

Saras D. Sarasvathy

3115 177th Pl. SW, Lynnwood WA 98037

Phone: (206) 221-5369

Fax: (206) 635-9392

Email: saras@u.washington.edu

Education

- May 1998: Ph.D., (Information Systems and Entrepreneurship)
Carnegie Mellon University
- August 1994: MSIA (MBA equivalent -- Concentrations in Entrepreneurship and Finance)
Carnegie Mellon University
- April 1980: B.Com. (Major in Statistics)
University of Bombay, India.

Work Experience

- 1998 – Present Assistant Professor of Entrepreneurship, University of Washington at Seattle
- 1999 – Present Batten Research Fellow at The Darden Graduate Business School, University of Virginia
- 1981 - 1991: Founded and operated a successful company in India -- manufacturing plastic blow-molded and injection-molded products including lubricant oil containers, gift articles, etc. Entrepreneurial experience includes several international ventures.

Awards and Honors

- ☞☞William H. Newman award for best single-authored paper out of a dissertation, annual meeting of the Academy of Management, August 2001 at Washington DC.
- ☞☞Research featured in several radio broadcasts and local, national, and international periodicals including Business Week (Aug 6, 2001), Entrepreneur Magazine (forthcoming Dec 2001), CIO Insight (forthcoming Oct 2001), The Herald (Scottish newspaper, Aug 14, 2001).
- ☞☞First Batten Research Fellow at The Darden Graduate Business School, University of Virginia (1999-2001)
- ☞☞Outstanding Contribution to Undergraduate Education Award (1998-99 and 1999-2000)

Grants Received

- 1998 – 2003 Buerk Faculty Fellowship in Entrepreneurship
- Summer 2001 CIBER summer research grant for international business and entrepreneurship
- 1996 - 1997 Kauffman Doctoral Dissertation Fellowship
- 1994 - 1996 Entrepreneurship Research Grant from the Ewing Marion Kauffman Foundation
- 1994 - 1997 William Larimer Mellon Doctoral Fellowship
- 1993 - 1994 Jerry Holleran Scholarship

Publications

- Sarasvathy, S. D. (Forthcoming) *Entrepreneurship as economics with imagination*, Business Ethics Quarterly.
- Sarasvathy, S. D. (2001) *Effectual reasoning in expert entrepreneurial decisions: Existence and bounds*, Academy of Management 2001 Meeting Best Paper Proceedings.
- Sarasvathy, S. D. (2001) *Causation and Effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency*, Academy of Management Review, 26(2): 243-288.
- Sarasvathy, S. D., with Venkataraman, S. (2001) *Strategy and Entrepreneurship: Outlines of an untold story*, In Handbook of Strategic Management, Michael Hitt, Edward Freeman, and Jeffrey Harrison, Eds. Forthcoming.
- Sarasvathy S. D., and Kotha, S. (2001) *Dealing with Knightian uncertainty in the new economy: The Real Networks case*, In Research on Management and Entrepreneurship, John Butler, Series Editor, IAP Inc. Greenwich, CT, Vol 1: 31-62.
- Sarasvathy, S. D. (2000) *Report on the Seminar on Research Perspectives in Entrepreneurship*, Journal of Business Venturing, 15(1): 1-58. (Participating authors: Kenneth Arrow, Morton Kamien, Mancur Olson, Donald Sexton, Herbert Simon, and S. Venkataraman)
- Sarasvathy, S. D., Simon, H. A, and Lave, L. B. (1998) *Perceiving and managing business risks: Differences between entrepreneurs and bankers*, Journal of Economic Behavior and Organization, 33(2): 207-226.
- Sarasvathy, S. D. (1997) *How do firms come into existence? Towards a theory of the entrepreneurial process*, Frontiers of Entrepreneurship Research-1997.

Under Review

- Sarasvathy, S. D., and Simon, H. A. *Effectuation, near decomposability, and the creation and growth of entrepreneurial firms*, Academy of Management Review.
- Sarasvathy, S. D. *Effectual rationality in entrepreneurial strategies: Existence and bounds*, Strategic Management Journal.
- Sarasvathy, S. D., and Kotha, S. *Effectuation in the management of Knightian uncertainty: Evidence from the RealNetworks case*, Academy of Management Journal.
- Sarasvathy, S. D., and Dew, N. *Of immortal firms and mortal markets: Dissolving "The Innovator's Dilemma,"* The Second Annual Technology Entrepreneurship Research Policy Conference, December 2001, Robert H. Smith School of Business, University of Maryland.
- Sarasvathy, S. D. *What makes entrepreneurs entrepreneurial?* Harvard Business Review.
- Sarasvathy, S. D., and Venkataraman, S. (2001) *Three Views of Entrepreneurial Opportunity*, In International Handbook of Entrepreneurship, Audretsch and Acs, Eds..

