

STVP

Stanford | ENGINEERING
Management Science & Engineering



STVP

Stanford
Engineering
Entrepreneurship
Center

2022 ANNUAL REPORT





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OUR VISION

Empowering aspiring entrepreneurs to become global citizens who create and scale responsible innovations.

Celebrating 25 Years of Innovation

FOUNDED IN 1997 AS ONE OF THE FIRST UNIVERSITY ENTREPRENEURSHIP CENTERS situated in an engineering school, STVP has been fortunate to play a central role in catalyzing entrepreneurship education throughout the world. We've done so with a focus on advancing the study of entrepreneurship through rigorous, scholarly research, and on making entrepreneurship accessible to students from all disciplines — including lifelong students around the globe.

As we look back on 25 years as the Stanford Engineering Entrepreneurship Center, we have much to celebrate. Some of the highlights you'll read about in the coming pages include:

- Our students and alumni—including more than 500 fellows and counting—who have launched cutting-edge ventures, made an impact in venture capital, and transformed organizations for the better.
- STVP's dedicated research and teaching faculty and our more than 60 PhD graduates, now teaching in prestigious institutions worldwide. STVP research continues to illuminate how — and why — some approaches to entrepreneurship succeed while others fail.
- The “lean startup” method was first piloted in the STVP Lean LaunchPad classroom. Now taught in more than 200 universities around the world, “lean” has also spawned topical courses regarding national security and climate and sustainability, as well as award-winning research by STVP faculty into the inner-workings of the method.
- The impact and influence STVP has made around the globe through eCorner and the Entrepreneurial Thought Leaders seminar series, PEAK (Principled Entrepreneurship: Action & Knowledge), and through global academic partnerships.

And we are only getting started. This past year, we unveiled a fresh, new vision statement to guide us into the next era of entrepreneurship research and education: *Empowering aspiring entrepreneurs to become global citizens who create and scale responsible innovations.*

We strongly believe that it's not enough to teach entrepreneurial skills. The future of entrepreneurship — and, indeed, our planet — requires leaders who are rooted in ethics, act in the interest of others, and scale solutions that elevate joy, health, and prosperity for all. As humanity grapples with dilemmas of extraordinary complexity and global scale, STVP is leading a movement to educate leaders who will solve the major challenges of the 21st century.

For entrepreneurship to be a pathway to societal change, it also has to be equitable and inclusive — across backgrounds, disciplines, and geographies. Through our on-campus engagement with first-generation and low-income students, and our Learning Paths initiative to show students the multitude of roads one can take to study entrepreneurship, we aim for STVP to be the place where all Stanford students can come to develop an entrepreneurial mindset. And our Entrepreneurial Thought Leaders series remains free and available around the globe, with an increasingly diverse roster of founders sharing their journeys and lessons.

In this report, we are thrilled to share how STVP will take entrepreneurship education to new frontiers through our three strategic action areas:

- We create and deliver teaching and learning approaches that develop entrepreneurs as global citizens
- We advance ground-breaking research on technology entrepreneurship and innovation
- We scale responsible innovation practices with stakeholders in communities around the world.

We are incredibly grateful to the many friends and supporters who have contributed to our first 25 years with their time, talent, and resources. Your participation has made it possible to experiment with bold new approaches to entrepreneurship education and to sustain and scale the best of these experiments.

As we look to the future and the opportunity to ensure that the entrepreneurship ecosystem lives by our core values of ethics, equity, and sustainability, we have never been more excited and motivated. We welcome your input, collaboration, and support as we embark on another 25 years of impact.

Sincerely,



Tom Byers
Faculty Director



Riitta Katila
Faculty Director



Mo Fong
Executive Director

25 Years of Impact in Entrepreneurship Education and Research

1996

Launched STVP's Mayfield Fellows Program. It has since grown to multiple fellows programs that focus on students and faculty and boasts over 500 alumni.

1997

School of Engineering Dean John Hennessy formally launched STVP after a two-year startup phase.

2002

STVP launched Entrepreneurial Thought Leaders podcast and video series and eCorner. Today they attract more than three million touch points and are used by over 500 schools annually.

2007

Hosted first of 50 Roundtables on Entrepreneurship Education at Stanford, then on six continents.

Tom Byers and Tina Seelig won National Academy of Engineering Gordon Prize for contributions to engineering education.

2009

2011

Offered first Lean LaunchPad startup methods course. Now taught at over 200 universities, the course is also the core offering for NSF's Innovation Corps, which has provided over 1,000 startups with more than \$760 million in funding.

Established Endowed Entrepreneurship Chair, held by Tom Byers.

2012

Created NSF's Epicenter and launched University Innovation Fellows, which now helps students at over 250 schools develop system thinking skills and learn design approaches that empower them to be change agents in higher education.

Offered first session of Accel Leadership Program, which develops entrepreneurial leaders through case-based team learning.

