

ANANYA SHETH

Post-doctoral Research Fellow, School of Business, Stevens Institute of Technology
email: asheth5@stevens.edu

EDUCATION AND TRAINING

School of Business, Stevens Institute of Technology Post-doctoral Research Fellow at the Consortium for Corporate Entrepreneurship <u>Research focus:</u> <ul style="list-style-type: none">• Understanding leadership behaviors and tactics for implementing organizational ambidexterity in large incumbent firms• Understanding organizational barriers to successful scaling of innovations• Defining exploratory innovations in terms of value-creation uncertainty	Fall 2023
The Institute for Innovation Science, Purdue University The Lyles School of Civil Engineering Ph.D. concentration: Innovation and Transformational Design <u>Dissertation title:</u> <i>Pathways to Enterprise Resilience: Building risk and opportunity intelligence for resilience in large companies</i>	2021
The Lyles School of Civil Engineering, Purdue University Master of Science	2016
The department of Civil Engineering, Manipal Institute of Technology, India Bachelor of Engineering	2012

RESEARCH

Focal research area

Understanding innovation archetypes and the scaling of non-digital innovations in large incumbent firms.

Core peer-reviewed publications

1. Sheth, A., & Sinfield, J. v. (*Forthcoming 2023*). Risk Intelligence and the Resilient Company. *MIT Sloan Management Review*.

The article describes a process to build risk and opportunity intelligence for resilience across a wide range of changing business contexts.

Impact factor: 3.177

ABS-3

FT-50

2. Sheth, A., & Sinfield, J. v. (*2022*). An analytical framework to compare innovation strategies and identify simple rules. *Technovation*.

The article introduces a framework to compare innovation strategies on a common basis and identifies simple rules for archetypal innovation forms.

Impact factor: 11.373

ABS-3

3. Sheth, A., & Sinfield, J. v. (2021). Systematic problem-specification in innovation science using language. *International Journal of Innovation Science*.

The article develops a framework and an AI-based tool for the ideation phase in front-end innovation management in small and large companies.

Impact factor: 3.19 *ABS-1*

Papers under review

1. Bishop, S., DiPaola, M., Hill, L., Koen, P., & Sheth, A. Implementing Ambidexterity in Large Companies. *Harvard Business Review*. **3rd round revise & resubmit** submitted on Dec 10, 2022.

The article describes the precise leadership tactics needed to implement organizational ambidexterity and succeed at scaling capital-intensive exploratory innovation programs in large incumbent firms.

Impact factor: 6.87 *ABS-3* *FT-50*

2. Collective leadership in Top Management Teams (TMTs): Individual behaviors and TMT performance. **Reject & resubmit - Organization Science**.

The article introduces a formal organizational model based on swarm intelligence to better understand collective and emerging leadership in TMTs.

Impact factor: 5.152 *ABS-4** *FT-50*

3. Morkan, B., Bertels, H., Sheth, A., & Holahan, P. Building Megaproject Resilience with Stakeholders: The Roles of Citizenship Behavior and Critical Transition Mechanisms. *International Journal of Project Management: Special Issue on Resilience in Project Studies*. **3rd round revise & resubmit** due on April 2, 2023.

The case study introduces a theoretical model for critical transition mechanisms of scaling project-level resilience from individual-level stakeholder behavior.

Impact factor: 9.073 *ABS-2* *ABDC-A*

Papers in-preparation

4. "Where to play?" A Typology of Explorations for Large Incumbent Firms - *Academy of Management Review*. **

Authors: Anan Sheth and Peter Koen

The article provides nuanced understanding of exploratory innovations based on value-creation uncertainty.

Impact factor: 13.856 *ABS-4** *FT-50*

** *Friendly review by Professor Mike Tushman of Harvard University.*

5. Variations in firm riskiness and their causes: An industry-firm multi-level analysis - *Management Science*.

Authors: Anan Sheth, Rachna Shah, and Joseph V. Sinfield

The article introduces a data and machine learning method to generate risk profiles for S&P 500 firms and enables between-firm and between-industry risk profile comparisons.

Impact factor: 6.172

*ABS-4**

FT-50

Non-core peer-reviewed publications

1. Sheth, A., & Kusiak, A. (2022). Resiliency of Smart Manufacturing Enterprises via Information Integration. *Journal of Industrial Information Integration*.

The article conducts a systematic literature review of risk and resilience in manufacturing and introduces a framework for resilience based on complex adaptive systems theory.

Impact factor: 11.718

2. Sinfield, J. v, Sheth, A., & Kotian, R. r. (2020). Framing the Intractable – Comprehensive Success Factor Analysis for Grand Challenges. *Sustainable Futures*.

