

How One Online Course Helped Support Global Entrepreneurs

MICHAEL E. GOLDBERG



Michael E. Goldberg, Assistant Professor of Design and Innovation at the Weatherhead School of Management at Case Western Reserve University, takes readers on an international adventure in *Beyond Silicon Valley: How One Online Course Helped Support Global Entrepreneurs.* From Cleveland, Ohio, to transitioning economies in Europe, the Middle East, Asia, Africa, and the Americas, Goldberg tells the stories of students who took his hugely popular Beyond Silicon Valley massive open online course (MOOC). The students start businesses, mentor entrepreneurs, grow entrepreneurial advocacy organizations, and energize the startup ecosystems in their communities.

#### ADVANCE PRAISE FOR BEYOND SILICON VALLEY

"In Beyond Silicon Valley, Goldberg has created an **indispensable playbook** to help entrepreneurs, regardless of where they may live and work, start and scale the companies of the future."

—**Steve Case**, co-founder of America Online and author of *The Third Wave: An Entrepreneur's Vision of the Future* 

"Beyond Silicon Valley breaks new ground in teaching entrepreneurship and economic development."

 -Philip Kotler, Distinguished Professor of International Marketing, Kellogg School of Management, Northwestern University

"An engaging speaker, writer and forward thinker, Goldberg has **provided a roadmap** for anyone building an entrepreneurship ecosystem in an emerging economy."

-JJ Ramberg, host, MSNBC's "Your Business"

"Beyond Silicon Valley is captivating. Michael Goldberg will change how you think about entrepreneurship and where risk-taking, business-building people can flourish."

-Brad Stone, author, *The Everything Store* and *The Upstarts* 

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Michael E. Goldberg

## Beyond Silicon Valley

How One Online Course Helped Support Global Entrepreneurs

by

Michael E. Goldberg

I dedicate this book to people who are working hard to support innovators and entrepreneurs in communities around the world.

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#### **FOREWORD**

Beyond Silicon Valley: Growing Entrepreneurship in Transitioning Economies (Beyond Silicon Valley), by Professor Michael Goldberg, has spread its message around the globe by engaging thousands of entrepreneurs in a worldwide network of startup visionaries.

Beyond Silicon Valley captures Goldberg's own entrepreneurial journey as he experiments with the potential of the MOOC (Massive Open Online Course) to achieve its fundamental goal of education for all. For entrepreneurs seeking to understand the meaning of their own travails, as well as anyone interested in this unique and effective approach to sharing universal startup experiences, these stories can build resolve and galvanize actions.

Conceived in 2013 by Goldberg, Beyond Silicon Valley developed as a way to share the lessons learned from the burgeoning Northeast Ohio entrepreneurial ecosystem, capitalizing on the MOOC as the vehicle to accomplish this audacious goal.

One may reasonably ask, "Why Northeast Ohio?" Why not the better capital of tech innovation, Silicon Valley in California?

While Silicon Valley boasts a well-deserved reputation as the pinnacle of successful entrepreneurial ecosystems, its unique attributes and primary focus on information technology make it a limited model for other regions around the world. Instead, developing ecosystems may be more likely to be inspired by the obstacles, struggles, and setbacks faced by Northeast Ohio—a region buffeted by economic challenges yet simultaneously buoyed by ingenuity and determination.

Beyond Silicon Valley draws upon the stories and experiences of Northeast Ohio leaders who have strategized and experimented over more than a decade to reignite an entrepreneurial culture across the region. The lessons to be garnered from these experiments form the underpinnings of the Beyond Silicon Valley message. When combined with technology-enabled, interactive opportunities for students from nations far and wide, these lessons also inspire powerful experiences that are changing lives and charting new directions for economic advancement. The result is a global discussion focused on the transformative potential of entrepreneurship. Beyond Silicon Valley has grown to be the most frequently translated MOOC (now 16 languages) in the history of this teaching medium. Goldberg's book captures this compelling global conversation and tells the varied and fascinating stories of entrepreneurs, angels, dot connectors, champions, and mentors, among many more energetic actors in this global startup phenomenon.

Based on his dual experiences in venture development and international entrepreneurship education, Goldberg is uniquely positioned to generate exchanges among entrepreneurs and ecosystem builders in far-flung places. He draws upon his own in-depth knowledge of the Northeast Ohio ecosystem and then uses his special talent for translating that story so it resonates in the context of other cultures.

Throughout this journey, he exhibits an intellectual nimbleness that creates his own methodology as well as an optimistic and accessible manner that breathes life into the educational process. His style encourages engagement by his audiences—and now, readers. Goldberg's chronicle of his personal interactions with entrepreneurs around the world coupled with first-hand accounts of the ways Beyond Silicon Valley participants have deployed its lessons—many against all odds—is an inspiring tale.

Burton D. Morgan Foundation sponsored this worldwide virtual classroom experience—this MOOC—as a means of amplifying the impact of our role as an entrepreneurial ecosystem builder in Northeast Ohio. The foundation, established in 1967, was the brainchild of Burt Morgan, who was an entrepreneur to his core. Today, Burton D. Morgan Foundation continues his vision of championing the entrepreneurial spirit.

The word "entrepreneurship" was not in vogue in 1938 when Morgan graduated from Purdue University with a degree in mechanical engineering. He only knew then that he wanted a job as an engineer. While working at Johnson & Johnson, he learned about the adhesives industry, or in his words, the "sticky" trade. He started moonlighting and created a strapless adhesive brassiere that would prevent tan lines. This "outside interest" got him fired and began the saga of Burt Morgan, intrepid entrepreneur.

In the years that followed, Morgan started dozens of companies. Some succeeded while others failed. He bought land for an international airport, started a bank, and developed patents. He became a philanthropist and a mentor. Ohio Governor James A. Rhodes tapped Morgan to serve among the Ohio Commodores, a respected cadre of entrepreneurs who traveled the world on trade missions, sharing views on entrepreneurship and attracting companies to locate in the State of Ohio.

Morgan helped set up adhesives plants in Holland and Belgium, established a distributorship in South Africa, and trav-

eled on a trade mission to Venezuela and Brazil. He enabled people and nations of the world better understand each other through the language of entrepreneurship. It is this legacy that inspired the foundation to be a primary supporter of the Beyond Silicon Valley initiative and to foster the wider dissemination of the Northeast Ohio reinvention-through-entrepreneurship narrative.

Northeast Ohio has transformed its vexing economic struggles into a platform for launching new ideas and approaches to entrepreneurship and entrepreneurship education. In the process, the region has developed into a laboratory for ecosystem experimentation. Working with its many ecosystem partners over more than a decade, Morgan Foundation has piloted a multitude of programs aimed at identifying best practices, creating a renewed culture of innovation, and engaging the larger community in championing the entrepreneurial spirit.

The foundation's multipronged approach supports programs that introduce grade schoolers to entrepreneurial concepts, provide college students with mentored startup experiences, and deliver just-in-time learning to adults navigating perplexing entrepreneurial journeys.

Michael Goldberg has enabled Beyond Silicon Valley to achieve its full potential by adapting it to suit varied environments instead of making it a cookie-cutter offering. He creates fresh approaches that fit—and respect—numerous cultures. Communication among participants unfolds in real time, and the questions posed are authentic, heartwarming and sadly, at times, wrenching.

A wonderful aspect of Beyond Silicon Valley is students do

not feel stranded in remote places without colleagues; it provides sounding boards for ideas and frustrations that are a few computer clicks away. The blending of perspectives through this learning approach is a powerful motivator for success. Beyond Silicon Valley is not a messenger of all the right answers, but instead, is a catalyst to assist participants in ascertaining for themselves how their communities can learn from others and then capitalize on local resources.

Goldberg and Morgan Foundation know that students may be affected by wide-ranging circumstances. From highly welcoming countries to those regions affected by war, poverty, limited access to capital, government barriers, corruption, and culturally driven suspicions about failure and entrepreneurial practices, Beyond Silicon Valley adjusts and delivers a relevant message.

At the same time, courageous entrepreneurs enhance Beyond Silicon Valley by bringing upbeat perspectives to problem solving and conveying a message of hope and perseverance. The struggles and successes described in Goldberg's book allow the reader to put a finger on the pulse of what is happening in ecosystems around the world-from Belize to Greece to India and more. Beyond Silicon Valley serves as a unifying force for entrepreneurs working in many different environments, which all have the common purpose to make their own corner of the world more fertile for growing companies and ideas.

The tales in this book create a rich tapestry of the innovative ways entrepreneurs use the original and "disruptive" qualities of the MOOC to take charge of their own futures. Some of the tales are about accomplished entrepreneurs seeking to expand their horizons and engage in continuous learning. Others tell of people piecing together the equivalent of an MBA program tailored to their own needs and interests. In yet others, class modules are used to supplement and enrich university curricula, and women entrepreneurs from places with few role models seek advice from other women about how to navigate cultural challenges.

The individuals in Professor Goldberg's book share personal details about the circuitous paths they followed to become entrepreneurs. Their stories tell a powerful tale not just about differences but about commonalities.

Beyond Silicon Valley is a book that emboldens the world's doers, change makers, and innovators as they chart a path forward, no matter what their geography or culture. Simply put, it is an owner's manual on how to dream big—and how to make those entrepreneurial dreams come true.

Deborah D. Hoover President & CEO, Burton D. Morgan Foundation Hudson, Ohio



Teaching students. Flashstarts Accelerator, Cleveland, Ohio, 2015.

## MICHAEL GOLDBERG MY CLEVELAND CONNECTION

In 2012, I began telling a story about how people in Cleveland added entrepreneurship to their industrial economy and what they learned about building entrepreneurial ecosystems—and by 2014, I was going live with the Beyond Silicon Valley MOOC.

In 2012, the Fulbright Scholarship program awarded me a fel-Llowship to teach entrepreneurship at the National Economics University Hanoi in Vietnam. My wife, Stacy, and our three children joined me for a six-month stay in Southeast Asia, and on our first day wandering around, we looked in amazement at the entrepreneurial endeavors of the Vietnamese. The Hanoi streets were crammed with mom-and-pop vendors selling homemade pho, batteries, nail clippers, toys, and many other things—you name it, in Hanoi, people sold it.

The activity on the streets showed the spirit of Hanoi's residents. We saw people, many of whom wore the distinctive Southeast Asian hats called *nón lá*, carrying produce in two handwoven wicker baskets balanced on a bamboo pole across their shoulders. Streams of motorbikes laden with cargo—from dry goods and food to family members—threaded around pedestrians. Other Vietnamese wore business attire similar to that of businesspeople in Chicago, London, or Cleveland. Regardless of what people wore or carried, or how they got around, the energy of the city and its inhabitants was palpable.

Three months into my stay in Hanoi, the head of the Vietnamese National Agency for Technology Entrepreneurship and Commercialization (NATEC), Pham Hong Quat, asked me if I would deliver a seminar. He wanted me to help his agency understand how it could support Vietnamese entrepreneurs and how the government could better tap into the Vietnamese entrepreneurial drive. NATEC, in particular, wanted to boost *technology-based* entrepreneurship that Quat (in Vietnam, first names are listed last) believed could lead to a new level of job growth and wealth creation. Basically, he said, he wanted NATEC to understand how Vietnam could be more like Silicon Valley.

I smiled and laughed—not *at* him, but in sympathy, *with* him. Everybody wants to be like Silicon Valley. I'm from Cleveland, and since I was a teenager, we've talked about how we can be more like Silicon Valley. But as an entrepreneur, investor, and

professor in Cleveland during some transformative days for the city, I watched us figure out that although we certainly can learn from Silicon Valley, we shouldn't try to mimic it.

"Why don't I do a course on Cleveland instead?" I suggested.

Ш

The Cleveland story of transitioning out of a powerful position in the Industrial Age into an uncertain future in an era based on the knowledge economy and entrepreneurship is relevant to Vietnam. Cleveland is a mid-sized city that's had its ups and downs; many in the US and around the world can identify with it. My hometown isn't Silicon Valley, Hong Kong, New York City, Tel Aviv, London, Moscow, São Paulo, or any city that has a large and thriving entrepreneurial infrastructure. As I hope to demonstrate, a much larger number of global regions are like Greater Cleveland than like Silicon Valley. I also hope to show why that's good news.

Let me offer a couple of quick definitions. When I talk and write about Cleveland, I am referring not only to the city of Cleveland but to Greater Cleveland, which we often call Northeast Ohio. The City of Cleveland is a relatively small geographic area with a population of under 400,000 in 2016. More broadly, Greater Cleveland is the Metro Statistical Area (MSA) made up of five counties and 2.1 million people. Broader still, Cleveland sits on the northern edge of Northeast Ohio, a region that includes the cities of Akron, Canton, and Youngstown, among others, and has over 16 counties, a population of about 4 million, and a gross regional product of \$170 billion.

About a hundred years ago, Greater Cleveland ranked among the Top 10 metropolitan areas in the US; today, it is the 32<sup>nd</sup>-larg-

est. Cleveland rose dramatically on the wheels of the Industrial Age, counting itself among the steel and shipping capitals of the industrial world, and along with its neighbor, Akron, a polymer capital. It reached its population peak in 1950 and then began the same decline as many other industry-based cities. I was born in Cleveland in 1969 during a time when the city entered the steepest slope of its decline.

One memory sticks out as a wellspring of my passion to connect people globally for positive social and economic purposes. In 1987, I went to Kenya in a high school volunteer program called Crossroads. I and my fellow students built a chicken coop, among many other projects. Although no one in the village where we worked had running water or electricity, all of us working on the project had an almost urgent eagerness to connect. I realized what I loved most in the world was this—interacting with and understanding people in a distant place with our work as our *lingua franca*. I learned so much from this high school experience, and the desire—to connect with people, to connect those people to other people, to learn from people everywhere, and to teach what little I knew—never left me.

When I graduated from high school in 1988 and went to Princeton University in New Jersey, I had no interest in returning to Cleveland to live or work. I did not see it as a modern place that supported entrepreneurship or new company formation. If I wanted to form entrepreneurial connections, Cleveland didn't seem to be the place for me.

During Cleveland's decline, plants were shuttered, jobs vanished, talent left for sunnier (or wealthier) places, and neighborhoods were abandoned, with some becoming ghost towns of decay. The downtown grew dark, ominous, and all but deserted at night. An older friend of mine recalled the sensation of driving into Cleveland at night in the 1970s.

"Through the visual smog and attendant stink and sting of pollution, I remember seeing one single light on in the Terminal Tower," he said. "I felt like I was driving into a kind of dead zone, where nothing could ever thrive again. It was pretty depressing."

Today, Cleveland is on the rebound. It ranks 10th among US cites in millennial residents. That same once-dimmed Terminal Tower—the second-tallest building in the world when it opened in 1930—is now brightly lit every night, including in wine and gold lights when my beloved Cleveland Cavaliers won the NBA championship in 2016.