2014

2015

Convened first cohort of the Threshold Venture Fellows program, giving master's students a front-row seat to the world of venture creation.

Delivered global programs for educators with custom curricula in Chile, Finland, Malaysia, Mexico, the UAE, and in prisons across the US.

2016

2019

Began PEAK: Principled Entrepreneurship: Action & Knowledge, offering courses on ethics and entrepreneurship starting with Principled Entrepreneurial Decisions, followed by Inventing the Future (2020).

The Academy of Management, the largest and most prestigious body of management studies scholars, awarded Kathleen Eisenhardt its Strategic Management Division Distinguished Scholarship Award and inducted Riitta Katila as a Fellow.

2022

2021

Expanded leadership to include Executive Director Mo Fong from Google and Assistant Professor Alicia Sheares from UC Berkeley.

Riitta Katila named the W. M. Keck Sr. Chaired Professor of Management Science. Jack Fuchs appointed Director of Principled Entrepreneurship.

Convened first cohort of the PEAK Fellows program, in which students develop their personal principles for entrepreneurial leadership.

Our Commitment to Diversity, Equity, Inclusion, and Belonging

STVP is committed to dismantling systemic barriers and forging more equitable pathways for educational, vocational, and personal achievement, especially for those historically underrepresented in entrepreneurship education and research. We are working to foster change through our courses, programs, research, and community building that are highlighted in the pages ahead. Below is our DEIB statement, which can also be found at stvp.stanford.edu/equity.

We See Systemic Inequity

- We see the murders of George Floyd, Breonna Taylor, and too many other Black people and the rise in anti-Asian violence.
- We see the closure of Black, Latinx, immigrant, and female-owned businesses at substantially higher rates during COVID-19.
- We see that Americans with disabilities experience inequitable treatment by the justice system, access to health care, and employment.
- We see LGBTQIA+ people barred from accessing health care, facilities, and resources.
- We see how the wealth gap more than doubled between America's richest and poorest families from 1989 to 2016.

We are committed to mobilizing entrepreneurship education and research to dismantle the barriers that perpetuate and exacerbate injustices and inequities and to use our influence to foster a society where every human is safe and respected for their human dignity.

We Have a Role

Entrepreneurship and innovation are seen as a means for social mobility and prosperity, even though many in society have not reaped the benefits or opportunities. As educators and researchers, we must examine and update our approaches to deliver on the promise of personal and societal well being.

STVP's Three Levers to Foster Change

1. Normalize narratives of entrepreneurs and innovators who are Black, Latinx, indigenous, those who are/were first generation and/or low-income students, and others historically underrepresented in entrepreneurship and innovation education.
2. Equip aspiring entrepreneurs and innovators with strategies that enable them to a) combat geographic, socio-economic, and demographic barriers and prejudices, and b) succeed in a variety of cultural and geographic environments.
3. Increase the diversity of the students and faculty who engage with STVP offerings and, broadly, who engage in entrepreneurship and innovation educational opportunities.



Teaching Aspiring Entrepreneurs



We believe that entrepreneurship is about much more than starting companies—it's also a pathway to personal growth and societal change.

That's why we create and deliver teaching and learning approaches that develop entrepreneurs as global citizens, encouraging innovation that is strategically advanced, research-informed, and designed for positive impact on stakeholders and communities around the globe. From courses and immersive fellows programs to skill-development workshops and small group events, STVP offers transformative opportunities to ALL Stanford students.

Through STVP, Stanford students from a diverse range of backgrounds and academic disciplines gain access to a dynamic, engaged community of talent and immerse themselves in Stanford Engineering's spirit of groundbreaking technology innovation. Students who engage deeply with STVP go on to leverage these skills and connections as they build careers as responsible technologists, founders, investors, social entrepreneurs, and change agents in organizations large and small.



Course Spotlights

Principled Entrepreneurial Decisions

In this highly interactive course, students develop their own values and principles that they can take wherever their career and life pursuits lead. Through cases about such companies as Bloom Energy, Tableau, Cloudflare, and RobinHood, students discuss situations with no right or wrong answer; rather, the answer depends on one's principles. The case protagonist listens to the class conversation, then shares what decision they made, and what principles they drew on. The students also perform role-play exercises and employ a series of frameworks that guide them through the process of developing their principles. Now in its fifth year and taught by Management Science & Engineering adjunct lecturers Jack Fuchs and Scott Sandell, Principled Entrepreneurial Decisions has become a core pillar of STVP's efforts to steer students toward principles-driven entrepreneurial leadership and innovation.



“Principled decision-making leads to better outcomes and vital benefits for humanity. We believe strongly that students should develop their own principles, rather than have a particular ethical framework imposed upon them. This course provides them with the tools they need for that development. By adopting their own principles, they are more likely to live their lives and careers accordingly, influencing others to do the same.”

