. Singhal, K., Singhal, J. Technology and Manufacturing in China Before the Industrial Revolution and Glimpses of the Future. *Production and Operations Management*, 28(3), 505-515.
- 2019. Singhal, K., Singhal, J., Kumar, S. The Value of the Customer's Waiting Time for General Queues. *Decision Sciences*. 50(3) 567-581.
- 2016. Singhal, J., Singhal, K., Roth, A., Tang, C. S. Knowledge Creation and Dissemination in Operations and Supply-Chain Management. *Production and Operations Management Journal*, 25(9), 1473 - 1488.
- 2014 "POMS Initiatives for Promoting Practice-Driven Research and Research-Influenced Practice" with M. Sodhi and C. Tang. *Production and Operations Management*, 23(5), 725-727.

- 2012. "Imperatives of the science of operations and supply-chain management" with J. Singhal. *Journal of Operations Management*, 30, 237-244.
- 2012. "Opportunities for developing the science of operations and supply-chain management" with J. Singhal. *Journal of Operations Management*, 30, 245-252.
- 2009. "On the noniterative multiproduct multiperiod production planning method" with J. Singhal. *Operations Research Letters*, 37, 65-66.
- 2008. "A noniterative algorithm for the linear-quadratic profit-maximization model for smoothing multiproduct production" with J. Singhal. *INFORMS Journal on Computing*, 20 (2) 169-178, 2008.
- 2007. "The domain of operations management and the role of Elwood Buffa in its delineation" with J. Singhal and M. K. Starr. *Journal of Operations Management*, 25 (2) 310-327.
- 2007. "The Holt, Modigliani, Muth, and Simon's work and its role in renaissance and evolution of operations and supply chain management" with J. Singhal. *Journal of Operations Management*, 25 (2) 300-309.
- 2005. "Sustainable operations management" with P. Kleindorfer and L. van Wassenhove. *Production and Operations Management*, 14 (5) 482-492.

This article was reprinted in C M Madtha, editor, *Sustainability Performance Management: Issues and Perspectives*, 67-93. The Icfai University Press. Hyderabad, India. 2008.

- 2002. "Supply chains and compatibility among components in product design" with J. Singhal. *Journal of Operations Management*, 20, 289-302.
- 2001. "History of technology, manufacturing, and the industrial revolution," *Production and Operations Management*, 10 (1) 97-102.

This article was reprinted in M.A. Lewis and N. Slack (editors), *Operations Management: Critical Perspectives on Business and Management*, Volume IV, 403-410. Routledge (Taylor and Francis Group), London and New York, 2003.

- 1997. "International Technology and Operations Management: Resource Toolkit for Research and Teaching" with A. Roth, A. Gray, and J. Singhal. *Production and Operations Management*, 6 (2) 167-187.
- 1996. "The number of feasible designs in a compatibility matrix" with J. Singhal. *European Journal of Operational Research*, 94, October, 186-193.
- 1996. "Alternate approaches to solving the Holt et al. model and to performing sensitivity analysis" with J. Singhal. *European Journal of Operational Research*, 91,

May, 89-98.

- 1992. "A noniterative algorithm for the multiproduct production and work force planning problem." *Operations Research*, 40 (3) 620-625.
- 1988. "Long range process planning and compatibility among operations" with J. Singhal and J. Weeks. *Management Science*, 34 (5) 619-632. (Erratum to the paper: 34, 1033.)
- 1988. "Poor model for the new organization." *Harvard Business Review*, 88 (4) 146--148.
- 1988. "Service levels for priority and nonpriority products with a common component" with V. Adlakha. *Journal of Operations Management*, 7 (3) 73-76.
- 1988. "Cost and shortage tradeoffs in aggregate production planning" with V. Adlakha. *Decision Sciences*, 1988, (1) 158-165.
- 1987. "Research and models for automated manufacturing" with C. Fine, J. Meredith, and R. Suri). *Interfaces*, 17 (6) 9-14.
- 1986. "A solution to Holt et al. model for aggregate production planning" with J. Singhal. *OMEGA: The International Journal of Management Science*, 14 (6) 502-505.
- 1984. "A note on application maximum principle to H.M.M.S. model for production planning" with T. Heintz. *INFOR*, 22 (3) 291-294.
- 1982. "Socio-political and economic context in evaluating productivity and implementing management science techniques." *Interfaces*, 12 (2) 77-82.
- 1981. "Implementation of management science methodology in public systems" with P.V. Ganesan, V.B. Kaujagi, A.K. Rao, M.R. Rao, S. Subba Rao, and S. Subramaniam. *TIMS Studies in the Management Sciences*, 17, 225-251. (For a decade, this series was a substitute for special issues of *Management Science*).
- 1981. "An empirical analysis of feasible network plans with compatibility matrix" with D. Dhavale. *International Journal of Production Research*, 19 (6) 657-666.
- 1981. "An exploratory study of interrelationships among technological and operational variables in paced assembly lines" with R. B. Chase. *International Journal of Production Research*, 19 (6) 703-708.
- 1981. "A discrete optimal control algorithm for production planning incorporating cost of changes in production rate" with T. Heintz, *INFOR*, 19 (2) 125-133.
- 1979. "Network planning projects subject technological interaction among activity alternatives" with K.P.K. Nair. *INFOR*, 17 (2) 124-132.