Plenty of bright buildings have been developed or renovated in the last three decades, including the Rock & Roll Hall of Fame and Great Lakes Science Center, an exciting theater district (the country's largest outside of New York City), and many new offices, as well as condos and apartments, due to the influx of downtown residents.

The Cleveland restaurant scene has become one of the hottest in the country, and new businesses—created in an improving entrepreneurial ecosystem in industries from high-tech to craft whiskey to medical—have sprouted to replace the boarded-up factories that lined the main strips into and out of downtown. Cleveland has a long way to go, but the journey has begun.

Ш

Back to Vietnam. I wasn't so sure Quat would agree with my desire to tell the burgeoning Cleveland story. For certain, we can't make direct comparisons among entrepreneurial ecosystems because there are no perfect parallels. Still, I reasoned, there are stories to which entrepreneurs and economic development people in other places could probably relate.

To my delight, Quat liked the idea, and so with his consent, I began to create a seminar.

The problem was, I didn't know where to begin. At Case Western Reserve University's Weatherhead School of Management, I had been teaching entrepreneurial finance, which included sessions on how entrepreneurs access capital and support, but I had never taught a course on developing an entrepreneurial ecosystem. For help in organizing the seminar, I called Hoang Hiep, whom I had recently met in Hanoi. Hiep was an Innovation Management Expert for the Vietnam Finland Innovation Partnership Program. NATEC was a grantee of that program, and she had become an entrepreneur development consultant for NATEC.

Hiep was adept at helping me work through my thoughts. I decided the seminar would include a week's worth of programming about the development of tech-based, entrepreneurial ecosystems organized around the roles that government, philanthropists, anchor institutions, intermediaries, investors, and mentors play in those ecosystems.

That was a nice start, but I wanted help from the experts when it came to telling the story. I contacted my friends, Steve Girouard, vice president of emerging technologies at Johnson & Johnson; Lisa Delp, executive director of the Ohio Third Frontier Commission, the government entity that oversees billions of dollars of innovation capital for the state; and Lynn-Ann

Gries, founding team member and chief investment officer of the Cleveland-based venture development organization, Jump-Start. I didn't know precisely what we'd talk about, but I knew I respected their knowledge, expertise, struggles, and successes. Fortunately, they agreed to take part in the seminar via Skype.

With the theme chosen, sessions organized, and team assembled, we delivered the seminar, which consisted of four Skype sessions that took place in the evenings in Vietnam (mornings in Cleveland). The seminar topics, outcomes, and audiences exceeded all of our expectations. The sharing of information, the mutual teaching and learning, and the camaraderie were all very inspiring! Cleveland had worked hard to support entrepreneurs for more than a decade, and we had an interesting story to tell.

Word traveled quickly about the success of this seminar, and when I returned to Case Western Reserve University, the vice dean of the Weatherhead School of Management, Fred Collopy, said the university had just signed on as a partner of Coursera, the leading platform that distributes MOOCs. He asked me if I might consider turning the seminar into a MOOC.

"Sure!" I replied.

As soon as I walked out of the meeting, I Googled the term "MOOC" on my iPhone. MOOC is an acronym for massive open online course, a type of online education that started in the early 2000s but began to take off in 2011 when the first Stanford University MOOCs were offered. By 2015, 35 million people had signed up for at least one MOOC. Ah . . . the dean wanted me to create an online course.

Coursera is the largest MOOC provider in the world, and in 2015, just under 50 percent of all MOOC students went

through Coursera. It's a venture-backed, for-profit, educational technology company founded by two Stanford Computer Science professors, Daphne Koller and Andrew Ng. Through Coursera MOOCs, professors teach more learners in a few months than they could teach in a lifetime in their classrooms.

I liked the idea of a MOOC, but I had no idea how to create and deliver one. I didn't let that dent my enthusiasm—I worked with a formidable team to create professional and engaging videos and with Case Western Reserve University and Coursera to deliver the course technologically. At 7 p.m. on April 28, 2014, I made an exception to the "no electronics" rule that I impose on my Weatherhead classrooms—I sat at my computer and anxiously clicked a "Go Live" button.

Since the MOOC launched, my life has changed. Part of the reason is the sheer number of participants and the dynamic level of engagement the MOOC has created. Beyond Silicon Valley started in April 2014 and has had over 135,000 registrants in both session-based and on-demand courses. ("Session-based" courses have a specific date range; whereas, the "self-paced" or "on-demand" courses have the same material, but students can start and end when they want.) My course was the first on Coursera translated into an African language—the Rwandan language, Kinyarwanda—and has been translated into 16 languages, the most of any course on the Coursera platform. In addition to Kinyarwanda, the other languages are Albanian, Chinese, Czech, French, Georgian, Greek, Indonesian, Khmer, Macedonian, Persian, Portuguese, Russian, Spanish, Turkish, and Vietnamese.

Hiep, who helped me develop the original Vietnamese seminar, had seen her life change, as well. Hiep had determined that she wanted to enable aspiring Vietnamese entrepreneurs to start businesses. She came to the US on a Fulbright Scholarship (I was pleased to write her recommendation) and earned her MBA in entrepreneurship and finance from Babson College's F.W. Olin Graduate School of Business. While there, she participated in Beyond Silicon Valley—the logical extension of the seminar she had helped me create—by joining a live WebEx session on the role of philanthropy in building entrepreneurial ecosystems.

As she learned about business at Babson and about the huge Ohio Third Frontier program (which has invested billions of dollars in developing basic sciences, technologies, and companies as well as entrepreneurial support) through Beyond Silicon Valley, Hiep homed in on how she wanted to help entrepreneurs. She wanted to consult to and make investments in their startups.

She returned to Vietnam and went to work as a business development consultant and a program manager for MITFive. org—created by five Massachusetts Institute of Technology graduates who returned to their native Vietnam. As successful entrepreneurs and investors, they wanted to contribute to the Vietnamese startup culture. She also works as a managing director for Butterfly Hub, a tech startup that provides beauty solutions online. That's one small example of how some lives have been touched by Beyond Silicon Valley.

You'll read in this book that people became more proficient in growing entrepreneurial economies through the Beyond Silicon Valley course. That's the primary goal of my teaching and MOOC. To me, the macro level implications of Beyond Silicon Valley matter as much as the micro, and I hope you'll see—if you extrapolate these stories across the numbers and across the globe—that there's a movement afoot. People in many places want to build entrepreneurial communities because innovation-based entrepreneurship adds vitality, creativity, and high-paying jobs. Entrepreneurship also is an extraordinary way for people to galvanize movement toward a better world. Small steps accomplish a lot.

Did I achieve the outcomes I wanted from Beyond Silicon Valley? As I continue teaching Beyond Silicon Valley and learning about its ability to help people, I increasingly see that it is one small but growing part of a global movement whereby people connect in their community through the idea of entrepreneurship. Where politics divide, entrepreneurship unites. I think that's powerful. What I'm always looking for is that people find value—catalyzing discussions that cause them to look more deeply at what they're doing or find inspiration, solutions, or ideas to improve things in their communities—through the Beyond Silicon Valley course.

So, yes, I do think that so far Beyond Silicon Valley has achieved very good outcomes.

I'm eager and more than a little interested to see how the Beyond Silicon Valley ideas and community evolve. I have stayed in touch with many Beyond Silicon Valley students, philanthropic funders, and collaborators who are working to implement lessons from the course in their communities. I've visited, emailed, WebExed, Skyped, FaceTimed, and called them. Since launching Beyond Silicon Valley in 2014, I have taken 85 international flights (averaging two or three international flights

per month) and conducted Beyond Silicon Valley seminars in over 25 countries. These countries include the Czech Republic, Morocco, Russia, Namibia, Zambia, Zimbabwe, Philippines, Austria, Switzerland, Slovenia, the Netherlands, Argentina, and more each month.

I have spoken with and heard from many thousands of people involved in developing economies and creating jobs through entrepreneurship. Because of the engagement of Beyond Silicon Valley students, collaborators, donors, and alumni worldwide, teaching the MOOC has been the most rewarding experience of my career.

## FAST FACTS CLEVELAND

In the late 1990s and early 2000s, you could typically find Cleveland in the bottom half of any entrepreneurship ranking. For instance, I remember in 2002, *Entrepreneur* magazine ranked Cleveland 61st out of 61 MSAs in the United States for support of entrepreneurship. Cleveland had for years been called the "Mistake on the Lake," and as I mentioned previously, was not where I thought I'd ever live and work. It lacked the entrepreneurial culture I found elsewhere. It had experienced a net outflow of people, a brain drain, and the offshoring of manufacturing jobs.

From 2003 to 2016, Cleveland rebounded in many respects and has risen to the upper half of entrepreneurship rankings—for example, in a ranking of "entrepreneur friendliness" created by *Entrepreneur*, *Forbes*, *Fortune* and NerdWallet, a website. By 2017, Cleveland had spawned Ohio's first "unicorn" company, CoverMyMeds, which is a venture-backed, tech company that is valued at a billion dollars or more. The Cleveland entrepreneurship story will continue to unfold. By no means is Cleveland's position in entrepreneurship a clear success—it is far from perfect or wonderful—but still, it is positive and good, and I'll take that combination any day.



Arjan Tupan (left) and I in Amsterdam, The Netherlands, 2017.

# ARJAN TUPAN MEETING UP IN DÜSSELDORF

Arjan Tupan is the king of Beyond Silicon Valley meetups. He created a series of meetups that brought Beyond Silicon Valley and its lessons to life in Düsseldorf, Germany.

In 2015, I traveled to Germany for a US Embassy Berlin Strategic Speaker Program. The trip took me to Frankfurt, Leipzig, Berlin, and Düsseldorf, where I met Beyond Silicon Valley student Arjan Tupan in person. I presented him with a LeBron James, Cleveland Cavaliers jersey, which he happily wore. It must have

been a good omen—about a year later, the Cavs finally won their first NBA championship!

Düsseldorf reminded me of my home town. In Cleveland, the twisting Cuyahoga River flows into Lake Erie like the River Dussel winds its way through the city and flows into the Rhine. Both cities have a history of heavy manufacturing, are ringed by parks, and share a passion for the arts.

By birth, Arjan is Dutch. He was born in The Hague, Netherlands, in 1973, the last of seven children. He said that although he was number seven, he was pretty much an only child because his step siblings are quite a bit older than he is.

Arjan is creative and has a curious mind, describing himself as "Eclectic Note Taker, Nomadic European, Poet, Dad." He loves to run, read, and blog. By profession, he's an advisor, consultant, and coach. In college, he majored in what was called Publishing but is now called Media and Information Management.

After college, he worked for consulting firms like Capgemini, and he specialized as a data consultant. He married, and his wife's job took them to Düsseldorf, Germany, around 2012. He was in his late 30s and excited about his wife's career. Arjan was also trying to determine how he could continue with his own career. He had to figure out how to integrate into his life the adventure of global travel and the adventures of adapting to his new community and finding his own career.

Arjan wanted to be a consultant in Düsseldorf, but he didn't know what area of consulting he should pursue. He began meeting with people, and after several meetings, he began to understand Düsseldorf's history and see the contours of its future. Düsseldorf is the capital of the state of NordRhein-Westpha-

lia (NRW), which fueled German growth in the 1970s and 80s through industry and mining.

"Industry, industry, industry," was, in Arjan's words, the focus of NRW in those days. Today, the focus is more diverse. Although NRW remains an important, high-growth economic hub, the Düsseldorf economy is dominated by services—financial, consulting, legal, advertising, fashion, and tourism. Düsseldorf is the second-largest urban center of banking and securities activities in Germany and home to the Börse Düsseldorf (a stock exchange).

Arjan found that the city also has a conservative business culture. Most people are familiar with the notion that hierarchies in German companies are rigid and complex. German employees follow protocol, and decisions are made from the top. New ideas and concepts are less easily accepted in German companies than in US companies.

Arjan realized in Düsseldorf that this culture presented challenges to innovation and the building of new industries. In particular, the financial services industry wasn't aligned with innovation.

"The local Sparkasse is like a savings bank that offers entrepreneurial credits," he told me. Over 400 Sparkassen exist in Germany, operated as independently run, local, commercial banks—essentially, community banks—under the umbrella brand Sparkasse. The Sparkassen, he says, "were convinced they were doing all things very well for entrepreneurs. And if you were a traditional entrepreneur, like if you were building a restaurant or a consulting company for that matter, they understand those businesses. Those types of entrepreneurs feel very

well supported. But people doing something digital feel absolutely not supported."

Arjan believed the conservative business environment stemmed partly from the guilds of the Middle Ages. Their purpose was to protect industrial workers, and culturally, that purpose lingers. During the annual renegotiation between the unions and the employers, strikes took place predictably every year, so predictably, in fact, that it bored Arjan.

The Netherlands, his birthplace, was different. The country might not wield the economic clout that Germany did, but it had a more open, progressive business culture. In the Netherlands, profits took priority over tradition and hierarchy.

Arjan wanted to merge the best of both countries. He saw good models in growing German companies like HierBeiDir. com, which is a place for local shops to market and sell online. If you order in one of their shops, a bike messenger will deliver your locally sourced item to your door within two hours. "They're absolute rock stars in what they do," he said. He believes they'll help a lot of local shop owners survive.

In the spring of 2014, Arjan remembered that he had taken a couple of MOOCs that he enjoyed. He decided to peruse some MOOC catalogs online.

"I was sort of picking off topics that I found interesting," he said. "I think just by looking at the catalog I stumbled across this course called Beyond Silicon Valley and I thought, *Wow!* 

"I'm interested in how economic development works, and also, I like different approaches instead of strictly mainstream," Arjan continued. "I'm also not a complete geek who hides behind a computer screen. I know how to connect with people. Germany was slightly different than I anticipated when we moved here, so I wanted a topic that I could show mastery of and be interested in and that actually gave me a tool."

When he looked at the Beyond Silicon Valley course description, Arjan thought the Cleveland story looked similar to the NRW story. Maybe the course could help him become aware of his local entrepreneurial ecosystem, develop subject matter expertise in how to help Düsseldorf startup businesses to grow, help him build a network, or generate new consulting business.

"I wanted to learn about entrepreneurship . . . to build a network of connections to improve existing business . . . to get in the door in Germany . . . to help build the startup ecosystem," he told me. He added that Beyond Silicon Valley didn't seem like the "typical course to learn entrepreneurship from," which he liked.

In April 2014, Arjan took the course. He watched the first video lecture, and the Cleveland story intrigued him right away—it seemed similar to the situation in NRW. He realized that Düsseldorf and Cleveland's economic challenges were more common than the incredible economic growth of places like Silicon Valley. Not everywhere in the US was akin to Silicon Valley, and that was news to him.