Jack Fuchs

Director of Principled Entrepreneurship,
STVP and Adjunct Lecturer, MS&E

Entrepreneurship without Borders

How and why does access to entrepreneurial opportunities vary by geographic borders, race and gender, or other barriers created by where or who you are? What are the unique issues involved in creating a successful startup in an emerging economy? Is Silicon Valley-style entrepreneurship possible in other places? What is entrepreneurial leadership in a venture that spans countries? In this course, students work in teams to create mentor-guided startups and learn how to develop them in international markets. Taught by Management Science & Engineering associate professor Chuck Eesley and adjunct lecturer Vimbayi Kajese, the course utilizes case studies, research on the unequal access to wealth creation and innovation via entrepreneurship, and networking with top entrepreneurs and venture capitalists who work across various forms of borders.

“Coming from Nigeria, I have always been interested in minimalist entrepreneurship: how can we use the bare minimum to solve the most pertinent problems in our world today? I began the class wanting to see how entrepreneurs around the world are using resources to be efficient, but ended up learning so much more. From lectures about emerging technologies in Asia to discovering innovative solutions to alleviate consumerism in Ukraine, my perspective on theoretical entrepreneurship expanded beyond what I could even imagine.”

Temí Bólódeòkú

MS&E Graduate Student



TEACHING AT A GLANCE

3,000+

Annual Enrollments

40

Affiliated courses

serving students
from across Stanford

Teaching Honors

Our faculty have been recognized both at Stanford and nationally for their exemplary teaching. Honors have included:

Bernard M. Gordon Prize for Innovation in Engineering and Technology Education:

Tom Byers and Tina Seelig
From The National Academy of Engineering

Department Teaching Award:

Kathleen Eisenhardt
From the Department of Management Science & Engineering

Eugene L. Grant Undergraduate Teaching Award:

Tom Byers, Chuck Eesley, Kathleen Eisenhardt (2), Riitta Katila, Robert Sutton
From the Department of Management Science & Engineering

Graduate Teaching Award:

Tina Seelig, Robert Sutton
From the Department of Management Science & Engineering

Richard W. Lyman Award: Tina Seelig
For extraordinary service to the alumni community and Stanford Alumni Association programs

Tau Beta Pi Teaching Honor Roll:

Tom Byers, Riitta Katila, Tina Seelig
For exceptional teaching in Stanford's School of Engineering

Walter J. Gores Award: Tom Byers
Stanford University's highest award for teaching



Fellows Programs

While our courses reach thousands of students across Stanford, our fellows programs provide opportunities for intimate cohorts of student leaders to build entrepreneurial skills and mindsets and create strong networks that last a lifetime. Our fellows join a vibrant, growing community of more than 500 fellows program alumni who collaborate, mentor, advise, invest, and keep the entrepreneurial fire burning.

The Mayfield Fellows Program, supported by Mayfield and launched at the dawn of STVP, is led by Tom Byers, Professor, MS&E and Faculty Director, STVP; and Ann Miura-Ko, Adjunct Lecturer, MS&E. The program enables undergraduate and co-term students to develop leadership skills for responsible tech ventures.

The Accel Leadership Program, supported by Accel and led by Tom Byers and Mo Fong, Executive Director, STVP, trains technically-minded juniors, seniors, and grad students to solve real-world problems via case-based team learning.

The Threshold Venture Fellows program, supported by Threshold and led by Heidi Roizen, Adjunct Lecturer, MS&E, enables Engineering master's students to develop leadership skills for the venture ecosystem.

PEAK Fellows, a new student-led program, invites Stanford undergraduate and co-term students to develop guiding principles for entrepreneurial leadership. It's supported by Pear VC and co-led by Tom Byers; Jack Fuchs, Director of Principled Entrepreneurship, STVP and Adjunct Lecturer, MS&E; and Mar Hershenson, Adjunct Lecturer, MS&E.



“Mayfield gave me a strong community of mentors that I can lean on to help me through early career decisions and lasting friendships that bring out the best in me and challenge me to be my better self every day.”

Pao Martinez
MFP Fellow '19

Learning Paths

Stanford offers a rich array of opportunities for students to develop as entrepreneurs, from courses and fellows programs to student clubs and accelerators. But the abundance of choice can be challenging to navigate, and not all students arrive on campus knowing how they can benefit from entrepreneurship programs or make entrepreneurship a sustainable career.

To invite students to explore entrepreneurship and support them on their journeys, STVP has launched Learning Paths, a project to demonstrate the paths taken by a diverse array of Stanford students. As we share more students' experiences and showcase the variety of paths one can take, STVP is helping ensure students of all backgrounds and experience levels feel included and empowered to boldly chart their own entrepreneurship trajectory.

Our hope is that all students, whether they start companies or work as leaders in any industry, can learn to have an entrepreneurial mindset.