- 1978. "More on Planning for Freedom" with V. Vyasulu. *Management Science*, 24 (5) 561-84, 1978.
- "Integrating production decisions." *International Journal of Production Research*, 16 (5) 383-393.
- 1977. "A generalized model for production scheduling by transportation method of LP." *Industrial Management*, 19 (5) 1-6.
- 1975. "A marketing management plan for family planning in India" with A. S. Kapadia. *Population Review*, 19, 51-57.

#### **Book Chapter**

- 2013. "Automation in manufacturing and services" with V. Agrawal, and M. Liberatore in *Encyclopedia of Operations Research and Management Science*, Saul I. Gass and Michael Fu (eds.), Third Edition, Springer, Boston, 88-95.

#### **Editorials**

- 1997. "Global Operations and Technology Management" with A. K. Chakravarty and K. Ferdows. *Production and Operations Management*, 6 (2) 99-100.
- 1995. "Developing sophisticated improvement approaches through business academe collaborations." *Production and Operations Management*, 4 (3) 183-186.
- 1994. "Implementing Initiatives on Quality." *Production and Operations Management*, 3 (3) 149-152.
- 1992. "Shaping the future of manufacturing and service operations." *Production and Operations Management*, 1 (1) 1-4.
- 1987. "Design and implementation of automated manufacturing systems." *Interfaces*, 17 (6) 1-4.

#### **Other Publications**

- 1992. "An open response to 'TOM on the campus': Need TQM and more" with R. Hayes, *Harvard Business Review*, January-February, 148. In 1992, the *Harvard Business Review* asked Singhal and Hayes to respond to a letter from the chairmen of American Express, Ford Motors, IBM, Motorola, Proctor & Gamble, and Xerox concerning business and engineering education and research. It published both letters with banner headlines and longhand signatures. In their letter, Singhal and Hayes encouraged the companies to fund cooperative research, which they did by funding a cooperative research program through the National Science Foundation.
- 1992. *A Study Guide for Production and Operations Management and Lotus*

*Templates*, six editions, with N. Aquilano. Richard D. Irwin, Homewood: Illinois. Over 300 schools adopted various editions of this publication for teaching at graduate and undergraduate levels.

- “Helping states gives more bang for the buck.” Readers Report, *Business Week*, September 30, 2002.
- “Is McKinsey Responsible if its Clients Fail,” Readers Report, *Business Week*, July 29, 2002.
- “Petition Makes the Case,” *OR/MS Today*, August 2003.

### **Presentations and Proceedings**

Made more than one hundred presentations, including several plenary addresses, at national and local meetings.

### **Work in Progress**

A general theory of trade dynamics

### **Teaching**

**Evaluations:** Undergraduate and graduate students have rated Singhal as one of the top teachers at the University of Baltimore, the University of Arizona and Kent State University. His ratings are high in both classroom teaching and in teaching online classes.

### **Graduate electives:**

Developed four graduate electives:

- E-Commerce and Supply Chain Management
- Global Management of Technology and Operations
- Process Reengineering
- Total Quality Management.
- Innovation and Project Management

The “E-Commerce and Supply Chain Management” course has been the most popular elective in the Merrick School of Business in the last 36 years. It was delivered via the Internet and its students were located all over the world. In 2004, The *Baltimore Sun* gave the course prominence in a detailed report on supply chain management courses offered in the various universities in Maryland.

### **Other courses taught:**

- Production and Operations Management (core course)



- Project Management
- Strategic Management (MBA capstone course)
- Management of Technology
- New Product Development
- Financial Management
- Statistics
- Management Science
- International Business
- Management Information Systems.