Arjan read the course assignments, watched more video lectures, completed the homework, became active in discussion forums, and participated in WebEx sessions. And he began to understand the Düsseldorf entrepreneurial ecosystem better. Becoming a Beyond Silicon Valley student was a compelling reason for him to try to meet entrepreneurs and innovators in Düsseldorf.

"The assignments were for me really about figuring out what the situation in your own region or locality is. They inspire you to get out of your building and talk to others to figure out how things work, how they're organized, and what the steps are," Arjan said.

"For me, going out and finding the people in the organizational ecosystem was the difference. [The personal assignments] are how I got involved with the local startup organization."

Arjan frequently began driving about 20 minutes into Düsseldorf to research the local entrepreneurial ecosystem. He realized as he explored how much he felt "culturally slightly different than the Germans around me." But he was game for this; he found his difference to be fun, maybe even a tool for progress.

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In the summer of 2014, I was reviewing the post-MOOC survey and came across a comment from Arjan saying that he'd be willing to develop meetups in Germany.

"Meetup" is both a general and a specific term and takes on different forms in different places. It's basically an intersection of a brainstorming session and a meeting—partly free-form but with a theme—and typically consists of more than two people. People hold running, knitting, and thousands of other types of meetups. At one website, meetup.com, you can find meetups all around the world on topics, interests, activities, and ideas of interest. In Beyond Silicon Valley, a meetup always has to do with the course topic of growing entrepreneurship in transitioning economies.

How and where a meetup is held depends on the person organizing it. Sometimes I coincided my delivery of a course session with a meetup that was held online through WebEx. Other times, I held it during my travels to different locations and not at

the same time as I was delivering a Beyond Silicon Valley course session. And when many of the 135,000 Beyond Silicon Valley registrants held meetups, they were similarly loose in their definitions. Sometimes they held a meetup as a type of follow-up action to the course, and sometimes they organized a series of meetups. Occasionally, their gatherings involved virtual connections through WebEx, which enables real-time, live interactions with people around the world.

I emailed Arjan about hosting meetups. He agreed and developed them really well. Arjan partnered with the local startup association, StartupDorf; with EBC Hochschule, a private, international business school; and with the US Consulate General in Düsseldorf. These organizations helped him promote and organize the gatherings. Two local co-working spaces, Gewächshaus Düsseldorf and GarageBilk, agreed to provide meeting space.

For organizing and promoting the meetups, Arjan used four tools: Eventbrite, Twitter, MailChimp, and a dedicated website.

Arjan formed each session around what we called the "pillars" of the course. Pillars are how I organized the course:

- The Role of Government
- The Role of Philanthropy
- The Role of Intermediary Institutions (such as non-governmental organizations or NGOs)
- Leveraging Anchor Institutions (such as universities), and
- Access to Mentors and Capital.

Arjan replaced the Philanthropy Pillar with a second session on Access to Mentors and Capital—he felt philanthropy was less relevant in Düsseldorf than it was in Cleveland. Each meetup included three elements. First, participants learned about the Cleveland story by watching the Beyond Silicon Valley videos; second, they learned about the Düsseldorf story through speakers who delivered talks and presentations; and third, they participated in an ideation workshop that enabled lots of personal interactions.

For the session on the Role of Government, Arjan invited the economic development department of Düsseldorf.

For the one on Leveraging Anchor Institutions, the local university talked about its programs.

In the two sessions on Access to Capital, a representative from a bank and David Jetel from Sirius Ventures, a local venture capital fund, spoke.

Around 40 people attended each of the five meetups, with a core of 15-20 people attending all of them.

After a while, people came to consider Arjan to be informed and knowledgeable about the startup ecosystem in Düsseldorf. He became a mentor to area entrepreneurs and knew so much about entrepreneurship in NRW that Dutch companies from a couple of regions in the Netherlands paid him to organize trips for them to Germany—they wanted him to introduce them to participants in the innovation ecosystem. Arjan also became an active member of StartupDorf, an association trying to strengthen the local startup ecosystem. He now sits on its board of directors.

I was impressed and asked Arjan to become a Lead Community Mentor for Beyond Silicon Valley. He agreed and he helped coordinate a mentor program for the MOOC. He co-authored a short e-book—a how-to guide for creating successful Beyond

Silicon Valley meetups. He began networking with other Beyond Silicon Valley leaders and students—examples of his networking abound, but in one instance he talked with Giorgi Tukhashvili (you'll learn about Giorgi later in the book). Giorgi and others used Arjan's meetups guide to develop their own series of meetings in Georgia (the country, not the state).

Arjan's meetups went well, and he realized the importance of telling the stories of startups and the startup economy. Consequently, he created StartIndus, a service in which he tells stories about startups, entrepreneurs, and the innovation ecosystem in Düsseldorf. He shares the stories via Instagram, Facebook, a blog on Medium, and more. He also created a podcast. He said, "I think that by telling the story of Düsseldorf, I am telling the story of other places, too, because of how familiar the story of moving from industrial economy to knowledge worker economy is. I think the model I'm trying to create for Düsseldorf is replicable in other places."

Arjan does his "multichannel storytelling" quite well. He also formed Impactioneers Consulting, which consists of people who "design, develop, and execute social good projects on the cutting edge of new phenomena, knowledge, and technology." They're passionate about building startup systems and MOOCs, so passionate that they've developed a lean management approach to learning and development based not only on MOOCs, but more specifically, on meetups. They deliver high-quality courses in a cost-effective, flexible, and scalable way, bringing the future of management training to companies.

Since 2014, Arjan has become a board member of local startup association, signed on as a global Beyond Silicon Valley mentor, and established himself as a multichannel storyteller and created Impactioneer Consulting.

"It's all thanks to the course!" he said. I felt tremendously fulfilled at hearing this.

I was so impressed with Arjan's Düsseldorf meetups that I wanted to meet some of the people involved. I enjoy teaching my traditional courses at the Weatherhead School of Management where I meet and nurture the professional growth of 200-plus students each year. But Beyond Silicon Valley has demonstrated that MOOCs can be incredibly effective and spread ideas to people who may never travel to Cleveland or be able to afford a class at a school like Case Western Reserve University. The local meetups like those Arjan led can produce a more meaningful educational experience and spark innovation for MOOC students.

I spent four days in 2015 traveling from Frankfurt to Düsseldorf to Leipzig to Berlin. I participated in meetups, delivered lectures, taught classes, and conducted radio interviews on the topic of building entrepreneurial ecosystems that are outside Silicon Valley.

Arjan and his family have since moved back to the Netherlands, and, in fact, he helped me with a program in the spring of 2017 when I received an invitation from the US Embassy in the Netherlands to conduct seminars in Amsterdam. Arjan works from home and in co-working spaces that are about a 20-minute drive away. He lives with his wife, young son, baby daughter, and German pinscher. Back in his homeland, he continues to engage entrepreneurs around the world "and to tell their stories, because I think by telling their stories, you can inspire each other, you can see things you have in common, maybe connect," he said. "Because if the entrepreneurs can grow sustainable busi-

nesses in all meanings of the word, they will create meaningful jobs, people will stay in these locations instead of move ever-more through the magnets of the big hubs, which leaves a lot of problems in other places."

Reflecting on the impact of Beyond Silicon Valley, he writes, "In a thriving traditional economy, you don't simply turn around things by introducing external knowledge. You have to combine the forces in place, especially when they are strong and healthy ones, with new ideas and new energy. That is why it was important to combine the lessons from the MOOC with local expertise. The [meetup] program was crafted specifically to facilitate that, and to challenge participants to build on both to find new ways to strengthen the local economy."

He continues, "The meetups around the world show . . . how MOOCs allow universities and professors to have an impact far beyond the walls of their campus classrooms. Not just by sharing knowledge, but by inspiring and igniting tangible change for the better. It was an ideal way to understand the current situation, and find ideas to build on that. It has made me part of an international network of startup/entrepreneurial ecosystem builders, from Japan to Canada, Zimbabwe to Germany, covering practically all continents."

## FAST FACTS MEETUPS

Meetups are a really important part of MOOCs like Beyond Silicon Valley because they increase completion rates and get students engaged in the course and with their local community in a meaningful way. So what are they? Well, they're like a meeting, but they involve interactivity and brainstorming, and are part of a themed series of gatherings.

There's a company that helps people organize meetups (Meetup, sold to WeWork in 2017; it says it has 20 million members from 180 countries who form over 200,000 groups), but anyone can hold a meetup, and no one needs a company specifically to help them hold a meetup.

Meetups and MOOCs are a good combination. About 65 percent of the engaged Beyond Silicon Valley students we surveyed attended a meetup. In addition to in-person meetings, 22 percent of engaged students started or joined a group of local entrepreneurs, and almost 47 percent of engaged students met other entrepreneurs near them in person or online. (We define engagement as taking at least one of the six quizzes, submitting at least one of the five personal learning assessments, and posting at least once on the course forums.)

Coursera has thousands of members who have participated in meetups on its Meetup platform.

As one person wrote, "Even virtual students want to have a cup of coffee and a conversation after a lecture."



Tuan Anh (standing) at a workshop in Ho Chi Minh City, Vietnam.

## PHAN DINH TUAN ANH EMBRACING ALL ASPECTS OF INNOVATION

Phan Dinh Tuan Anh is a successful entrepreneur who helped the Vietnamese innovation ecosystem begin to accept business and idea failure both culturally and financially.

han Dinh Tuan Anh was born in 1981, five years before the Vietnamese government enacted a set of reforms called Doi Moi intended to transform Vietnam's central-planning apparatus into a more market-oriented economy.

Tuan Anh went to Bond University in Queensland, Australia, and graduated with a combined Bachelor of Arts degree in Business Law and Commerce. He ran a family business that managed stock market investments for individuals. "My family background was mostly based in finance and banking," he told me. He went for his master's degree in Entrepreneurial Management from the European Business School London, graduating in 2006, and then began doing mergers and acquisitions work.

To say that Tuan Anh is well-balanced in his talents, interests, and activities is an understatement. His interests range from music, particularly classical and smooth jazz, to sports such as football (soccer to US fans) and tennis. Perhaps what shows Tuan Anh's outgoing nature and desire to engage with people of varying backgrounds is his deep interest in current affairs and community activities. A true connector, he says he enjoys building alliances with others and working within his community to raise awareness about the importance of high-quality education and training.

For all his background and education, Tuan Anh nonetheless had his entrepreneurial work cut out for him. Before Doi Moi, Vietnam ranked as one of the poorest countries in the world with problems that included hyperinflation, famine, drastic cuts in aid from the Soviet Union, and a trade embargo by the West (including the US). Most Vietnamese citizens lived a harsh life. The Vietnamese people experienced decades of war that began in 1946—against the French, then the US, and finally against Cambodia, which ended in a Vietnamese victory in 1991. The conflicts took a huge toll on the country and its people.

Nonetheless, the Vietnamese are a tremendously resilient people, and they wanted to move on and fully enter the modern world economy. After Doi Moi, entrepreneurship became an essential driver of economic development in Vietnam, and the economy improved significantly. The entrepreneurial businesses that Doi Moi helped spawn were not technically oriented, though, so today up to 75 percent of Vietnamese workers are said to be untrained for technical work.

From 1990 to 2010, Vietnam enjoyed an average annual GDP growth rate topping 7 percent, and its income per capita almost quintupled. Its economic transformation brought high levels of international trade; large inflows of foreign direct investment; a big reduction in poverty; and substantially improved access to education, health care, and infrastructure, such as roads, electricity, piped water, and housing. Vietnam's relatively rapid transition to a lower-middle-income country became a case study used in textbooks.

Then the 2008 global financial crisis hit.

"We woke up to a new reality. Things changed, and they will never be the same again. Not only had the environment changed, but also the people living in the environment had changed," Tuan Anh said.

Bank loans for small and medium-sized enterprises (SMEs) became very difficult to access, and the credit crunch caused a shakeout among Vietnamese SMEs. In Vietnam, the number of startups declined from almost 84,000 in 2010 to about 70,000 in 2012, a 17 percent drop.

Nearly 30 years old when this took place, Tuan Anh decided to co-found Mya Communications. During this difficult economic time, Tuan Anh led it as a strategic public relations firm specializing in investor relations and corporate internal dispute resolution. But he realized there was a strong demand for

corporate training. He talked with Sandler Training, a global company that does sales and management consultancy training, and decided to pivot Mya Communications—it would become a Master Franchisee of Sandler Training in Vietnam.

It seems to me that this was a pretty good pivot. Pivoting is when an entrepreneur decides, my original idea wasn't right, so I'll fix that problem by pivoting into a new idea. It's terrific that Tuan Anh did this, and his successful pivot showed what a solid entrepreneur he is.

Five years into growing Sandler Vietnam, Tuan Anh sold his master franchise and put his profits to good use by volunteering to help a number entrepreneurial programs. "I asked myself, What's next?" he said. "The only thing that I know for sure is I love investing and building something from scratch."

He was perusing the Coursera course catalog one day when he saw a new MOOC called Beyond Silicon Valley: Growing Entrepreneurship in Transitioning Economies. He read in my bio that I had taught entrepreneurship in Vietnam, and that intrigued him. He registered and participated in the first run of Beyond Silicon Valley in the spring of 2014, joining the online meetups and getting so much out of Beyond Silicon Valley that he took it again.

The second time he took the course, he became a core facilitator, so he met other Beyond Silicon Valley students in person at forums at the American Center at the US Consulate in Ho Chi Minh City (formerly Saigon), where they exchanged entrepreneurship stories and best practices. Tuan Anh also translated the Beyond Silicon Valley videos into Vietnamese.

"Upon taking Beyond Silicon Valley, things became clearer to

me," Tuan Anh remarked. "It was the first time I learned about the concept of a startup ecosystem. I finally found what I really love, and that is helping startups with investments."

Around the time of this realization, the Vietnamese government started a new round of economic reforms. Although Doi Moi had boosted Vietnam's domestic output and per-capita income, in large part by allowing foreign investment into its large industries, relatively few ways of tangibly supporting entrepreneurs were developed during the economic reform. Little support for entrepreneurship training or access to startup capital came out of Doi Moi, and technology-based entrepreneurship was an even lesser consideration. In what locals refer to as Doi Moi 2.0, the government is trying to fix these and other problems. Many Vietnamese hope that Doi Moi 2.0 will compensate for some market forces that are weakly functioning and that support for entrepreneurs will increase.

Tuan Anh is hopeful about prospects for Vietnam when it comes to innovation. He believes the global financial crisis probably advanced entrepreneurship in his country. "The crisis caused businesspeople to be more creative in order to survive," he said. "So suddenly, we had a willingness to try new ideas, new technologies, and boom, startup becomes a movement." And in the past few years since taking Beyond Silicon Valley, he has done many things to advance innovation in his country.