“I came to Stanford with no entrepreneurship experience... STVP guided me towards courses that inspired me. Professor Katila’s MS&E 175 brought in leaders from PayPal’s product innovation lab, which catalyzed my interest in product management and creative cultures. I then joined the founding team of a startup as product manager during my gap year.”

Michelle Schwartzman

MS&E '23



MICHELLE'S LEARNING PATH

MS&E 180
Organizations:
Theory and
Management

**Cardinal Ventures
& Stanford Women
in Business**

MS&E 193
Technology and
National Security:
Past, Present, and
Future

MS&E 175
Innovation,
Creativity, and
Change

**Stanford in
Florence &
PEAK
Fellows**

Hacking for Climate Brings In New Era of Lean

This January, more than 30 Stanford students — engineers, physical and social scientists, MBAs, and law and policy students — formed startup teams and began tackling the climate crisis head-on. They were part of Hacking for Climate and Sustainability, the latest STVP-affiliated course to spin off from Lean LaunchPad, which marked its tenth anniversary in 2021.

In this latest iteration, which was initiated by STVP adjunct lecturer Steve Weinstein, budding innovators explored how “lean startup” methods could deliver new solutions to the climate crisis. They attacked problems like deforestation and wildfires, and dug into potential solutions like ocean energy and carbon sequestration, interviewing key stakeholders and piloting interventions like ocean carbon dioxide removal using kelp, and electronic repair and reuse in Kenya.

The “lean startup” movement began to coalesce when serial entrepreneur Steve Blank retired from startup life and began teaching in the early 2000s. This gave Blank time to reflect on the patterns he’d observed during his career in startups. As he thought about how to share his insights with students, he began to circle around one particular idea: That startups weren’t simply smaller versions of large companies, but utterly unique entities, and treating a startup like a large company is setting yourself up for failure. “Large businesses execute known business models,” he observed in his 2016 Entrepreneurial Thought Leaders talk. “Startups don’t execute known business models. Startups search for business models.”

This observation undergirds Lean LaunchPad, the course Blank developed as an adjunct professor in MS&E, fusing Alexander Osterwalder’s business model canvas and emerging insights about agile engineering into a powerful framework that soon became known as “lean startup.” The method encourages entrepreneurs to reach potential customers early, test their own assumptions, and rapidly iterate as their assumptions are proven either right or wrong. Rather than simply teaching business concepts, Blank made Lean LaunchPad a fully experiential course. Students practiced entrepreneurship by piloting actual startup ideas with potential customers.

In 2011, Lean LaunchPad became the basis for the National Science Foundation’s I-Corps program, which has since trained more than 5,800 NSF-funded scientists in entrepreneurship and given birth to more than 1,000 companies. In 2016, the Hacking for Defense program began applying lean startup strategies to military innovation. What started as a Stanford pilot has become a Department of Defense-sponsored initiative that leverages the engineering talents of students at more than 50 universities around the country. Other mission-driven entrepreneurship classes like Hacking for Diplomacy and Hacking for Oceans soon joined the Lean LaunchPad family, and Hacking for Climate and Sustainability joined the series this year. Through the nonprofit Common Mission Project, Hacking courses are now taught at 60 colleges and universities around the world.

Today, the lean startup method is fundamental to the way many entrepreneurs and early-stage investors around the world think about the process of scaling a new idea or technology.

“It’s incredible to teach Hacking for Climate and Sustainability and work with our students as they tackle some of the biggest, most pressing challenges facing our world,” said Weinstein, who leads the teaching team and is director of H4XLabs. “To watch our students learn the lean methodology and apply it to solving problems involving climate, oceans, and energy is not only exhilarating, it gives me so much hope for our planet’s future.”

“Above all, Hacking for Climate and Sustainability centered true challenges of people experiencing or fighting the climate crisis. As our team dove into the wildfire prevention problem, we were lucky to speak with homeowners, fire professionals, agencies, grassroots organizations, and indigenous tribal members about their work. We emerged realizing the importance of agile thinking and evolving our creative ideas to meet our potential partners where they’re at. Today, we’re continuing a project born out of the class, partnering with land stewards and local artists to mint NFTs that will fund ecological restoration, land reclamation, and wildfire prevention.”