Working Papers

Single authored:

Models of causation and effectuation in expert entrepreneurial decision making: Testing predictions. Academy of Management Journal

Toward a plural notion of rationality, Academy of Management Review

Where does the entrepreneurial process end and the firm begin?, Strategic Management Journal

The case for effectuation: Tracing teleology through the history of causation, Administrative Science Quarterly.

The Artificial Nature of the Firm, American Economic Review.

With Menon, A. R. *Failing firms and successful entrepreneurs: Using surjectivity as a simple machine.* Administrative Science Quarterly.

With Moses, T. P. *Language and the entrepreneur: Theories of human development as implicit theories of firm growth,* Academy of Management Review (Special issue).

With Venkataraman, S. *Trade in Romeos and balconies: What entrepreneurship research has to offer strategy,* Strategic Management Journal

With Wicks, A. C. *Giving entrepreneurship its due: Ethics, economics, and contingent value creation,* Academy of Management Review.

Works-in-progress

Effectuation – Book develops the theory of effectuation in detail, presents evidence from protocol analysis study of the decision processes of 27 expert entrepreneurs who founded and built companies between \$200 M and \$6.5 B as well as other case studies and histories, and shows connections with ideas from economics, psychology, sociology and philosophy.

With Freeman, E. *Contingency, effectuation, and the strong poet in the economy,* Economics and Philosophy.

With Roseman, J. *50% and then some: Teaching effectuation.* (Text Book).

Invited Conferences

Sarasvathy, S. D., and Simon, H. A. (2000) *Near decomposability, effectuation, and the speed of growth of entrepreneurial firms*, presented at “The First Annual Technology Entrepreneurship Research Policy Conference,” May 19 and 20, 2000, Robert H. Smith School of Business, University of Maryland.

Sarasvathy, S. D. (1999) *Entrepreneurship as a solution to ethical problems in society*, presented at the conference on “Ethics, Entrepreneurship, and The Foundation of Capitalism,” Ruffin Lectures in Business Ethics, Oct 1-3, 1999, The Darden School, University of Virginia.

Teaching Experience

Sample evaluations of courses taught at the School of Business Administration, University of Washington (1998 – 2000)

Entrepreneurship (MBA Fall 2000)	(Rated 4.61 on a 1-5 scale)
Entrepreneurship (Undergraduate Spring 2000)	(Rated 4.65 on a 1-5 scale)
Strategic Management (PhD Fall 2000)	(Rate 4.83 on a 1-5 scale)

Doctoral Seminars Taught

Research methods exemplars (The Darden School, University of Virginia, Fall 1999)
Seminar on creativity (Joint between Darden and U. of Washington, Summer 2000)
Classics in strategy (University of Washington, Fall 2000)
Economic theories in strategic management (University of Washington, Winter 2001)

Courses taught at the Graduate School of Industrial Administration, Carnegie Mellon University, 1995-1998 (Evaluations for the different courses taught ranged from 3.52 to 4.80 on a 1 to 5 rating scale)

- ? ? Executive education: *Manual for Developing Continuing Education Programs in Entrepreneurship*, co-authored with Jack Roseman, John Thorne, and John Mather.
- ? ? Undergraduate: Developed and taught a new course titled “Technology-based Entrepreneurship” -- primarily for students of electrical and computer engineering, and computer science. Other undergraduate courses taught include Entrepreneurship I, Entrepreneurship II, Marketing, Introduction to Business Management, and Computer Workshops.
- ? ? MBA: Developed and taught a new module of “Consulting Entrepreneurship” for MBA students from the Ukraine.
- ? ? General: Taught several topics in business including the “People Express” simulation management game to international students (both MBA and undergraduate) of The Summer Institute.

Service

Outside the UW

- ☞☞ Board member, 2001 to 2003 -- Northwest Venture Group, Seattle, WA.
- ☞☞ Research Advisory Panel, 2000 -- National Commission on Entrepreneurship, Washington DC.

At UW

- ?? Curriculum Development Committee, Program in Entrepreneurship and Innovation, University of Washington, 1999-2001.
- ?? M&O Ph.D. Program Review Committee, 2000-01.
- ?? Strategy Faculty Recruitment Committee, 2000-01.
- ?? Research Committee (Summer funding), 2000-01.
- ?? MBA Curriculum Development Committee, M&O Dept. 2000-01.
- ?? Undergraduate Curriculum Development Committee, M&O Dept. 2000-01.