He has started Gekkospace, which he calls a "co-working space." He has also founded Angels4Us, a small network of angel investors who have invested in about ten startups. "The responsibilities of Angels4Us," he said, "are to build up a community of private investors who provide seed funds for local

startups and to help build the entrepreneurial ecosystem here in Vietnam by offering mentoring, coaching, and innovation training." The Angels4Us investors also advocate on behalf of startups. "We found ourselves in the position to get access to policy makers," he noted.

Tuan Anh then joined a second angel investor network, Mekong Angels Investment Network, and he became involved with a public organization, the Saigon Innovation Hub (SiHUB), which is an incubator and accelerator. SiHUB is an initiative developed by the Department of Science & Technology in Ho Chi Minh City to foster innovation and entrepreneurial activities. It plays the role of a bridge between the government and the startup community and ecosystem builders.

In May 2015, he also became an innovation coach at the Finland-Vietnam Innovation Partnership Program—the same program that Hiep was working with when I met her. Tuan Anh was involved with the partnership's Training of Trainers program, which boosts innovation capacity and helps develop a startup ecosystem in Vietnam. "I was trained in innovation, which helped me with my work in the entrepreneurial ecosystem in Vietnam," Tuan Anh told me.

"Three experts from Silicon Valley deliver the intensive nineweek training program to help us become innovation coaches," he explained. "The program that this falls under supports Vietnam's goal of becoming an industrialized, middle-income, knowledge economy by 2020."

Further, Tuan Anh became a mentor in a program called SME Mentoring. It won a U.S. Department of State grant about five years ago to offer one-on-one mentoring to entrepreneurs in Vietnam. "I firmly believe you have to have mentorship to help bring up a good generation of entrepreneurs," he told me. "For the next two or three years, my focus is to try to connect and work with all the components in the ecosystem. Now we have lots of incubators where entrepreneurs with ideas can find a place to help make their idea happen, which is a good sign. And now we have more and more training programs for founders/entrepreneurs."

It's clear Tuan Anh is doing a lot of interesting things relating to entrepreneurship. In particular, though, I want to highlight what I consider to be one of his most interesting or differentiated efforts. It has to do with failure—most Vietnamese people shun startup business failure, and this culture of succeed-or-else can be a real barrier to starting a business.

An essential component of an entrepreneurial ecosystem is tolerance and acceptance of business failure. As a successful entrepreneur trying to advance an innovation ecosystem, Tuan Anh knows that the acceptance of failure is important.

To help move the needle a little bit on this in Vietnam, he and another entrepreneur, Tien Trung Nguyen, decided to create and organize a Fail Smart event in Hanoi. Entrepreneurs would demonstrate their entrepreneurial spirit by sharing their entrepreneurial failures with the community. "We organized our first event in June 2016 and were able to attract over 100 participants," [students, entrepreneurs, founders, professionals, and others] he told me.

The event was covered by local TV stations and many newspapers. It was successful enough that they turned it into a series. Tuan Anh and Tien Trung held two more Fail Smart events in

2016 and another in 2017. All three events drew twice the number of registered participants than the capacity of the venue.

On the topic of failure, Ohio inventor Thomas Edison once famously said, "I haven't failed. I've just found 10,000 ways that won't work." In Cleveland, innovators enjoy the legacy of the inventor of the light bulb in numerous ways, including through the presence of General Electric Lighting headquarters. But I mention Edison because of his brilliant thought about reframing failure. Reframing failure while trying to build an entrepreneurial ecosystem has certainly posed challenges to Cleveland, a Great Lakes town that enjoyed industrial success for many vears.

The notion that startup ideas can and do fail, and understanding that there are times for pivoting, times for perseverance, and times for cutting one's losses, are important elements of success. Many ecosystems need to build in a better acceptance or even celebration of failure. In Greece, for instance, one of the subjects (covered later in this book) attended "F\*&^ [expletive] Up Friday" events where Greek people tell stories about their business failures (not just entrepreneurial failures).

I'm not a stranger to seeing businesses struggle, and I have felt business failure personally, as was the case when I worked at America Online (AOL). I joined the internet pioneer after completing my MBA at Wharton and my MA in International Affairs at the Johns Hopkins School of Advanced International Studies (SAIS) in 1999. AOL grew to become the largest internet company in the US, with more than 30 million subscribers. But after AOL merged with Time Warner in 2000, it lost its footing, resulting in the biggest loss of shareholder value of any merger in US corporate history. While my experience there was enriching in other ways—I worked on helping AOL expand into new markets in Asia, including China—the company's international expansion was put on hold when the company began to struggle.

By the time I left AOL, I'd learned a great deal about both success and failure, and how some things, such as government involvement that doesn't always go as planned, can hinder a company. (Though clearly, as I hope I show in other sections of this book, government can be an important part of enabling successful entrepreneurship.)

As for Tuan Anh, he actively plays the role of angel investor, mentor, and innovation advisor in Ho Chi Minh City. He said, "Beyond Silicon Valley gave me a roadmap to develop my own business model, and what I love to do is to help local entrepreneurs and the ecosystem."

Overall, I think he's a prime example of someone doing many things to advance an innovation ecosystem, and I love that one of the things he's doing is to help forge a better acceptance of failure in Vietnam's developing innovation ecosystem.

#### PERSPECTIVES FAILURE

Tuan Anh talked about the Fail Smart events, which spoke to the point that failure is an important piece of culture change in most innovation ecosystems. Steven Koltai is managing director of Koltai & Co., a successful entrepreneur, and former senior advisor to the US Secretary of State. When I interviewed him about the topic of risk, he said "[cultural acceptance of entrepreneurial risk] is one of the biggest challenges to turbocharging entrepreneurship in a lot of places.

"One of the greatest obstacles to growing entrepreneurship," Steven continued, "especially in developing countries, is cultural aversion, which is almost universal in every place I've ever worked. You don't change that overnight or by any one single thing. It's like a drop of water on a stone."



Cleveland, Ohio.

## THE CLEVELAND CONNECTION THE ROLE OF GOVERNMENT

ll people who attempt a business endeavor, who try to take an idea from concept to marketplace, have one thing in common—they all need help . . . help in the form of moral support from friends and family, sure, but help from institutions, too.

In Cleveland, many people work at institutions that do the behind-the-scenes work of helping entrepreneurs start and grow their businesses. In the Beyond Silicon Valley MOOC, I categorize these institutions and organizations by the roles they play, namely, government, philanthropy, intermediary organizations and non-governmental organizations (NGOs), anchor institutions, and institutions that provide mentoring and capital.

Let's start with the role of state government in supporting entrepreneurs. In the late 1990s and early 2000s, most people did not consider Cleveland to be a good place to start a tech company or a company with an innovative business model. Since 2002—when *Entrepreneur Magazine* ranked Cleveland dead last in its annual ranking of friendliness to entrepreneurs—a lot of positive things happened. Cleveland now enjoys a solid or even good entrepreneurial environment.

Let's take a look at how Ohio's entrepreneurial support system transitioned from one that was small, disorganized, and low-impact before 2002, to one that became and remains large, supportive, and outcomes-driven. In 2002, the State of Ohio launched a program called the Ohio Third Frontier, which addressed the lack of support for entrepreneurs and startups. Its mission was to provide financial support to key technology sectors where Ohio possessed strengths relative to the US and the world. Ohio Third Frontier did this by the replacing fragmented strategies with a \$2.3 billion, voter-approved program that created a pool of money and additional resources.

The state launched the Ohio Third Frontier program because of the profound need for a significant program that would support innovation in the Ohio economy. Lisa Delp was executive director of the Ohio Third Frontier Commission, and later, a director of Innovation Fund America. (She is also an entrepreneur and has held many tech-based roles; she is very knowledgeable in the technology-based economic development space.) Lisa supported the development of the initial Beyond Silicon Valley course and is now a course mentor. She has said consistently

that there needs to be a spark, which requires visionaries in both government and private sectors. Ohio Third Frontier along with entrepreneurs in the Northeast Ohio-Cleveland region provided that spark.

The following four questions can help give more insight into how Cleveland approached the role of government. The answers can be applied—or adapted—to other regions' ecosystems and may help people eager to understand and develop governmental support elsewhere.

#### 1. What kinds of initiatives should government support?

Charu Ramanathan, co-founder of the medical device company, CardioInsight, helps answer this by example. Cardio-Insight developed a novel 3-D mapping technology for mapping cardiac disorders and was acquired by Medtronic in 2015 for \$93 million.

Charu believes that the new source of government funding in Ohio played an important role in making the technology she developed in the early 2000s at a lab at Case Western Reserve University into a full-fledged, independent, startup company. She says that roughly 10 percent of the financing raised by CardioInsight came from the state.

"If your project is sound, and you're able to articulate exactly what you're going to do in a paper, in [the state government's] format, you get the money," she said.

Charu feels strongly that if her company had to exist solely on private financing, it would have had to move out of Cleveland. According to Lisa Delp, "To measure the success of the [Ohio] Third Frontier programs to support entrepreneurship, three key metrics are considered: job creation, tax revenue, and the amount of follow-on capital that's raised by entrepreneurs after the state investment."

3. Why should governments get involved in supporting entrepreneurship at all?

There's a legitimate debate about the extent to which government should be involved in supporting entrepreneurship. Ray Leach, CEO of the Cleveland-based non-governmental venture development organization, JumpStart, thinks the strong public-private partnership in Cleveland moved up the timetable for success.

"If you get the right private sector leadership, and you get everybody organized, and they're committed for 20 years, you can make a significant difference . . . but Ohio didn't have 20 years," Ray says.

Ray adds that public sector dollars have enabled JumpStart to create a lot of momentum in a relatively short amount of time.

4. Isn't it best to let the private sector handle investing in private companies directly, since this is what it does best?

"I'm cautious about the role of government," says David Liddle, a Silicon Valley-based venture capitalist with US Venture Partners. But Liddle says it can work well, "if it's done light-handedly, which is, as far as I can see, the case here [in Ohio]."

For aspiring entrepreneurs determined to pursue government funding, here are some questions to answer before taking that step:

- Does the government avoid bias?
- What is the government offering in matching startup funds, and how can those funds be used to support startups?
- How does the government measure startup success?
- A tough, but sometimes necessary question to ask is: If the economy is known for corruption, should government have a different role in supporting entrepreneurship, if any at all?

Once aspiring entrepreneurs find satisfactory answers to these questions, it may be the right time to move ahead in seeking governmental support for the world's next exciting idea.

Clearly, the Cleveland innovation ecosystem isn't the same as your innovation ecosystem (unless of course you live in Cleveland). And in the US, we have very high relative amounts of capital and quite high relative political and social stability—two massive factors that prompt me to avoid making direct comparisons to your ecosystem, and instead, encourage me to tell stories (of Cleveland and elsewhere) that have pieces and parts you can relate to as you work within your own ecosystem.



Giorgi Tukhashvili (foreground) in Tbilisi, Georgia, 2016.

## GIORGI TUKHASHVILI

#### ADDING MORE TECH TO TBILISI

As a tech entrepreneur, Giorgi Tukhashvili is interested in infusing more innovation and technology capabilities into the Tbilisi small business ecosystem.

liorgi Tukhashvili was a young boy when the Union of Soviet Socialist Republics (USSR) dissolved. During that time in the early 1990s, Georgia transitioned from being a republic of the Soviet Union into its own independent nation. With the transition came struggles with new problems—civil unrest, armed conflicts, energy and transport blockades, high crime rates, severed economic ties, and other serious issues. At that point, as the new country voted for its first democratically elected president, civil war broke out.

At their home in Tbilisi, Giorgi and his family endured the destruction that war brings. Giorgi remembers occasionally playing with spent bullet shells on the balcony of his apartment.

Because of the civil war, the economy went even further into disarray, namely economic stagnation, high inflation, and high unemployment. But around the mid-2000s, the economy began to recover remarkably, moving from near collapse to becoming the World Bank's top reformed economy. By 2014, Georgia had become part of the European Union's Free Trade Area, trading heavily with the EU and attracting large amounts of foreign investment.

In December 2015, I received an email from Giorgi. He was a student in my MOOC. No longer a boy playing with bullet shells, Giorgi was an entrepreneur trying to improve his homeland through peaceful means.

"I wanted to make my country better, and entrepreneurship seemed like the way to go," he later said to me.

Entrepreneurship makes Giorgi feel fulfilled.

"You don't have to rely on your manager to tell you what to do, and you're no longer a small detail in a huge corporation. You decide what to do, and whatever you do hopefully gives you satisfaction that you are doing something that you believe in."

In December 2015, Giorgi took Beyond Silicon Valley to learn how to help the Georgian innovation ecosystem. As background, Georgia has a good concentration of SMEs. In 2014, the Georgian government formed the Entrepreneurship Devel-

opment Agency to improve the skills of entrepreneurs, increase their access to financial resources and markets, and strengthen their export potential. But Giorgi, who then worked as a senior software developer for TBC Bank in Tbilisi, was interested in the world of high-growth, technology-based startups, and Georgia's ecosystem for innovation-oriented SMEs is immature.

In his spare time, Giorgi worked on growing a company he founded, Flexbox, a web development firm. It uses the flexible box web layout model and Cascading Style Sheets (CSS) 3 programming language to help companies create, update, and improve their websites. CSS Flexible Box layout is used to create website text that is flexible and fits whatever size of screen a user views it on, from a full-sized PC screen to a much smaller screen on a smart phone. He sees the potential market for Flexbox as being strong.

He told me that the majority of Georgia's SMEs (estimated at about 600,000) do not have websites.

"We try to solve that problem," he said.

The Georgian government had a goal to provide internet access to 90 percent of the country by the end of 2017. Recently the Georgian government took basic steps to support innovation as a path to sustainable economic growth. It stated in its 2014 economic development report that it would create a legislative and institutional environment that would enable more venture financing for startups, high-risk businesses, and innovation-based enterprises.

It also created an Innovation and Technology Agency to develop entrepreneurial innovations and infrastructure, such as forming business incubators through public-private partnerships.

"The government has an agency dedicated to innovations and one agency dedicated to entrepreneurship," Giorgi said. "And they both host investment challenges and do grant funding. So they want to jumpstart this startup and entrepreneurship culture in Georgia, and they are trying their best, but this effort is still in its infancy."

In his Beyond Silicon Valley midterm exam, Giorgi offered ideas for advancing the innovation ecosystem in Georgia. He wanted to hold local meetups based on Beyond Silicon Valley. These would start conversations among the many people interested in the Georgian entrepreneurial ecosystem. Here's what he wanted to cover in the meetups:

SESSION	PROBLEM	SOLUTION
Role of Government	Education system is insufficient.	Incorporate business and finance education in earlier stages (use games); experiential learning with small, real investments.
Intermediary NGOs	Existing NGOs do not communicate with the end-users—focused on communicating with funding organizations.	Organize local, grassroots-lev- el meetings with target audi- ence; spend more resources on communications.
Anchor Institutions	Lack of entrepreneurial units at universities.	Universities need to establish flexible startup labs; change legislation to allow for such labs; create exhibition of innovations, with goal of selling/commercialization; faster registration of innovation at universities; create templates to facilitate creation of startups.
Access to Capital	Lack of information.	Create centralized portal for startups to collect information for startups.