Eric Bear & Tule Topping Horton

Hacking for Climate and Sustainability, 2022



HACKING FOR CLIMATE & SUSTAINABILITY

Teaching Team

Chris Field

Melvin and Joan Lane Professor of Interdisciplinary Environmental Studies and Professor of Earth System Science, of Biology and Senior Fellow at the Precourt Institute for Energy

Radhika Malpani

Founder and Former Lead of Google Images

Brian Sharbono

Associate Director, Programs, Stanford Woods Institute for the Environment

Steve Weinstein

Director, H4XLabs

Course Advisors

Steve Blank

Entrepreneur turned Educator

Tom Byers

Entrepreneurship Professor in the School of Engineering

Joe Felter

Senior Research Scholar

TEN YEARS OF LEAN

I-Corps

5,800

Scientists

1,280

Universities/
Institutions

1,036

Startups
+ \$760m funding raised

Lean LaunchPad

Alumni Companies include:

Blue River Technologies (intelligent see-and-spray agriculture tech)

Firefly (intelligent outdoor ads on rideshares)

FreeWill (digital wills and bequests with a philanthropic bent)

Nova Credit (access to international credit data)

Senreve (luxury handbags for modern professionals)

Zum (on-demand rides and care for kids)

Hacking for Defense

55

Scientists

2,000

Students

25

DoD Repeat
Sponsors

55

Startups Formed

Advancing Groundbreaking Research



Does government funding help or hurt new ventures?

How well do doctors perform as executives of medical device startups?

Which matters more: the industry environment or the founding team?

Does antitrust legislation spur innovation or slow it down?

Research by Management Science and Engineering faculty and PhD students affiliated with STVP creates a deep understanding of start-up performance and growth, technology innovation, and entrepreneurial policy. Our rigorous approach provides accessible insights that entrepreneurs apply in practice, while also improving the theoretical understanding of entrepreneurship.



RESEARCH SPOTLIGHT

The Rise of Entrepreneurial Policy

How do government incentives and regulations impact scientific research, innovation, commercialization, and entrepreneurial activity?

How do social norms, surrounding institutions, and supports — from academic institutions to social movements and capital structures — affect the development of new technology ventures?

Management science research on entrepreneurship is exploring areas where policy, firm strategy, and geography intersect — and STVP is leading the way.

“While there has been significant research interest in how firms innovate and compete, including by impacting public policy, this entrepreneurial policy research looks at how regulatory regimes and institutional and social norms both enable entrepreneurial activities and set boundaries on those activities, particularly in new and rapidly shifting markets,” observes Riitta Katila, STVP faculty director and the W. M. Keck Sr. Chaired Professor of Management Science. “Questions like these used to belong to the realms of political science and economics, but management science can provide a new perspective.”

In a study of regulatory influences on innovation, Katila and her coauthor, Sruthi Thatchenkery, an assistant professor at Vanderbilt University and STVP-affiliated PhD graduate, examined the U.S. government’s lawsuit against Microsoft for bundling its web browser and operating system (in press for the *Strategic Management Journal*). The researchers showed that in the years that

followed the legal challenge, competition in the software industry actually increased, and that fueled more product launches among companies seeking to gain share in a market that could once again accommodate more players.

“Competition goes hand in hand with software innovation,” Katila says about the findings. “When there are only a handful of big players in an industry, there are limited approaches to solving technology problems. When you kill variety, you kill innovation.”

While questions related to antitrust regulation are coming to the fore as a place where firm strategy and policymaking meet, the speed of digital innovation poses new problems for scholars.

“With digitization, decentralization, and the importance of inclusiveness driving new questions in entrepreneurial policy, the thought-provoking work being done by STVP scholars will further expand our thinking,” Katila says. “I’m excited to see what new research questions and innovative empirical approaches our students pursue in the years to come.”

Key entrepreneurial policy papers by STVP-affiliated faculty, PhD students, and alumni:

PUBLICATIONS

Antitrust Intervention in Platform Ecosystems and Implications for Complementor Firms
Sruthi Monica Thatchenkery and Riitta Katila
Strategic Management Journal, 2022

Enabling Technologies and the Role of Private Firms: A Machine Learning Matching Analysis
Jason M. Rathje and Riitta Katila
Strategy Science, 2020

The dark side of institutional intermediaries: Junior stock exchanges and entrepreneurship
Robert N. Eberhart and Charles E. Eesley
Strategic Management Journal, 2018

How entrepreneurs leverage institutional intermediaries in emerging economies to acquire public resources
Daniel Erian Armanios, Charles E. Eesley, Jizhen Li and Kathleen M. Eisenhardt
Strategic Management Journal, 2016

DISSERTATIONS

Collaborative Innovation: The Antecedents, Consequences, and Valuation of Technological Resource Contributions
Jiang Bian, '21, Assistant Professor in Management and Strategy, The University of Hong Kong

Essays on Public Funding for Private Innovation
Jason Rathje, '19, Partner, AF Ventures, AFWERX, U.S. Air Force

Entrepreneurial Strategies in Institutional Changes: Tackling the Conflicts Between New and Old Rules
Willow Wu, '21, Assistant Professor, The Chinese University of Hong Kong

When New Markets and Powerful Institutions Collide: How Mission-Driven Entrepreneurs Form Strategy, Organize, and Compete
Eric Volmar, '21, Chief of Research & Analytics at AFWERX, U.S. Air Force



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Riitta Katila

W.M. Keck Sr. Chaired Professor of Management Science and STVP Faculty Director

Meet Our PhD Students

Working with Management Science & Engineering research faculty, the PhD students affiliated with STVP study crucial questions that face entrepreneurs, investors, and policy-makers around the world. They go on to become thought leaders in entrepreneurship and innovation.