**MBA theses:** Guided MBA thesis projects at the Indian Institute of Management, Bengaluru. The students worked with major companies on supply chain management, the effect of absenteeism on the design of assembly lines, information systems, inventory management, material planning for a large project, product standardization, production planning and control, quality management, and transfer of technology from laboratory to manufacturing. Also supervised a number of MBA students on independent study projects in international business.

**Executive Development Programs:** Taught in the following programs for senior managers: management of technology and technology supply chains, management of engineering schools for principals (deans) of engineering schools in India, international technology and operations management, innovations in high tech companies, quality management, and accounting for operations managers.

**National Meeting on Teaching POM:** Served as general chair for the seventh national meeting of the Production and Operations Management Society on teaching POM, hosted by Purdue. Indianapolis, March-April 1996.

### **Consulting**

Consulted for major organizations including Westinghouse (technology and manufacturing), Standard Oil Company of California (project management and inventory information systems), Baltimore Gas & Electric (management of inventory), and the Government of India (Supply chains: information systems and an optimization model for distribution of cement). The annual savings to all organizations exceeded \$50 million.

### **Administrative Roles in Schools**

- Founder-Chair, Department of Manufacturing and Operations Management, Indian Institute of Management, Bengaluru, India, 1975-77. Responsibilities included

recruiting, developing, and evaluating faculty; course scheduling; and assisting colleagues in obtaining grants from companies and the federal government and in organizing executive development programs for company executives and government officials. Reported to the director (president) of the institute.

- Founder-chair, programs on managing business and engineering schools, Indian Institute of Management, 1974-77. Designed and offered a two-week program on managing engineering schools. It was attended by 47 principals (deans) of engineering schools.
- Coordinator, production and operations management area, Merrick School of Business, University of Baltimore, 1984-98, handling faculty recruitment and development, scheduling, and external relations. Worked with colleagues in obtaining grants from the National Science Foundation, the U.S. Department of Education, Westinghouse, and Baltimore Gas & Electric.
- Founder and codirector, Center for Production/Operations Management and Engineering, 1989-91. The center was jointly operated by the Merrick School of Business at the University of Baltimore and the School of Engineering at the University of Maryland.
- Chair, search committee for the department chair and faculty members, 1986-89; chair, search committee for production and operations management faculty, 1983-84; and chair, department committee on tenure and promotion, 1987-88.

#### **Fund Raising and Grants**

- Raised funds from the local community for an endowed chair and for faculty development at the University of Baltimore.
- Obtained two grants from the National Science Foundation, two from the US Department of Education through the Center for International Business Education and Research at the University of Maryland, two from the Government of India, two from Westinghouse, one from Baltimore Gas & Electric, and four from the University of Baltimore Educational Foundation.
- Obtained cash and in-kind support from external sources for the Production and Operations Management Society.

#### **Local Business Community**

***Business Advisory Council:*** Recruited a number of senior executives to serve on the school's advisory councils in 1985. Two of them, Aris Melissaratos and Nelson Sabatini, served as members of Maryland Governor Ehrlich's cabinet.

Also organized the POM Business Advisory Council at the Merrick School of Business, University of Baltimore, to support the school's programs and fund raising. The council included the president of Environmental Elements Corporation; vice presidents of Martin Marietta Baltimore Aerospace, Maryland Cup Corporation (now Fort Howard), McCormick & Company, Proctor & Gamble, and Westinghouse Electric Corporation; the deputy commissioner of the US Social Security Administration; and senior executives from AAI Corporation, Arthur Anderson, Baltimore Gas & Electric, Bendix Corporation, Bethlehem Steel Corporation, and IBM.

The council members advised on curriculum development, served as guest lecturers for classes, provided tours of manufacturing and service facilities, offered consulting opportunities, organized seminars on POM, obtained internships for students and faculty, and helped to place graduates. They also obtained contributions from these companies to the university's educational foundation.

**Alumni:** Worked with the alumni of the Merrick School on recruiting students, placing graduates, and developing curricula. Received the "Spirit of Excellence" Award from the University of Baltimore Alumni Association in 1987.

### **Major Roles in Faculty Governance**

**The MBA Curriculum:** Chaired the graduate curriculum committee of the Merrick School 1993-95, successfully building on three years' deliberations to develop and implement a rigorous MBA curriculum that met the AACSB standards, students' needs, and business' needs.