While he was taking Beyond Silicon Valley, I connected Giorgi with Arjan Tupan, the king of meetups (in Düsseldorf, Germany). Arjan helped Giorgi structure a series of meetups in Georgia. I also connected Giorgi with Nam Sang Yoon, a US diplomat in the Public Affairs section at the US Embassy in Tbilisi. Giorgi translated Beyond Silicon Valley into Georgian, making it the first MOOC on Coursera with Georgian subtitles.

Then for five weeks in the spring of 2016, Yoon and Giorgi co-hosted weekly meetups, based on the outline Giorgi had created in his Beyond Silicon Valley midterm exam. At each meetup, Giorgi briefed attendees on the topic of the day and then played the video lecture on that topic.

The five topics were a modified version of the Beyond Silicon Valley course pillars: Role of Government, Role of Intermediaries and NGOs, Leveraging Anchor Institutions, Access to Capital and Mentors, and (instead of Philanthropy) Local Challenges. After each video, Giorgi and Yoon introduced a subject matter expert who presented for 15-20 minutes.

One subject matter expert, for instance, came from Crystal Microfinance, which provides loans (mostly micro-loans) and financial services to entrepreneurs and farmers living in remote areas in Georgia.

"Then we had a small break and then a workshop where they would break down into groups, and they would share their personal experiences of what sort of challenges there are in Georgia, and hopefully, they would talk about how we could overcome those challenges," Giorgi said.

About 36 people attended the meetups.

"We had almost every type of person you could imagine," Gi-

orgi said. "We had a 52-year-old professor who had a PhD from the US and was a director of a huge company. We also had some students and people who had launched startups or were in the middle of launching them. We even had one high school student."

The meetups inspired Giorgi and other participants to do something. They created a document that highlighted the problems they talked about in the series of meetups. Giorgi shared it with the Georgian Innovation Technology Agency, and the agency responded, saying it would address some of the problems.

For his part, Giorgi ended up suspending the operations of Flexbox after another of his ventures took off more quickly than expected.

"Things didn't turn out the way I wanted [with Flexbox]," Giorgi told me in early 2017. "That is life—it turned out to be much better than I imagined!"

What happened was Giorgi and his colleagues received a multimillion-dollar angel investment in October 2016 that enabled them to launch 1Click, a payday lending company that employs 30 people. Customers take out short-term loans online and pay them back (plus interest) after they cash their paychecks.

"I'm not sure how long the funding will last; it depends on the market situation," Giorgi said. "But it should be more than enough to make the company profitable."

Giorgi said he and his colleagues expect the angel investment to increase the company's probability of becoming a multinational company and enable it to add related services.

"After two or three years, we'll add some new, innovative, 'fintech' products to our portfolio." (Fintech is short for financial technology.)

From occasionally playing with spent bullet casings in the midst of civil war, to becoming a tech entrepreneur, Giorgi Tukhashvili has traveled quite a path. What does he plan to do next?

"We hope to change the world a little," he told me.

#### FAST FACTS STARTING BUSINESSES

Giorgi started a business after taking Beyond Silicon Valley (he had started one beforehand, as well). He's in good company—after taking Beyond Silicon Valley, about 43 percent of engaged students created a new business as a founder or co-founder. In contrast, only 26 percent of enrolled disengaged students were founders. In other words, students who were deeply immersed in the course content were 65 percent more likely to start a business after the course compared to those who did not truly engage.

This is statistically a very significant difference. Of course, I recognize the statistician's constant caution that "correlation doesn't equal causation." Even with that in mind, I like seeing the *correlation* that those students who engaged with Beyond Silicon Valley are significantly more likely to start a business.



Yvette Mazariegos.

## YVETTE MAZARIEGOS NETWORKING REGIONALLY AND GLOBALLY

By networking globally, Yvette Mazariegos gained appreciation for how she could aid and benefit from the entrepreneurial ecosystem in Belize.

vette Mazariegos was born in British Honduras in 1968. In 1971, Great Britain granted independence to British Honduras, and from this, in 1981, the nation Belize was formed.

Despite its relatively new name, the nation of Belize was also the center of the Mayan civilization, some two to three thousand years ago. With its jungles, world's second-largest barrier coral reef underneath the Caribbean Sea, and abundant wildlife, including hundreds of species of birds, Belize is in many ways a paradise. I can understand why Yvette loves her country.

"I had a very healthy upbringing in Belmopan," she said. Belmopan became the Belizean capital after a hurricane destroyed the prior capital city. "It is beautiful here—beautiful trees plus the blue holes that Jacques Cousteau came here to scuba dive in. It's a fabulous, beautiful place."

Yvette's family owned and operated a farm specializing in corn, beets, and beans. She said her father, a farmer and businessman, was a fantastic mentor to her. One thing he did was help Yvette and other kids earn spending money by giving them summer jobs tending to crops.

Yvette ended up developing an entrepreneurial streak at a young age. She once wanted spending money and came up with an idea. She gathered old comic books and toys, hopped on her bike, and pedaled to the houses of the neighborhood kids, selling the books and toys for a couple quarters apiece. She also sold cupcakes and pepitas (pumpkin seed snacks) to her classmates. A matchbox full of *pepitas* went for 5 cents.

Yvette liked earning money, so when she read about a fishing game where children used fishing poles to snag prizes out of a kiddie pool filled with water, she came up with another original idea. She didn't have a kiddie pool or water, so she wrote numbers on pieces of paper that corresponded to numbers she had placed on her brothers' and sisters' old comic books and toys. She charged neighborhood kids 25 cents, 50 cents, or \$1 for a chance to pick the numbers out of a carton and win the books and toys.

"I had kids lining up down the street. They had to pay for a try," she told me.

Although Yvette showed an entrepreneurial mindset early on, her family prioritized education. Yvette earned an associate's degree in general studies from St. John's College and a Bachelor of Science degree in business administration from the University of Belize. Before she graduated, Yvette met her husband, Roberto, in Belmopan, where he was working on his electrical engineering degree. He had grown up in neighboring Guatemala.

"We went to live in Guatemala and then came back, and together we started M&M Distributors in 1996," said Yvette. M&M imports paper and textiles. "We started importing goods from Guatemala, and then as our company grew and developed, we started importing goods from the States and other Central American countries, like El Salvador."

Demand for paper products started to grow in 2000. Yvette and Roberto co-founded another company, this time a paper converter, Belize National Paper Converters (BNPC). BNPC converts huge rolls of paper by cutting them into smaller, precisely shaped pieces; packaging them into reams; and selling them by the pallet. It is the only paper converter in Belize. Yvette's goal as CEO is to convert paper and sell it in developed countries throughout the Caribbean, such as Barbados, Jamaica, and Guyana.

Yvette is an entrepreneur not in the field of IT, which is a popular industry for entrepreneurs around the world, or tourism or agriculture, which is a popular industry for small businesses in Belize. Instead, she's an entrepreneur in paper converting, which is an industry without much of an ecosystem in her country.

Yvette and her husband faced the reality of being in a lonely industry as entrepreneurs as they tried to grow their business. Yvette and Roberto have faced a lack of access to growth capital, for example. When they needed a loan to expand BNPC, they went to the Development Finance Corporation, a development bank that provides debt and equity investments to people and businesses. It accesses financing from larger regional and international lending institutions and then lends to Belizean citizens, residents, companies, cooperatives.

"It is not a bank, but it offers loans for agriculture, education, and other purposes," Yvette explained.

The strongest industries in Belize are tourism and agricultural exports (sugar, citrus, bananas, fish, and shellfish). The Belizean government has historically supported these industries' exports with trade tariffs and by influencing the allocation of credit. But for a paper converting company, things are different. First, Belizean labor is relatively high-cost compared to neighboring countries. Second, energy prices are higher. And third, Belize has under-invested in infrastructure (i.e., building roads) for decades, which means large tracts of land are inaccessible for industry, and ports are limited to smaller ships. Strongly underlying these economic factors, there's the very difficult reality that 41 percent Belizeans live below the poverty level; that's no paradise.

Yvette said she and her husband were extremely persistent about their need for capital. After they put up \$250,000 worth of collateral (property they owned), the development corporation finally issued the Mazariegoses a \$100,000 loan.

But of course, financing issues continue. For instance, Yvette would like to get credit from paper mills in the United States and Canada. She wants to expand the business by buying more paper to convert and then selling it throughout Belize. But she said that the big paper mills won't sell directly to her business because the profit margin is too small.

"By the time it gets to me, I may have three or four middle people between me and the factory. Then it's expensive, including shipping," she said. "Then they're going to say: 'We need a better price.' At the end of the day price rules."

Yvette wanted to find out how to make BNPC more price competitive and how entrepreneurs in other places deal with issues similar to what she faces. She said, "Here, everyone is on their own," although she did add that she thinks people are beginning to understand the idea that Belizean entrepreneurs might need help. In any case, Yvette figured out that she needed to network with people in other regions.

In spring 2014, she found out about Beyond Silicon Valley from her local newspaper, *Amandala Newspaper*. The US Embassy in Belmopan was co-hosting meetups around the MOOC and was advertising for students who would take the course and meet every other Wednesday. The topic matter would be how to build the Belizean entrepreneurial infrastructure.

Jeff Wofford, the facility manager at the US Embassy in Belmopan, ran the Beyond Silicon Valley meetups.

"Students here gained a lot of insight by taking the time to sit and discuss the lessons in person," he said. "We had a nice cross-section of attendees, from University of Belize students to Belizeans who had owned and operated businesses for decades.

Yvette signed up.

"We all went to the University of Belize—they held it in one

of the auditoriums and they [the embassy people] chatted with us and we talked about how the course applied to us in Belize. Everyone gave input, and we all contributed thoughts on how the ecosystem might work better."

Yvette wanted to understand the world of entrepreneurs in other places, hear their stories, see how they started and developed, understand what drove them and what would come next for them. That "what next?" was the key question for Yvette.

"I have plateaued and I need to go to the next level, so I want to have more knowledge, more training, more doors open, more something to enlighten my mind what to do next, some help," she said.

Yvette wanted to know more, from as many people and places as possible, and she wanted to improve her businesses.

"What the MOOC improved was my mindset, getting to know people and understanding a little bit more."

She said that in several instances, a comment made by one of the students led to one of those wonderful "a-ha!" moments with another student, and the exchanges went both ways.

At the end of the course, the US Embassy gave Yvette and other Beyond Silicon Valley students certificates—one from Coursera and one from the US Embassy. It also held a ceremony at the residential compound.

Then her Beyond Silicon Valley experience took a more global turn. Yvette and another woman in her class did a class project for Beyond Silicon Valley in which they discussed BNPC. As it turned out, the embassy liked Yvette's project so much that it sent her to the Global Entrepreneurship Summit in Nairobi, Kenya, in July 2015. She networked with some of the 1,500

attendees from across the globe, and she enjoyed watching President Obama, who attended the summit and delivered a talk on female entrepreneurs and women's propensity to reinvest in their local economies.

Since those experiences, Yvette has helped to mentor and check assignments completed by Beyond Silicon Valley students.

"MOOCs are definitely the way to go," she said. "They will help so many people get a better education."

Yvette was chosen to be president of the new global alumni association of people who have taken courses at the US Embassy in Belmopan, called the US Embassy-Belize Alumni Association.

"I'm on the board of directors," she said. "It's just starting, and I hope I can mentor people in my community and impact entrepreneurs in Belize."

Another Beyond Silicon Valley student, Elaine Slatter from Canada, who has become a lead mentor for Beyond Silicon Valley, wrote this about Yvette in her book about female entrepreneurs: "Yvette is a ball of fire and her entrepreneurial mind is always dreaming up new ideas for business expansion and at the same time exploring ways to help her local community become entrepreneurial."

Elaine is right. I admire that Yvette is growing her paper converting company in the mostly agricultural and tourist economy of Belize, and that she has taken advantage of many global connections through conferences, alumni associations, LinkedIn, and other means. Some of these connections were forged because of Beyond Silicon Valley; all of them comprise the global entrepreneurial ecosystem that is helping her grow her business.

### FAST FACTS NETWORKING

Yvette uses LinkedIn for global networking, and it's a platform that has worked well for her. It's no wonder why—LinkedIn has 467 million members in over 200 countries and territories. There are more than 40 million students and recent graduates on LinkedIn—they are LinkedIn's fastest-growing demographic. One LinkedIn representative told me that LinkedIn thinks companies increasingly need to evaluate people's educational profiles not only on four-year college degrees but also on skills as well.

I became interested in how participation in and certifications from MOOC courses such as Beyond Silicon Valley were being conveyed by people, and I also became very interested in how communities form around online courses. So I decided to investigate how students convey their Beyond Silicon Valley experience on LinkedIn.

First, I found that they list it in various ways. Some list the actual course name, whereas others list "Case Western Reserve University" (where I teach; the host institution for the Beyond Silicon Valley course) as an institutional affiliation, and still others show the Coursera logo. Also, some of the community mentors list the mentor position as a volunteer position on their LinkedIn profile. Regardless of what they list, they show their course experience in a variety of locations. Yvette, for instance, lists Beyond Silicon Valley in these six sections of her LinkedIn profile: courses, accomplishments, certifications, honors and awards, interests, and groups.

play a big role.

This matters to today's entrepreneurial ecosystems because, along with Coursera's interactive platform and Beyond Silicon Valley's in-person meetups, LinkedIn has helped provide connectedness among Beyond Silicon Valley participants. When we observe how entrepreneurial ecosys-

tems grow, we can see that local and global connectedness



Ajit Nigam.

# AJIT NIGAM ACCESSING CAPITAL IN INDIA

Ajit Nigam is working to bring risk capital to a new incubator in the Himalayan foothills; as the Indian venture capital environment improves, it's an interesting hill to climb.

A jit Nigam lives in Dehradun, India, and works as Associate Dean-Incubation, for UPES Centre for Innovation and Entrepreneurship (UCIE). India is a massive nation that has 1.3 billion citizens, 29 states, and more than 13 languages, with an area of more than one-third of the US. Over the last five decades, India's SMEs have become ever stronger contributors to the economy. The Indian chamber of commerce says that

today, India has 36 million SMEs that employ over 80 million people, and SMEs contribute 45 percent of Indian manufacturing output and 40 percent of its total exports. They create over a million new jobs each year, making the SME sector the second-largest employer in India (after agriculture).