Wajeeha Ahmad

Research interests: The intersection of digital platforms, entrepreneurship, and platform regulation; the role of digital platforms in enabling responsible entrepreneurship and innovation, and creating shared prosperity



Parisa Assar

Research interests: The role of ethical principles and moral values in the realm of responsible innovation and entrepreneurship



Christopher Flowers

Research interests: The intersection of organizational behavior, psychology and entrepreneurship, and how personal identities and experiences influence entrepreneurial success.



Khonika Gope

Research interests: Strategy in innovative entrepreneurs and team dynamics in new ventures, how institutions affect entrepreneurship and innovation, and how power and politics play a role in top management teams in entrepreneurial firms.



Zahra Hejrati

Research Interests: The intersection of entrepreneurial processes and artificial intelligence (AI), specifically how AI affects such processes as decision making and organizational learning.



Carrington Motley

Research interests: Decision making, and how organizational characteristics influence innovative output and other performance factors for new ventures.



Philipp Reineke

Research interests: Decentralized Autonomous Organizations (DAOs) and how decentralization and autonomy function and intersect in organizations more generally.

AT A GLANCE

PhD graduates who have been affiliated with STVP are now training the next generation of aspiring entrepreneurs and investigating the key questions that impact founders, investors, and policymakers.

60+

PhD graduates have been affiliated with STVP

80%

of PhD graduates joined academic institutions around the world, including:

- Harvard University
- INSEAD
- Northwestern University
- University of North Carolina at Chapel Hill
- University of Oxford

RESEARCH SPOTLIGHT

Born into Chaos

Why does one startup succeed when another fails?

For Carrington Motley — a PhD student in Stanford’s Department of Management Science and Engineering studying with STVP — that question is at the heart of his research.

A year like 2020, Motley observes, begs some intriguing questions about how environmental conditions might impact startup success. “In 2020, there was lots of uncertainty in industry environments,” he says. “But there were also many new ventures formed during the pandemic, as well as high startup valuations and some big exit events. So one question would be: Was 2020 a good year to be starting a new venture?”

In a paper-in-progress titled “Born into Chaos,” Motley and his co-authors, MS&E associate professor Chuck Eesley and Wesley Wu-Yi Koo, assistant professor of strategy at INSEAD and STVP-affiliated PhD graduate, examine data from a major Stanford alumni survey, focusing on the responses from more than 1,000 alumni entrepreneurs.

“We look both at the industry environment and at the co-founders, specifically industry dynamism,” which is the unpredictability of the industry environment, “and founding team functional diversity,” a measure of the diversity of cognitive resources the team possesses, Motley explains. “Imagine one founder being an engineer and the other a marketer. What are the direct effects of those two factors, and what is the interaction between the two?”

“Among our takeaways at this point is: Ventures that are created in unpredictable environments perform better,” Motley concludes. “We also find that, overall, functional diversity helps. The startups with functionally diverse leadership teams tend to outperform the startups without functional diversity.”

However, when combined, environmental uncertainty and functional diversity can have a negative impact if the initial environment changes substantially, according to Motley and his co-authors. “We argue that this negative relationship is due to the fact that the processes that functionally diverse teams implement during uncertain founding environments carry forward. However, these processes actually impede success when subsequent environments do not resemble the founding environments in which they were created,” Motley explains.

In addition to “Born into Chaos,” Carrington Motley’s working papers include “Organizational Learning From Failure & Success: A Review” and “Pivoting for Performance.” Motley has accepted a tenure track faculty position at the Carnegie Mellon University Tepper School of Business and will focus on entrepreneurship.

Empowering Entrepreneurial Communities



For more than 25 years, STVP has been committed to entrepreneurial community-building on campus and around the world.

At Stanford, where we serve as one of 115+ Community Hubs that engage in sustained community partnerships, we're building bridges with first-generation and low-income communities of students, re-invigorating the Stanford Entrepreneurship Network, and launching a new speaker series focused on the ethics involved with innovation-driven engineering.

Beyond the Stanford campus, STVP has held roundtables throughout the world, from Finland to Brazil and Thailand, to strengthen educator networks and share learnings; co-created and rolled out entrepreneurship programs in Chile and the United Arab Emirates to embed rigorous, transformative entrepreneurship experiences in colleges and universities; and live-streamed weekly Entrepreneurial Thought Leaders talks to aspiring innovators while empowering more than 500 educational institutions with learning content.