References

Lester B. Lave

Harry B. and James H. Higgins Professor of Economics and Finance and University Professor
Graduate School of Industrial Administration
Carnegie Mellon University
Pittsburgh PA 15213-3890
Phone: (412) 268-8837
Fax: (412) 268-7357
Email: ll01@andrew.cmu.edu

S. Venkataraman

Samuel L. Slover Research Professor of Business Administration
Darden Graduate School of Business Administration
University of Virginia
P.O. Box 6550, Charlottesville, Virginia 22906-6550
100 Darden Boulevard, Charlottesville, Virginia 22903
Phone: (804) 924-6892
Email: VenkatS@Darden.virginia.edu

Andrew C. Wicks

Associate Professor of Ethics in Management
University of Washington Business School
Box 353200
Seattle WA 98195-3200
Phone: (206) 543-7913
Email: acwekw@u.washington.edu

Current Research Projects leading to Future Streams of Publications

I am currently involved in two major empirical research projects, both of which contribute to a substantial theory-building effort in entrepreneurship research.

The theory of effectuation

Effectuation is the inverse of causation. The theory of effectuation essentially has to do with a type of reasoning that inverts causal reasoning and sets into motion a process that inverts principles of causation. Philosophical inquiries into causation have a history beginning with Aristotle and even earlier. Also, new insights into causation are being developed even today. Mackie's INUS condition is but one example.

But in the past hundred and fifty years, eminent philosophers and reputed researchers from several areas have begun to focus on and develop theories based uniquely on human action – as opposed to theories driven by the physical or biological sciences. From Marx's and Sartre's *praxis* to Peirce, James, Dewey, Mead, and Rorty's *pragmatism*, and Joas' *sociology of creative action*, this powerful tidal wave of intellectual developments provides the philosophical grounding for the theory of effectuation.

In our own areas of economics and management, effectuation integrates Knight's typology of uncertainty, March's garbage can model of decision making, and Weick's conception of enactment to provide a new basis for examining human action in general, and entrepreneurial decision making in particular. Effectuation brings its own unique "rationality" to decision making in the absence of pre-existent goals and environmental selection in a space permeated with Knightian uncertainty. Effectuation suggests that our normal conceptions of "rationality" are not only impotent in this space, but more importantly, "irrationality" or deviations from rationality need not be our only recourse in dealing with this space.

Empirical Project #1

The theory of effectuation is being formulated by me, along with several collaborators, using data from an intense exploratory research project that provides its empirical grounding. This project consists of protocol analyses of 27 expert entrepreneurs (founders of companies ranging in size from \$200 Million to \$6.5 Billion), each of whom spent two hours or more in solving ten typical decision problems that occur in the startup stage of a firm. Analyses are nearly completed of over 1500 pages of data, using traditional process tracing methods (used by cognitive scientists) and textual content analyses including both

quantitative and qualitative techniques. One or two peer-reviewed articles in premier empirical journals and several theoretical articles are expected from this project. The complete analysis with accompanying theoretical conclusions, however, is expected to be published as a peer-reviewed book.

Empirical Project #2

One of the predictions arising out of the theory of effectuation involves the decision making processes of investors in entrepreneurial firms. The theory suggests that on an average, angel investors will have a significantly higher rate of success (in terms of the proportion of firms surviving to firms funded) than venture capitalists, although venture capitalists might achieve higher rates of return on investment.

To test this prediction, I am supervising a doctoral thesis that involves working with the Alliance of Angels in Seattle and the Band of Angels in Silicon Valley to gather data from the ground up. While there are good sources of data available on venture capitalists, very little has been done to gather data on other types of investors. For example, we do not even have credible data on how many firms are financed by angels, or how many of those firms survive over substantial periods of time. This second project is designed to remedy that situation not only for the purposes of testing the above-mentioned hypothesis, but to create a comprehensive data set that can then be used for answering several other research questions in entrepreneurship and new venture financing.

Empirical Project #3

Effectuation challenges both the assumption of pre-existing markets and the economic inevitability of outcomes based on that assumption. If markets do not pre-exist and get created in an endogenous fashion within economic processes, it would make sense to empirically trace the births of new markets, and perhaps also to witness their deaths. One way to do that is to tackle the source of new markets in the commercialization of new technologies. In partnership with Battelle, the Pacific Northwest National Labs of the US Department of Energy, I am engaged in the design and supervision of a research project leading to a doctoral thesis examining how new markets come to be. Battelle employs over 1,800 scientists and creates 300 new technologies on an average per year. In the past approximately 65 of these reach the commercialization phase. This provides us with a rigorous setting to understand how and under what circumstances new markets get created and when pre-existing markets are key to commercialization success.