India has entrepreneurship in its soul. Now, the high-growth entrepreneurship sector in India is also taking off, says Vikram Gupta, founder and managing partner of IvyCap Ventures, which is based in Mumbai, India. With \$140 million of capital under management, IvyCap is the largest Indian venture capital firm dealing in Indian rupees (larger, India-focused venture capital funds exist, but they are US-originated, dollar-denominated funds). Vikram told me that in India, a cycle of success has set in with respect to high-growth entrepreneurship.

The government previously recognized all funds as one category, but it recently made a change, recognizing venture capital funds as a separate category from, say, private equity funds, real estate funds, and hedge funds. With this change, refined taxation and other policies began to adapt to the unique opportunities and challenges of venture capital. A venture capital asset class was created.

Then, angel investors came along.

"There are about a thousand, or maybe more, angels in India very actively investing, but also all the big cities now have their own angel networks, and each network has about 200 angels," Vikram told me. "The culture has also changed in India. Parents are encouraging kids to do startups where they used to encourage them to go into safe government jobs or encourage them to apply to US universities for higher education."

"Fresh graduates now are actually starting up their own companies and not even going abroad for higher education," he added.

Another entrepreneurial leader in India, Yatin Thakur, wrote in an op-ed for CNBC that 2016 in particular was a big year for innovation in India. Thakur is founder of India's largest co-working network and managing director of GEN India, an affiliate of the nonprofit Global Entrepreneurship Network. He wrote that the prime minister launched the Startup India action plan aimed at boosting high-growth, digital entrepreneurship. After that, the National Institution for Transforming India, a government entity promoting innovation, announced financial support for people setting up and modernizing startup incubators across the country. (Vikram Gupta is very involved with this network of incubators.)

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UPES, where Ajit teaches, is trying to help innovation-oriented entrepreneurs and trying to do so from a somewhat remote place. UPES is located in the foothills of the Himalayas in a province known across the country for being the center for secondary education—in particular, boarding schools for elite Indians such as politicians and the Bollywood crowd—for the entire country. Dehradun was so far from the capital of its original Indian state that in 1930, residents demanded a separate state. It took 70 years for that state to be created, but in November 2000, that's exactly what happened—Uttarakhand became a state, with Dehradun as its provisional capital.

And what a stunning state I'm told Uttarakhand is—rolling hills, mesmerizing waterfalls, lush valleys (between two big

rivers), and a mild climate. Uttarakhand is home to some of Hinduism's most holy places and is a global tourist destination for students of yoga, who journey to the province's more than 250 yoga centers, ashrams, and schools. It's a place that many might think of as exotic, boasting animals from tigers to elephants, as well as peacocks and quail. For aficionados of pop-

ular music history and cultural movements, it's also where the Beatles traveled to study Transcendental Meditation in 1968.

Uttarakhand is also a gateway to surrounding Himalayan tourist destinations. The province and its main city, Dehradun, enjoy wonderful natural resources, which give rise to good food, tourism, and pharmaceutical product industries (the pharmaceutical opportunity uses extracts from resinous trees and mineral stores). The region also has a toehold in something not related to natural resources, namely publishing.

Within India, Uttarakhand has not been known for its startup activity, but heartening progress in India's funding environment has led to visible signs of the region becoming more entrepreneurial. Here's s a small but meaningful example: the Indian National Institute for Entrepreneurship and Small Business Development placed its one regional office in Dehradun.

Vikram of IvyCap Ventures gave me a sense for Uttarakhand's business culture.

"Uttarakhand is actually a high-growth state in India. There are a lot of investments happening in that state, a lot of industries setting up there, and it's one of the most progressive states in India now because of the tax collections and also the tax benefits for companies to set up there," Vikram explained.

"It's also very good from the perspective of natural resources,

because it has hills, rivers, plains, and it's very green and has good soil for agriculture.

"Now," Vikram continued, "it has many good companies setting up there, and the government, which is center, won state elections there, and so that gives stability to Uttarakhand. I think it's, overall, positioned very well for growth, and I think you will see some development happening in that area."

These positive signs for entrepreneurship throughout India and in Uttarakhand have occurred simultaneous to Ajit's work in setting up the new incubator at his university. When he became the assistant vice president of entrepreneurship and incubation at UPES not long ago, he immediately wanted to create an incubation center. He first had to differentiate between growth-oriented innovators and self-employed retail shop owners so that the incubator would serve the right people.

"Entrepreneurs," he said, "are people who set up businesses and the systems around them."

Essentially, as Ajit sees it, entrepreneurs create wealth for their regions whereas shopkeeper-type entrepreneurs create jobs for themselves. This distinction is important because Ajit wanted the new entrepreneurship center to focus on entrepreneurs as innovators and wealth creators.

Knowing the incubator's target customers was step one, but Ajit still had a little problem before he got started.

"I had no place to go for direction," he said.

Ajit registered for Beyond Silicon Valley because he needed ideas as he tried to develop the incubator. He watched the videos, did the readings, took the exams, attended one or two live WebEx sessions, and posted observations and questions on the

forums. Through this and other homework, Ajit confirmed that he definitely did want to build the incubator community entirely around innovation-oriented entrepreneurs, not the shopkeeper entrepreneurs.

Ajit created the UPES Centre for Innovation and Entrepreneurship at his university. UCIE provides mentoring, infrastructure support, networking, and financial support to help students make their business ideas more concrete. And it has grown well. Within a relatively short time, it was housing two companies and had four in the pipeline. It also helped broaden how students and faculty think about education: education offers not only knowledge for getting a job but also the skills for starting businesses.

"That's very satisfying to me!" Ajit said.

He also wanted to help develop the broader ecosystem in the area. When he spoke at a meetup in November 2015 during Global Entrepreneurship Week, he said UPES and the Confederation of Indian Industries were collaborating to create an entrepreneurial ecosystem in Uttarakhand.

"What was most important for me was building this community of people," said Ajit. "There are brilliant ideas trying to solve problems of society."

To ensure students understand the ecosystem, Ajit takes students on field trips to downtown Dehradun, asking them "to look around, spot problems, create solutions, and use learning to solve those problems."

But one of the main areas Ajit is working on, with respect to the ecosystem goal, is helping create a network of angel investors. "The biggest problem in India is, 'How do I raise capital?'" he said.

There may be rising levels of angel and venture capital in India, but in Dehradun, Ajit hasn't yet seen as much of this as have incubators in other places. Vikram, the venture capital investor at IvyCap, agrees that although the situation is changing rapidly, Indian activity and capital currently remain largely based in four cities—Bangalore, the Delhi and New Delhi area (called the National Capital Region, or NCR), Mumbai, and Hyderabad.

"Tier 2 towns are coming up, but the numbers are pretty small right now," Vikram said.

So although India is the third-ranked nation in the world for startup activity and the number of so-called unicorns (companies valued at a billion dollars or more), access to capital can be difficult.

Ajit's approach is to pursue a grass-roots strategy, leveraging the knowledge and connections developed when he was raising money for UCIE, as he tries to assist with the angel capital needs of the companies in the incubator. He has also formed a networking group called Dehradun Startups, a meetup group that has met regularly since its formation in 2015 and is a way for local entrepreneurs to support and learn from each other.

Because an organized and rapidly rising level of angel capital is a concept that is only five or six years old in India, and because the idea of university incubators as reliable feeders into the innovation system is even newer than that, and because Dehradun is not one of the main centers of capital, Ajit has, in the midst of an enormous and exciting opportunity for a developing ecosystem, plenty of near-term fundraising challenges. I received

a message from Ajit as this book was going to print saying that a new incubator outside UPES has been launched, and an angel network called Dehradun Angel Network has been created.

I am eager to stay in touch with Ajit to learn how the ecosystem evolves in his fascinating locale.

# PERSPECTIVES INSTITUTIONS AND INCUBATORS

I was particularly interested in two pieces of Vikram Gupta's IvyCap Ventures involvement in the ecosystem. First, how deeply he's involved with the incubator network the Indian government set up. IvyCap created a connection platform called IvyCamp (www.ivycamp.in) that has about 60 incubation centers on it. He says the original incubation centers started at the top five engineering colleges—Indian Institute of Technology (IIT) Mumbai, IIT Delhi, IIT Kharagpur, and others.

Seeing these successes, the Indian government set up and funded its own incubation centers through the department of science and technology, which is an investor in the Ivy-Cap fund. Because of these government efforts, there now are a total of about 97 incubation centers in India, of which 60 are on the IvyCamp platform.

The reason IvyCap is involved in part relates to the fact that, said Vikram, "the government itself is very inexperienced so that even when it allocates funding, it can't easily find people to manage those funds. They have funds available but don't know who can give funds to manage it. The team managing the incubation center may not be very experienced."

"They may come with the mindset of an angel investor," he said. "As an angel investor, you are not necessarily looking at how to scale a company and make it very large. Or they may have a technology background so that they don't understand the commercial side; they may be too focused on technology and so they can't manage capital side as well.

Secondly, I was interested in how some of the IITs are involved with IvyCap beyond the IvyCamp platform. Vikram explained it to me.

"In our case, 80 percent of our capital has come from institutional investors in India—banks, insurance companies, government of India—these are our investors," he said.

Then we talked about other types of funding.

"The remaining 20 percent has come from IIT alumni trusts," Vikram said. We have a large number of alumni from the IITs who've pooled their capital, and they have become sponsors of the fund. So, we have organized differently and done something unique in global venture capital, which is that we have seeded India's first endowment platform; we give a significant part of our carry is basically, the portion of returns on investment reserved specially for fund management to the endowment fund, which goes back to those colleges. No one else has done this ever before."

An interesting perspective from a pioneering venture capital investor in India.



Farm in Northeast Ohio.

# THE CLEVELAND CONNECTION THE ROLE OF PHILANTHROPY & DONORS

hat is the role of philanthropy in contributing to regional entrepreneurial ecosystems? As an extremely philanthropic city, Cleveland provides us with an excellent example.

There are several inflection points regarding Cleveland's philanthropic history. In the mid-19<sup>th</sup> century, Cleveland thrived as a center of shipping and industry, and John D. Rockefeller, whose Standard Oil was based in Cleveland for decades, owned 90 percent of the nation's oil. The Standard Oil monopoly was even-

tually broken by the government. But as the wealthiest person in America, Rockefeller helped establish the modern, systematic approach to philanthropy through the creation of foundations. Cleveland benefited from this philanthropic activity.

Skip forward to lawyer and banker Frederick H. Goff, who established The Cleveland Foundation in 1914, making it the first community foundation in the US. Initially, it financially supported cultural institutions like The Cleveland Orchestra and the Cleveland Museum of Art, and it then evolved to supporting a wide array of community and economic efforts. The success of The Cleveland Foundation inspired the creation of similar community foundations in other cities nationwide and now in countries.

Fast forward to another milestone—the 1980s, when a global recession and a long, steady shift in the US economy caused the manufacturing base in Cleveland to decline dramatically. This led to economic and human suffering, and it had a devastating impact. Jobs vanished and the "brain drain" began.

About 20 years into this decline, the State of Ohio recognized it needed to support job creation through broad and sustained efforts, and in 2002, it created the aforementioned Ohio Third Frontier program. Two years later, Burton D. Morgan Foundation and other Cleveland organizations came together to form the groundbreaking Fund for Our Economic Future—groundbreaking because it developed and acted on the core insight that changing the trajectory of a regional economy requires a level of resources surpassing the level that an individual foundation or philanthropist can provide. The resources required for the task of changing a regional economy vastly surpass resources

required for simpler tasks like building new facilities and physical infrastructure or developing targeted programs. The big idea was that philanthropists interested in advancing a regional economy and having an impact must collaborate deeply by pooling their resources and working together to allocate funding.

Brad Whitehead was a senior fellow at The Cleveland Foundation when he and others co-developed the idea for the Fund for Our Economic Future. He says that in 2004, there was a "chicken and egg" debate in the community.

"Is the problem that we don't have capital, or is it that we don't have investable ideas?" he recalls people consistently asking.

After posing the question many times with no clear answer, community members agreed that they needed to work on the two problems equally and simultaneously. Leading foundations in Northeast Ohio came together and agreed to pool their economic development resources, especially related to entrepreneurship because entrepreneurship is an important, albeit long-term, way of creating jobs. Brad is the founding president of the Fund for Our Economic Future, which has raised about \$100 million to improve regional economic competitiveness through pooled grant-making, research, and convening. As a pool of capital, it provides philanthropic capital side by side with government and private sector funding.

Today, startups in Northeast Ohio benefit from the Fund for Our Economic Future and many individual philanthropic organizations, such as The Cleveland Foundation and Burton D. Morgan Foundation. Burton D. Morgan Foundation is an important leader in philanthropy related to entrepreneurship. It uses its resources to build entrepreneurial networks of people, ideas, organizations, and opportunities, and as a result, it has played a central role in advancing the entrepreneurial ecosystem in the Northeast Ohio region.

Let's dive deeper into the Beyond Silicon Valley pillar on philanthropy and donors by addressing the following questions.

1. Why do philanthropic donors get involved in supporting entrepreneurs?

Dorothy Baunach led a Cleveland-based NGO called NorTech. This group of Northeast Ohio technology and business leaders had a vision of enhancing the prosperity of the region through science, technology, and innovation.

"We have a wonderful orchestra, and we have a wonderful art museum—all the things that make a wonderful community. But if we didn't have jobs for people, and investment in those jobs and those companies, [the area] wasn't going to survive. There would be no one left to go to the art museum or hear the orchestra . . . . At one time [Cleveland] had over 25 Fortune 500 companies in this community, and we're down to 10 or 12."

Ronn Richard, president and CEO of The Cleveland Foundation, agrees.

"One thing that's unique about us is our role in Cleveland in funding economic development," Ronn told me. "For most of our first 100 years, we did what most community foundations do these days, which is to fund the arts, social services, and things like that . . . . We were really the first community foundation that [said], 'Heck, if we don't do something about the economy, we won't have an art museum to give money to in 30 years."

# 2. How do philanthropic donors differ from government and private investors?

Donors in the economic development arena believe in a cause or idea generally. They make their grants to intermediary organizations, usually not to startups directly. They aren't in the business of owning equity or debt in a for-profit company or making operating decisions for a company. One grant to an intermediary organization may be the first and last stage of a donor's participation. This compares to a private investor, who invests equity or debt in a startup directly, and the government, which on the one hand may have very large resources to commit to intermediary job-creating organizations, but on the other hand, may be subject to ups and downs of voters and administration changes.

Northeast Ohio has some excellent examples of donors committing funds to the intermediaries that aid startups. David Levine is the founder of Wireless Environment, an innovative lighting company, and he and his early stage company indirectly benefited from philanthropic funding. In 2008, Wireless Environment received a \$400,000 investment from JumpStart, the Cleveland-based venture development organization funded by philanthropic donors and the Ohio Third Frontier program.