As a hub for diverse communities of entrepreneurship educators, scholarly researchers, students, startup teams, investors, and policymakers, we are leading an inclusive movement to elevate ethics, equity, and sustainability as core standards of entrepreneurship. By helping entrepreneurs to think and act in the interest of others, we're developing global citizens who strengthen the ecosystem together.



Broadening our Impact with Stanford Communities

Our impact at Stanford extends well beyond our courses and fellows programs. Through these and other initiatives, we strive to empower students, alumni, and faculty to dream big and act with conviction to elevate ethics, equity, and sustainability in entrepreneurship.

Stanford Entrepreneurship Network

After two years of remote work due to the pandemic, STVP took the lead in re-engaging the Stanford Entrepreneurship Network (SEN) as a place to discuss ethics, equity, and sustainability and to amplify the work of members, university programs and student groups that offer opportunities for the Stanford community to engage with entrepreneurship.

Collaborating with the Center for Entrepreneurial Studies in the Stanford Graduate School of Business, STVP launched a series of quarterly networking gatherings for SEN members including Stanford Venture Studios, CodeX, Emergence, BASES, the Stanford TomKat Center for Sustainable Energy, the Stanford Energy Club, Stanford Women in Business, Startup Garage, and Stanford's Office of Technology Licencing. An active SEN will help ensure that all Stanford faculty, staff, and students with a stake in entrepreneurship and innovation can share knowledge and resources, and will further accelerate Stanford's engine of innovation. (sen.stanford.edu)

School of Engineering Principled Engineering Talks

STVP and Stanford’s School of Engineering launched a new quarterly series of Principled Engineering talks. The series engages Stanford School of Engineering students and alumni in conversations about what it means to make engineering decisions that are consistent with their ethics, values, and principles. The first event, “Principled Engineering: AI and Drug Development,” featured Russ Altman, the Kenneth Fong Professor of Engineering and co-host of the Future of Everything podcast, and Kim Branson, GSK’s Global Head of Artificial Intelligence and Machine Learning, in conversation with Jack Fuchs, Director of Principled Entrepreneurship, STVP and Adjunct Lecturer, MS&E. Fuchs, Altman, and Branson discussed how ethics and principles can shape innovation at the intersection of AI and drug development.

FLI with STVP

While entrepreneurship has driven significant societal benefits, STVP recognizes that many communities have been excluded from access to resources and opportunities and is always working to dismantle barriers to participation and make our programs welcoming to all aspiring entrepreneurs. Recently, STVP began a collaboration with the Stanford First-Generation and/or Low-Income (FLI) office along with the Stanford First Generation and/or Low-Income Alumni Network (FLAN) to bridge the gap. STVP also engages in community building and networking activities and recently co-hosted an event for FLI students featuring FLI alumni speakers, including Lean LaunchPad alum and Zūm founder and CEO Ritu Narayan, independent educational consultant Marc Thompson, and president of i2i Corporate Strategies Angel Orrantia.



“As a FLI undergrad, my sole focus at Stanford was to graduate with a ‘safe degree’ so that I could have a stable job that could provide for my family. If I had the benefit of STVP, entrepreneurship might not have seemed so ‘risky.’ Instead, I would have seen that entrepreneurship is very much aligned with being an engineer — to create, innovate, and build to make a positive impact in the world.”

Mo Fong
Executive Director, STVP

ETL

ENTREPRENEURIAL THOUGHT LEADERS

Entrepreneurial Thought Leaders

For nearly two decades, our Entrepreneurial Thought Leaders series has served as the gateway to entrepreneurship for tens of thousands of Stanford students while inspiring entrepreneurs and innovators around the world. Amid the global pandemic, the series became a magnet for international learners hungry for insights about how to innovate amid setbacks and disruptions.

This year, ETL reached an especially significant milestone: More than 1,300 Stanford students enrolled in MS&E 472, the Stanford seminar course associated with the ETL series. This level of enrollment, by far the largest ever in ETL, reflects the relevance of the series as our speakers explore timely themes like responsible innovation, trends in venture capital, the importance of diversity in tech, and the ways that AI/ML is transforming everything from healthcare to agriculture.



TUNE IN TO ETL!

Our Entrepreneurial Thought Leaders series is live-streamed on our Stanford eCorner YouTube channel at 4:30 p.m. PT every Wednesday during Stanford's Fall, Winter and Spring quarters. This year's series kicked off with Microsoft chief accessibility officer Jenny Lay-Flurrie.

HEARD AT ETL



“It always is helpful to be wildly optimistic — to dare to dream big.”

Alexandr Wang
Scale AI (January 2022)



“I was never trying to build an organization. I was trying to build a movement.”

Reshma Saujani
Girls Who Code (October 2021)



“Do we talk about our purpose? Is it something that is just wallpaper, or is it lived purpose?”

Ranjay Gulati
Harvard Business School (April 2022)



“The hardest thing was gaining the trust of consumers from the beginning.”