**Full-time MBA Program:** In 1994, at the dean's request, developed the structure for a one-year full-time MBA program, which was implemented in 1995.

**International Business MBA:** In 1993, coordinated development of an MBA specialization in international business at the University of Baltimore. Served as the advisor (1993-98) to implement and administer the specialization.

**AACSB Accreditation:** During 1993-95, played a major role in obtaining reaffirmation of AACSB accreditation of the Merrick School's programs: writing the mission statement, planning approaches to continuous improvements, and partnering with all constituents. The school's programs were re-accredited in 1995. Also worked for two years (1987-89) as part of the dean's team on accreditation of the school's programs.

### **Other Academic Service Roles**

**University of Baltimore:** Member, Dean's faculty advisory committee and the strategic planning committee, 1987-89; member of dozens of committees on computers, curriculum, library, research, service, and teaching (since 1983); and faculty advisor for

the student chapter of the American Production and Inventory Control Society, 1984-87.

**Indian Institute of Management, Bengaluru:** Chair, doctoral curriculum committee and member of the organization-based executive development program committee, the admissions committee, and library committee.

**Kent State University:** Member, university graduate council and the college of business graduate (master's and doctoral) program committee.

**Indian Institute of Technology (IIT), Bombay at Mumbai:** Founded the alumni association of IIT Bombay in 1967 and served as its first general secretary (president).

### **Other National and International Roles**

**Founder and Editor-in Chief, POMS Series in Technology and Operations Management,** a series of hardcover books. The first two books on supply chain management were cosponsored and financially supported by Dartmouth, Hong Kong University of Science and Technology, Stanford, and Vanderbilt and edited by professors at those schools.

**Founder the Institute of Management Sciences' (TIMS) College on Production and Operations Management,** 1987. Chairman of the college, 1987-1990. Director of the college, 1990-1994. The college, the largest subdivision of TIMS, merged with its counterpart in ORSA (Operations Research Society of America) to become Manufacturing and Service Operations Management Society, a subdivision of INFORMS, the society created by the merger of TIMS and ORSA.

**Consortia of Leading Business Schools:** In 1993, chaired a consortium of UC-Berkeley, Chicago, Columbia, Harvard, Michigan, Minnesota, Northwestern, and Purdue on quality management and another consortium of Columbia, Harvard, Indiana, and Stanford on international technology and operations management.

**Curriculum Standards for Business Schools:** In 2003, led a successful effort, including a petition drive, to persuade the AACSB (Association to Advance Collegiate Schools of Business), a global organization of business school deans, to include management science (analytics) in its accreditation standards for business schools. Signatories included Nobel laureates; deans of business schools at Carnegie Mellon, MIT, Northwestern, and Wharton; and senior executives from AT&T, GM, and Proctor & Gamble. See *OR/MS Today*, June 2003, "The Last Word," page 72, "Inside Story," and "President's Desk" in the same issue. Also see *OR/MS Today*, August 2003, "Petition makes the case." An indication of the importance of this initiative is that three years later, *Harvard Business Review* and *Business Week* (cover story) also published articles on the critical role analytics play in the functioning of the economy and on need to teach analytics to college students. Most business schools now require a course in business analytics or plan to do so.

### Other Professional Activities

- Served as an external reviewer for tenure, promotion, or university professorship at Arizona State University, Boston University, University of California at Davis, Cornell University, the University of Colorado at Denver, Florida International University, the University of Florida, Georgia State University, Harvard Business School, the University of Iowa, the University of Massachusetts, Ohio State University, the University of Oklahoma, the University of Oregon, Pennsylvania State University, the University of Utah, Vanderbilt University, Washington State University, and the University of Wisconsin.
- Editor-at-large, *Interfaces*, 1984-1994. Editor, special issue on automated manufacturing, *Interfaces*, 1987. Editorial advisory board, *Journal of Operations Management*, since 1986. Editorial Advisory Board, *Quality Management Journal*, 1998 - 2010.
- Referee: *Decision Sciences*, *IIE Transactions*, *Management of R&D and Engineering*, *Japan and the World Economy*, *Journal of International Business Studies*, *Management Science*, *Opsearch*, and *Studies in Management Sciences and Systems*.
- Reviewer of book manuscripts for several publishers.
- Member, Program Committee, ORSA/TIMS Conference on Flexible Manufacturing Systems, M.I.T. 1989. Member, national conferences on Expert Systems and Production Planning, University of South Carolina, 1988, 1989, and 1990.