"What I've noticed in Cleveland, being a newcomer [in 2005 when he started Wireless Environment]," Levine says, "is that foundations that traditionally invested in big staples of the community, such as the Cleveland Museum of Art and Cleveland Orchestra, are also investing in the entrepreneurial infrastructure."

3. What are the challenges of maintaining donor interest in entrepreneurship and economic development, and what causes "donor fatigue?"

Philanthropic donors have their limits. Keeping them engaged can pose big challenges, considering the results of their funding are best measured over decades and even generations. This extended timeline and need for large resources can create so-called "donor fatigue." Job creation and other economic development results come in lower and slower than projected, donors question their commitment, and fatigue regarding making additional commitments over an extended timeline sets in.

Strong leadership in sharing a vision is one key to keeping donors involved, as indicated by, for example, the leadership of the Fund for Our Economic Future—13 years into its economic development mission, it is still going strong because all its contributors agreed at the outset on a long-term time horizon for success metrics.

Baiju Shah, the former CEO of another Cleveland-based NGO BioEnterprise, admits the problem of donor fatigue is real, however. He says, "I think you have a real challenge in economic development sustaining investment and strategies to the point where [startups] have not only proven themselves, but they can become self-sustaining elements of a region."

4. How are the metrics of success for philanthropic donations similar to or different from those of the government and private sectors?

Because of the very nature of elections and administration

changes, government often isn't the place to look for sustained, strategic investment. Philanthropic donations, on the other hand, are more likely to be attached to a longer time horizon. In general, success metrics are usually more patient in the philanthropic sector than in the private or governmental sectors. The reality of this longer-term time horizon has benefited Northeast Ohio, which is a very philanthropic region.

The success metrics themselves are often the same—number of jobs created is the No. 1 aim of economic development philanthropy, and the nature of those jobs is also extremely important. In philanthropy, the creation of jobs that pay well, are cross-sectoral and sustainable, and that help a broad swath of a region's workers is a core success metric. There are many other metrics, such as tax revenue, population gains, and regional reputation, but jobs created and retained are typically the most important metrics.

#### 5. Are donors more or less risk tolerant than their government and private sector counterparts?

In Cleveland, multiple philanthropic foundations and other entities uniquely pooled their resources and acted together. This has taken strong leadership, trust, and long-range thinking. And this dynamic has enabled philanthropic organizations to step in and make significant, and sometimes critical, donations to Cleveland's entrepreneurial sector.

For those looking for unique and long-range support and resources for their startups, philanthropic organizations can be an important piece of the puzzle, usually through intermediary organizations (philanthropic organizations rarely place monies directly into startups). These organizations also aren't in the business of making operating decisions to guide for-profit companies.



Patel Barwabatsile (right) and I in Gaborone, Botswana, 2015.

## PATEL BARWABATSILE MAKING PRIVATE-PUBLIC PARTNERSHIPS WORK

Patel Barwabatsile is working with an interesting public-private partnership that supports innovators and entrepreneurs in Africa.\*

Tfirst met Patel Barwabatsile at the annual Microsoft Innova-Lion Center (MIC) Summit at Microsoft in Seattle in October 2014, where I was invited to speak with MIC leaders like Patel about Beyond Silicon Valley. The summit enabled fantastic exchanges of ideas because it included roughly 70 MIC

managers from around the world. The MIC in Botswana is a public-private partnership between Microsoft and the Botswana Innovation Hub, and Patel was its director. The MIC provides the services that help new ventures deliver innovative IT- and communications-based products. He landed at the MIC because he wanted to be part of developing diversified growth options for Botswana.

After the conference, the US Embassy in Botswana invited me to travel to Botswana to conduct meetups with entrepreneurs and supporters of entrepreneurship. Before my spring 2015 journey to Botswana, I contacted Patel to invite him to be involved in these efforts. I was thrilled when he agreed to host the meetups at the MIC facilities in the Botswana Innovation Hub.

A MIC serves a social purpose in that it aims to help a region improve and become competitive in the area of software and information technology, and it also serves a commercial purpose of helping Microsoft access global customers. Microsoft always sets up its MICs as public-private partnerships. The company finds partners in each community—local governments, academic institutions, industry organizations, and software and hardware vendors—and they jointly design the MIC for that community's needs. The partners operate the MIC by providing services that stimulate the local software economy. The support they offer includes skills and professional training, industry partnerships, and innovation support.

I talked about the impact of MICs around the world with then Microsoft global program manager of MICs, Ed Steidl.

"What's interesting from an impact perspective," he said, "is that although there are various stakeholders in the markets—be it investors, government, or private enterprise—and they all sort of know each other, they never really sat around a table and talked about how they could move forward together and help the ecosystem move to the next level.

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In June 2015, I traveled to Botswana. I took a taxi from the airport outside Gaborone, Botswana, one of Africa's fastest growing cities, into the center of the city. The US Embassy in Botswana sponsored my trip with the idea that I would help some Batswana explore how they could develop an entrepreneurial ecosystem and diversify the growth economy. Over the next few days, I'd be conducting a series of meetups.

One of the most sparsely populated countries in the world, Botswana is flat and landlocked; desert and vast expanses of savanna occupy 70 percent of its land mass. The wildlife is (to this Cleveland boy) incredible, featuring lions, giraffes, zebras, and one of the largest elephant populations in Africa. The country has an amazing array of flora, including the baobab tree, which figures prominently in Antoine de Saint-Exupéry's classic 1943 children's book, *Le Petit Prince* (*The Little Prince*). The tree is a succulent, holding great quantities of water, which, among other life-giving qualities (its fruit has legendary, positive nutritional benefits, for example) is known as "tree of life." The tree is revered in that it can grow for thousands of years.

Few sights in the world are more timeless and gorgeous than the sunsets over the Botswana savanna, the baobab tree in the foreground, with a few fire-orange clouds in the background, and in the middle of the vista, the silhouette of a "tower" (group) of giraffes. Botswana is the cradle of civilization, especially the Okavango Delta, one of the largest inland deltas in the world, and humans here go back at least 100,000 years.

As one of the strongest and longest-running democracies in Africa, the country enjoys a good degree of political stability.

This trip to Botswana was a particularly meaningful trip for me because in neighboring South Africa, I had launched my post-college career journey in the field of international development. That journey didn't begin with entrepreneurship as its explicit goal, but looking back, I think it provided a spark that eventually led me to entrepreneurship. I spent three years in South Africa (from January 1993 through December 1995). For a year, I worked with WorldTeach to help launch a program to bring American teachers to work in rural, racially segregated schools in South Africa, and I served as a teacher myself in the community of Grabouw on the Western Cape. I then became a program officer for the National Democratic Institute, developing and implementing voter education programs in preparation of South Africa's first democratic national and local government elections in 1994 and 1995. During this time, Nelson Mandela was elected the first black president of South Africa.

During my three years in South Africa, I visited Botswana as a tourist. I visited it again on my honeymoon in 2001. So, as I began my 2015 trip to Botswana, I felt as if I were coming full circle, except that now I had the opportunity to work with aspiring entrepreneurs. Education, voting rights, and entrepreneurial endeavors—all of these seem, upon reflection, to be on the same continuum of positive change, which I find very gratifying.

In Botswana, I remember being struck by the downtown Ga-

borone layout, how it had changed since my long-ago visits.

Where is the center of things? I wondered.

I figured out there are two centers to the city—a new center with new buildings, the city business district, called the CBD, and then the traditional government center, the Main Mall, and Government Enclave. This dichotomy illustrates the changes occurring in Botswana today, where you can actually see growth in the shape of the buildings private developers have built in the new downtown. You can see an emerging skyline of a growing economy.

In the south, Botswana borders South Africa, and in the north, it borders Zimbabwe and Namibia with a tiny section of border touching Zambia (there is debate about whether Botswana and Zambia share a border). Botswana is a relatively stable nation politically and has seen good economic growth for 50 years, but its growth stems from the strength of one main industry—diamonds.

When Botswana became an independent country in 1966, it was one of the world's poorest nations. In 1967, when geologists with the De Beers Group of Companies discovered diamond deposits in Orapa in the Central District (northwest of the village of Serowe), Botswana began its ascent, becoming the largest producer of gem-quality diamonds on the planet and one of the fastest-growing economies in the world. Diamonds are special because as precious gems, they rarely lose value.

For about a decade, Botswana's diamond production (in terms of carats) has been declining, partly because of weak demand during the now nearly decade-old global financial crisis. Diamond mining is projected to end in the 2030-2050 time frame (that is, the deposits will run dry by then). Botswana also has

copper and nickel mines and a good cattle industry, but those industries distantly trail diamond mining in terms of wealth creation and growth (50 percent of government revenue comes from the diamond industry, and 80 percent of exports are diamonds). The Botswana government and citizens are well aware that the country needs to pursue a path of economic diversification.

Enter the Botswana Innovation Hub, a science and technology park located in Gaborone near the international airport. At its core is an innovation building that consists of roughly 25,000 square meters of space—auditoriums, restaurants, data centers, conference facilities, a gym, cafeterias, training rooms, and meeting rooms. The goal for this place is to be a physical symbol of Botswana's support for research, development, innovation, and entrepreneurship; a nexus for knowledge creation and innovation.

As director of the MIC at the Botswana Innovation Hub, Patel said that the Innovation Hub can "drive other industries and businesses to develop, and that is a way to drive the economy from mining." He continued, "I think the good things about doing business in Botswana are that you not only have access to the Botswana market but the larger outside market of about 100-something-million people." (This includes Botswana's neighbors of South Africa, Zimbabwe, Namibia, and Zambia.) "Another good thing," he added, "is that you have access to a good middle-class population, so the buying power is quite high."

Patel thinks, for example, that the telecom industry has penetrated the Botswana market with valuable products and services.

Prior to Beyond Silicon Valley, Patel had not participated in many MOOCs. He grew up with nine siblings in a village 50

kilometers west of Gaborone. He attended the University of Botswana, the only institute of higher learning in Botswana, but left and ultimately graduated in 2006 from Carleton University in Ottawa, Canada, with a degree in Computer Systems. Since then, he has undertaken continuing education through receiving a project management certificate from the University of Stellenbosch Business School's Executive Development Program in South Africa and an innovation certificate from a Stanford University professional program that is a partnership between the Stanford School of Engineering and the Stanford Graduate School of Business.

Patel told me that in Botswana, MOOCs haven't been common. People who live in rural areas of Botswana do have increasing levels of access to the internet, but they still find it easier to take a course in person at a nearby school or the country's university.

At the MIC in Botswana in 2015, we had four meetups with stakeholders that included entrepreneurs, capital providers, government officials and policy makers, and accelerators. Each meetup included from 5 to 50 people, and the overall number of individual participants probably totaled 75. We examined topics like tax incentives for angel investors, government and donor funding for seed accelerator programs, government-sponsored venture capital funds, and other programs the government offers entrepreneurs.

Banusi Mbaakanyi is the Chief Commercial Officer from the Economic Diversification Unit of the Botswana Ministry of Trade and Industry. She seemed to see benefit from the conversations that took place during the roundtables and meetups Patel helped host at the MIC. She told me that although Botswana's leaders had common interests, they had not yet "engaged one another in a round table manner to find solutions." At the risk of being repetitive, I think that's the power of meetups—a lot of people have innovative ideas, but if they aren't communicating them, then nothing happens. Awareness is power.

Patel said he most benefited from the government and policy roundtable at which participants laid out the real challenges entrepreneurs face and possible policies to support them. This included potential involvement with a US organization that was helping the Botswana Innovation Hub sponsor an angel investing capability. He also found the financial institutions and banks roundtable helpful because MIC employees had been encouraging Botswana's banks to add new ways of funding startups, and the participants identified tangible solutions. The meetups helped those conversations between MICs and financial institutions, in Patel's words, "move a level ahead."

The meetup participants emerged with concrete plans to support innovation-oriented entrepreneurs. "The roundtables were very helpful in looking at the issues and challenges of entrepreneurship in Botswana, especially the funding of technology-based startups," Patel said. Participants expressed that the discussions about developing more angel investing capability were most useful.

After I returned to Cleveland, the conversations continued, prompting a few people to sign up for Beyond Silicon Valley, through which they made additional connections, moving a step closer to their goals of supporting their local innovation ecosystems. Other people invited Patel and additional meetup participants to participate in new academic and policy programs. He said some policies "were energized by this discussion in terms of entrepreneurship support, trying to create market access, and assisting people to get access to the market. The policies may be moving ahead slowly, but I think they were energized by the people involved in the discussions."

Because of his role at the MIC, Patel could access the knowledge and resources he needs for supporting the innovation ecosystem. At his office in the new science and technology park, he works hard to develop the ideas and partnerships that will advance IT- and communications-related innovations in Botswana, and he employs a public-private partnership mindset. He seems to me to be skilled in combining the needs and aims of the corporate world (for example, Microsoft) with the needs and aims of having an impact on society.

I like one example of how he thinks about communications and connectivity. "In terms of working with connectivity solutions for better health care and education delivery, we have to make sure what we are putting in place is infallible and can reach a larger population at a very affordable price. We have to make programs affordable and accessible."

Another thing he works to achieve is to include both urbanites and rural residents in diversified economic growth. He understands the needs of both because although he lives in the nation's capital, he grew up and his parents and other family members still live in the village of Molepolole in southeast Botswana. He still farms occasionally on a small farm his family owns outside Molepolole. He runs sometimes in the countryside. And he likes to photograph the landscape, especially admiring its colors and the way the sun looks above the savanna.

But what Patel says he enjoys most is the intersection of technology and economic development. He feels that the meetups in Botswana at the MIC did help advance the ongoing conversation about how Botswana can use entrepreneurship to diversify its economy. He believes the biggest challenge preventing more innovation-oriented entrepreneurship is the scarcity of angel and venture capital funding, a common problem nearly everywhere but not least in developing nations and communities.

And so Botswana is diversifying away from diamonds.

I enjoyed returning to this beautiful country where I started my career as a young idealist. Most importantly, I think public-private partnerships like the Botswana MIC are crucial to growing entrepreneurship in developing economies. I'm thrilled the Beyond Silicon Valley course and meetups helped start dialogues and knowledge transfer at the facilities of the MIC in Botswana.

\*Note: After I wrote this chapter, Patel left the Microsoft Innovation Center in Botswana and is running his own startup in the media, telecom, and technology arena.

### PERSPECTIVES PUBLIC-PRIVATE **PARTNERSHIPS**

I talked with Jonathan Ortmans, the president of the Global Entrepreneurship Network (GEN) and senior advisor to the Kauffman Foundation (specializing in entrepreneurship), because I wanted to ask him more about public-private partnerships. Microsoft does a great job in the area of public-private partnerships. I hoped he might provide me with more examples.