The article builds an improved method for the problem-framing process for wicked problems based on holism and computing

Impact factor: 2.8

Invited talks

1. Scaling capital-intensive innovation programs in large-incumbent firms. *Jake Jabs College of Business and Entrepreneurship, Montana State University*.
2. Defining a typology of exploratory innovations in large-incumbent firms. *Stevens School of Business, Stevens Institute of Technology*.
3. A comprehensive typology of complex supply chain risk networks. *Complex Adaptive Supply Networks – Research Accelerator, Arizona State University*

Refereed conference papers

1. Morkan, B., Bertels, H., Sheth, A., & Holahan, P. (2023). Managing with stakeholders: Citizenship behavior action strategies for mega project resilience. *Eastern Academy of Management*.
2. Sheth, A., & Sinfield, J. v. (2019). Simulating self-organization during strategic change: Implications for organizational design. *ACM SIGCHI - Collective Intelligence*.
3. Sheth, A., & Sinfield, J. v. (2018). Applying ‘simple-rules’ to simulate managerial adaptation to strategic change. *European Group for Organizational Studies*.

TEACHING EXPERIENCE

Instructor at the School of Business, Stevens Institute of Technology

MGT-103: Introduction to Entrepreneurial Thinking

Mandatory course for first-year engineering students (550+ students)

2021 –
Present

Key course tenets:

- Teaching *entrepreneurial thinking* as a process to engineers, i.e., to hone a systematic and customer-needs centric approach to problem definition and apply lean start-up methods to conduct rapid hypotheses testing in solution validation and development.
 - Students identify jobs to be done, build an MVP, and test it via lean start-up.
- Teaching engineers to effectively communicate complicated product solutions.
 - Students build explainer videos, which are put out to university-wide voting for monetary awards and recognition.
- Using active learning methods such as flipped classroom to instill teamwork, coordination, and leadership.
 - The course uses 5 case studies, and 2 simulations from the Harvard Business School Publishing teaching resource stack.

PROFESSIONAL MEMBERSHIPS

- Academy of Management (AOM)
- Institute for Operations Research and the Management Sciences (INFORMS)
- European Group on Organization Studies (EGOS)
- Industry Studies Association (ISA)
- The Society for Decision Making Under Deep Uncertainty (DMDU)
- International Society for Professional Innovation Management (ISPIM)
- Association of Computing Machinery (ACM)
- The Prosocial Institute

AWARDS AND EXTERNAL FUNDING

1. Co-PI on an NSF grant awarded by the Decision, Risk, and Management Science program, Division of Social and Economic Sciences, National Science Foundation **Awarded** 2020
Grant Title: Building a comprehensive understanding of enterprise risks and their interdependencies for improved risk-intelligence **Closed** 2021
Award amount: \$37,975.00 | Average success rate: 1 in 10
2. Best social innovation business plan award by the Burton D. Morgan Business Model Competition, Purdue University 2021
3. Travel grant by the Purdue University Graduate School 2019
4. Scholarship recipient of the Construction Management Association of America 2015
5. Finalist at a global innovation challenge by Schneider Electric 2012

PROFESSIONAL REFERENCES

Referee #1	Joseph V. Sinfield Professor of Civil Engineering Director of the Institute for Innovation Science Director of the College of Engineering Innovation and Leadership Studies Program Purdue University West Lafayette – Indiana – USA Email: jvs@purdue.edu Relationship: Ph.D. mentor and co-author
Referee #2	Peter A. Koen Associate Professor Director of the Consortium for Corporate Entrepreneurship Stevens School of Business Stevens Institute of Technology Hoboken – New Jersey – USA Email: pkoen@stevens.edu Relationship: Post-doc mentor and co-author
Referee #3	Rachna Shah Professor, Supply Chain and Operations Department Carlson School of Management University of Minnesota Minneapolis – USA Email: shahx024@umn.edu Relationship: External mentor and co-author
Referee #4	Heidi Bertels Associate Professor and Blackstone LaunchPad campus co-director, Chazanoff School of Business – CUNY College of Staten Island New York – USA Email: professorbertels@gmail.com Relationship: Co-author
Referee #5	Patricia Holahan Professor, Stevens School of Business (ex officio) Stevens Institute of Technology Hoboken – New Jersey – USA Email: pholahan5@gmail.com Relationship: Co-author

INDUSTRY EXPERIENCE

Researcher , Purdue and Stevens projects with the <i>Procter & Gamble Co.</i> Engaged in focused research projects with the P&G's Corporate R&D, and Feminine Care and Oral Care Business Units	2018 – 2022
Research fellow , <i>DigitalDx Ventures</i> Participated in developing the organization structure for their first venture fund	2020
Research fellow , <i>Purdue Ventures</i> Led due diligence for an early-stage Purdue-licensed technology for a \$500,000 seed funding round	2019
Assistant Project Manager , <i>V Create Architects</i> Led the delivery for two construction projects ~67,000 sft. of space on time and within budget	2012 – 2014

EXTRA-CURRICULAR ACTIVITIES

- Karate – Goju Ryu (7th Kyu)
- Art of Living member
- Founding member of 'Tatvam' a fusion music band at Purdue
Performed 50+ music shows in Indiana and Illinois
- Co-founder at *V Create Games*, a web-platform for riddles and puzzles