Juliet Anammah
Jumia Nigeria (November 2021)



“It’s a lot easier to be authentic when you have a very researched point of view on where you’re going to invest versus not invest.”

James Joaquin
Obvious Ventures

ETL AT A GLANCE

Enrollment

AY 2021-22:

1,342 Students

420+ students/quarter

AY 2020-21:

747 Students

AY 2019-20:

841 Students

ETL Podcast

35K+

Podcast downloads/episode; listeners from more than 100 countries!

ETL on YouTube



**68K
Subscribers**

ETL content taught in

500+ educational institutions
around the world

Thank you to the alumni, friends, and organizations who have fueled our impact for more than 25 years.



A Future Fueled by Philanthropy

Imagine a future where every entrepreneur sees themselves as a global citizen who acts in the interest of others. A future where responsible innovation practices are standard operating procedure. A future where entrepreneurs scale solutions that elevate joy, health, and prosperity for all.

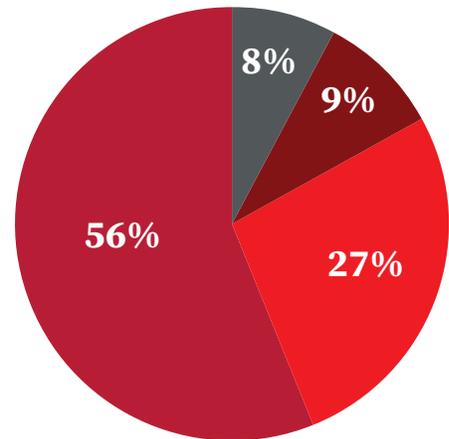
As humanity grapples with dilemmas of extraordinary complexity and global scale, STVP, housed in the Department of Management Science & Engineering, is leading a movement to educate leaders who will solve the major challenges of the 21st century.

And we can't do it without you. STVP relies on the generous financial support of alumni, friends, and organizations for more than 90 percent of our operating budget each year.

With your support, STVP blazes new paths for powerful experiential teaching, uncovers novel research insights, fosters knowledge networks that span the globe, and activates aspiring entrepreneurs to create meaningful change in their lives and for their communities.

FISCAL YEAR 2022 REVENUE

July 1, 2021 – June 30, 2022



Revenue Sources

- Earned Income**
8%
- Stanford University General Fund**
9%
- Individual Gifts**
27%
- Institutional Gifts**
56%

COMING SOON!

Stanford Engineering Entrepreneurship Center

This past year, STVP unveiled a fresh, new vision:

We empower aspiring entrepreneurs to become global citizens who create and scale responsible innovations.

This spring, STVP will become the Stanford Engineering Entrepreneurship Center.

Our new name and vision build on our history of pioneering novel approaches, strengthening community, and fostering trust to shape the future of entrepreneurship for the better as only Stanford Engineering can. With more than 25 years of impact, a vibrant global network, and your continued support, we are uniquely positioned to lead the next wave of entrepreneurship education.

We look forward to reintroducing ourselves in 2023!





Our Team

In the end, the team is as important as the core technology or idea. At STVP, we consider ourselves fortunate to have such an incredible team of teachers, researchers, staff, and advisors!

CORE FACULTY

Tom Byers

Professor, MS&E and
Faculty Director, STVP

Chuck Eesley

Associate Professor, MS&E

Kathleen Eisenhardt

Professor, MS&E and
Faculty Director Emeritus,
STVP

Riitta Katila

Professor, MS&E and
Faculty Director, STVP

Tina Seelig

Executive Director, Knight-
Hennessy Scholars and
Faculty Director Emeritus,
STVP

Alicia Sheares

Assistant Professor, MS&E
(joining Fall, 2023)

Robert Sutton

Professor, MS&E

STAFF

Mo Fong

Executive Director

Jack Fuchs

Director of Principled
Entrepreneurship, STVP
and Adjunct Lecturer,
MS&E

Asher (Rachel) Julkowski

Managing Director

Eunice Lee

Community Engagement
Specialist

Mandy Llerena

Project & Operations
Manager

Kai Robinson

Financial Analyst

Pamela Sziebert

Marketing Manager

ADJUNCT FACULTY

*Management Science & Engineering Fenwick &
West Entrepreneurship Educators*

Tom Bedecarre

The Lean LaunchPad
Hacking for Defense

Ravi Belani

Spirit of
Entrepreneurship
Entrepreneurial
Thought Leaders
Seminar

Steve Blank

The Lean LaunchPad
Hacking For Defense

Jeff Epstein

The Lean LaunchPad

Joe Felter

Hacking for Defense

Jack Fuchs

PEAK Fellows
Principled
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Decisions

Mar Hershenson

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Entrepreneurship
Without Borders

Trevor Loy

Entrepreneurial
Management & Finance

Emily Ma

Spirit of
Entrepreneurship
Entrepreneurial
Thought Leaders
Seminar

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