"There are many, many examples of great public-private partnerships, and most companies are now jumping into startup communities and corporate venturing," he told me. "Take, for example, banks. Santander, Barclays, Bank of Ireland all have traditional bricks and mortar branches, which as their industry is disrupted are becoming less relevant. But they do not want to sell their real estate.

So, they are taking their physical spaces and turning them into co-working spaces," he continued. "We believe so strongly in creating a shared workspace hub and culture in small towns, GEN just opened with Richard Branson the largest startup campus in Africa-GEN's 22 on Sloane in Johannesburg. Dell is doing an exceptional job trying to be there for startups around the world, too," Jonathan said. "And then there is also Google and Google for Entrepreneurs, and companies like Johnson & Johnson that do lots of innovation challenges with entrepreneurs."

He could have continued, but I stopped him because he had made his point: public-private partnerships are a meaningful piece of the global entrepreneurship ecosystem, and there are a lot of them for good reason. They help achieve a very important balance in economic development—they do good and they do well.



Alexis Komselis (far left) and Manos Androulakis (far right) in Heraklion, Greece, 2015.

## **EMMANOUIL ANDROULAKIS** EMPHASIZING THE NEED FOR COORDINATION

Emmanouil ("Manos") Androulakis discovered that in Greece, resources exist for innovation-oriented entrepreneurship, but improving coordination among them is important.

anos Androulakis and his younger brother grew up in the same suburban home where their father and uncle had grown up, in Heraklion, a city in Crete. It's the fourth-largest city in Greece with a population of more than 140,000.

Manos's father served in the Greek Air Force, and his mother worked as a primary school teacher. Manos studied economics at the University of Crete, which in 2016 ranked as the only Greek university on the *Times Higher Education* World University Rankings.

Crete is an island in the Aegean Sea known primarily for its agriculture and tourism. It's a beautiful place and very walkable, with curved beaches that are ringed by clusters of palm trees and rock formations. The ancient past meets the present everywhere in Crete; the historic Venetian port harbor of Chania is only one example. Being an island as well as one of the earliest civilizations in the world, Crete is a place where cooperation and coordination among residents is a tradition and even a necessity for survival.

The island is also a dream for foodies because Crete's locally grown food is the standard fare in homes and restaurants. When I visited Manos, I enjoyed locally sourced seafood, but there's much beyond seafood. Farmers grow olives for some of the world's best olive oil, and vintners grow grapes for excellent wine.

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I first met Manos in Athens, Greece, at a MOOC meetup in June 2014. I learned that he enjoyed studying macroeconomics but also took courses in innovation and entrepreneurship, and that while Manos was shaped by growing up and attending college in Crete, his dreams of entrepreneurship extended beyond the horizon of the Mediterranean Sea.

"The first time I got excited about entrepreneurship was at university," he said, "and then I got really passionate about it. I became really excited about new initiatives." He learned about how people in Silicon Valley can grow their ideas and build com-

panies. "Everyone was talking about venture capitalists in Silicon Valley, but okay, we're in Greece. How can I grow my idea here?"

When Manos finished university in 2013, the Greek economy was in terrible condition. When the financial crisis hit Europe in 2008 and 2009, Greece experienced a nearly 30 percent economic contraction, which is a full-on economic depression. Unemployment reached 27 percent with youth unemployment reaching 50 percent. As the US pulled out of its recession, Greece was only just beginning to feel the pain of its debt crisis and subsequent depression. By 2015, six years into its debt and financial crisis, Greece continued its profound struggle, and the government imposed stringent capital controls. People were limited to sending tiny sums of money out of the country and were allowed to withdraw only the equivalent of 60 euros per day from banks (60 euros equates to about \$65). In summer 2015, banks closed for two weeks, crippling the country.

In college, Manos had participated in water polo, a competitive team sport, and swimming, a sport that requires individual determination. He would need those qualities of collaboration and self-determination to help grow any business in Greece, especially in the face of difficult Greek economic realities. After graduating from college and motivated by what he said was his desire to hear different stories and different points of view, Manos came upon Beyond Silicon Valley one day while surfing the internet.

"I decided to participate in [Beyond Silicon Valley] to learn how economies are different, to understand ecosystems that are different from Silicon Valley, to help me further my radius," he said.

He viewed every Beyond Silicon Valley video, completed the assignments, and participated in WebEx sessions and online discussion forums in which he offered other students his thoughts on the entrepreneurial ecosystem in Greece. He used as an example the international cosmetics company, Madis S.A., which his uncle had built. Manos wanted to understand how he could help his uncle grow Madis, and also how he could start his own business.

He figured out through his assignments that the reason Greece has relatively low levels of entrepreneurship does not stem, in his view, from a lack of innovative ideas but predominantly from what he saw as a lack of coordination among resources. He believed Greece needed better coordination among existing organizations. Too many leaders in the entrepreneurial ecosystem do not know about each other, don't communicate regularly, or don't interact and do business together, in his view.

What Manos liked about Beyond Silicon Valley was that it was so interactive and participants were truly engaged. He also found the Cleveland example to be compelling, seeing that the problems Cleveland faced had some similarities to those Greece faced—initial lack of coordination among institutions and low levels of capital, even if the magnitudes differed.

To Manos, the Cleveland story felt close to home.

"I believe that the ecosystem that has developed in Cleveland could be developed in Greece as well and in countries like Greece," Manos told me. "And it's fascinating because you can see how different sectors—like businesses, institutions, and academia—can collaborate to help you and finance you to move forward until you launch a new idea."

Manos Androulakis's view held true at the US Embassy in Greece, too.

"The fact that the case focused on Cleveland was important," said Thomas "Todd" Pierce. "It could have been any mid-sized city as long as it had seen its share of problems. That's what we needed to see."

During a good part of the Greek depression, Todd worked in the US Embassy in Athens as Counselor for Public Affairs. I had originally met him in Turkey when I was teaching entrepreneurship on the mountainside campus of Bilkent University and he was working at the US Embassy in Ankara. Todd completed three tours in Greece, totaling ten years as a public servant there. He went to Stanford in the mid-1980s, where he gained an appreciation for the power of disruptive innovation. Todd told me that in Greece, people understand the notion of the small business owner, but innovation-based entrepreneurship—coming up with a new idea that fills an unmet market need-is "a little unusual still."

When employment levels and salaries plummeted in 2008, entrepreneurship became the only option for some Greeks. But the new Greek entrepreneurs had one big problem—they couldn't even get money out of the bank.

"Is it wise to start a business when you literally can't access capital?" Todd asked.

Alexis Komselis echoed Todd's observations. Alexis is the director of AHEAD, a non-profit entrepreneurship center he co-founded in 2009, AHEAD stands for ALBA Hub for Entrepreneurship and Development and is part of the ALBA Graduate Business School in Athens. Alexis explained that Greece has an unstable taxation system and a highly regulated market that make entrepreneurship challenging. "One law usually contradicts the other law, so it's very difficult."

Alexis said that bureaucracy, corruption, and high employment costs in the form of social welfare add to the challenges. He mentioned that you can pay an employee a minimum wage of 500 euros, but you'll pay another 300 euros in social security. The employee pays about 15 percent of her or his salary, and the employer pays another 30 percent, to take care of social welfare costs—about 45 percent of salary.

According to Alexis, this has caused many of the global competitiveness issues that Greece faces. "If you take the tech startups with an international outlook, it doesn't actually make sense to be in Greece. It would make better sense to be in Delaware, London, or Berlin so that they can get money."

Even small businesses can't get capital, never mind riskier, high-growth, tech businesses. "No one will lend you money to set up a new hotel in Greece, you'd have to finance it yourself," Alexis explained. With the banks never having played a big role in the entrepreneurial sector, and then with them having all but stopped their role of making loans, business owners of all kinds need courageous angel investors and venture capitalists.

Some positives do exist in the Greek entrepreneurial ecosystem. For one, tourism is a thriving industry in Greece. Throughout the crisis, the number of tourists continued to rise. Terrorism in Russia, Turkey, and other places encouraged more people to travel to Greece. Alexis explained, "In Greece, the sun, the beach, the mountains are your partners."

The nation also has a very good educational system, which, Alexis said, has resulted in strong levels of talent.

Greeks have for centuries been leaders in international trade. He told me about how many of the major global, individual ship owners are Greek. Greece grew so much of the foods that Europeans and Asians needed that it developed a comparative advantage in shipping. Today, the country grows and heavily exports world-renowned products like wine, olives, and saffron, and probably the best raisins in the world. It is the EU's third-largest peach, orange, and olive producer and its fourth-largest tomato producer. Global demand for organic and natural ingredients, and the popularity of the Mediterranean Diet, are a couple of factors that boost the contribution of Greece's agricultural and food sector to GDP.

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Todd at the US Embassy and Alexis at AHEAD, found out about the Beyond Silicon Valley MOOC I was developing, and simultaneous to my development of the course, they decided to develop a Greek version of the course. Todd approached Alexis in search of an academic partner who could deliver a version of Beyond Silicon Valley that used Greece as the example. This was the type of coordination that Manos noted was all too often lacking—an embassy and a university partnering to support entrepreneurship. Todd asked Alexis if AHEAD would lead the creation of a complementary version of Beyond Silicon Valley—a Greek one.

The Greek version of Beyond Silicon Valley would be called Beyond Silicon Valley: The Greek Story and would involve shooting six videos focused on Greece instead of Cleveland, delivering the videos and holding meetups during the same months that I was delivering the first Beyond Silicon Valley course. In other words, they would use the main structure of the Beyond Silicon Valley curriculum but customize videos and meetups to tell their own story.

Alexis led the team and focused his efforts on curriculum development and oversight of Beyond Silicon Valley: The Greek Story. Alexis also hired contractors to conduct interviews and shoot videos (which included a sound engineer, two camera operators, a director, and a producer), and mix and edit the videos.

They subtitled the Beyond Silicon Valley videos in Greek—they would also show the Cleveland videos during the class—and subtitled the Greek videos in English. They told stories of Greek companies and entrepreneurs instead of Cleveland's, and focused on the agriculture, food, tourism, and leisure industries—areas of economic growth for Greece.

Alexis and his team developed new readings and course materials that followed each of the five Beyond Silicon Valley pillars. They produced a final exercise for students that was based on the Greek tech company, Workable, a cloud company in the HR space.

People told me that the Beyond Silicon Valley course videos were easy to watch and engaging. Fortunately, I had hired great videographers and producers who knew how to make this happen. The Greek Story version of Beyond Silicon Valley was also incredibly dynamic. As I watched the first few minutes of the introductory video and listened to the acoustic guitar music, I was riveted. They had skillfully crafted a top-notch video production that portrayed the people and businesses of Greece in a beautiful

and fascinating way. Their new course would attract attention and help bolster the entrepreneurial community.

Watching the Greeks turn the course into something that amplified the work already begun made me feel a little like a proud parent. I had no idea what the Beyond Silicon Valley online course would bring when we launched it. The Greek Story was a highlight.

As he was producing Beyond Silicon Valley: The Greek Story and I was advising, Alexis contracted with someone to do the marketing of the course, especially the meetups that would be held simultaneous to the launch of each video and pillar of the course. Alexis decided to do meetups with each session of the course, one per week across five weeks. Because half of Greece's 10 million people live in Athens, two meetups and course sessions would be held in Athens, and the remaining four, in other Greek cities.

Alexis and Todd promoted the meetups by traveling to each region, talking to stakeholders, putting up posters, and distributing materials to encourage people to register for and attend either in-person or online. Alexis developed the specific agenda for each of the five Beyond Silicon Valley sessions and meetups, inviting local speakers to each one. From late April through early June 2014, the same time period in which I was delivering Beyond Silicon Valley in Cleveland, four meetups throughout Greece were held in Athens, Thessaloniki, Heraklion, and Ionnina.

"I think this localization was the key that unlocked the knowledge that the course offered," he said.

As it happened, while Alexis was creating Beyond Silicon Valley: The Greek Story, Manos was serving in the military. In Greece, there is nine-month mandatory conscription for men aged 16-45 years. Manos entered the Greek Air Force and specialized in finance and economics. One day, he was walking into Heraklion, the capital of Crete, to get a coffee when he saw a flyer encouraging people to attend meetups for Beyond Silicon Valley: The Greek Story.

He was already taking my Beyond Silicon Valley course focused on Cleveland as the case study, so he was very interested in the flyer. He noted that the flyer indicated that ALBA was sponsoring the Greek story.

"I knew the reputation of ALBA, and I was enjoying the course, and so I decided to participate," he told me.

In addition to Manos, over 3,500 people registered for Beyond Silicon Valley: The Greek Story in the spring of 2014, half from Athens and half from other areas (some outside of Greece). Each week for five weeks, I logged on to WebEx and offered a brief case study from one of the five pillars of the course. Then Alexis and his team showed the Greek video for the same pillar and asked people involved in entrepreneurship to make a presentation—a leader of an incubator, someone from government talking about regulation, etc. Lastly, the Beyond Silicon Valley: The Greek Story team opened up classroom discussion through live, online chatrooms where thousands of Beyond Silicon Valley students related to and talked about entrepreneurial ecosystems.

With Greek unemployment at sky-high levels, it was important that these Beyond Silicon Valley meetups and chatrooms addressed not pie-in-the-sky ideas but specific actions people could take.

"In the summer of 2014, things were getting really dark . . . and there were no 'success stories' visible . . . . Institutions like

schools and hospitals were under strain," Todd explained.

In fact, within a year of the offspring of 2014 meetups, a new, conservative government would come into power in Greece, and the euro would go into a tailspin, which resulted in more strain in Greece. There was so much uncertainty that entrepreneurship was not on the top of people's minds. "People didn't even know if Greece would be solvent," Todd said. "My office isn't focused on entrepreneurship, it's focused on employment. Entrepreneurship is one way you can get people feeling more invested."

Two of the meetups that Manos attended took place in Athens and one in Heraklion. He attended in person because he was passionate about this topic, and his attendance required asking his superior in the military for afternoons off. But Manos really wanted to become more expert on how to get an idea through the Greek entrepreneurial ecosystem, he wanted to hear stories and points of view from people in the entrepreneurial ecosystem in Greece, he wanted to get inspired, and he wanted to understand how to he might one day play a coordinating role in the Greek entrepreneurial ecosystem.

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In June 2014, I traveled to Greece for the fifth and final Beyond Silicon Valley: The Greek Story meetup in Athens, held at the Stoa of Attalos within the Ancient Agora. This is where Socrates lectured and was a center for learning and business in ancient Athens. I had never met Manos in person. During my talk, I used one of his assignments as an example because he had done a fantastic job with the homework just a few weeks earlier. He had developed a structured and integrated overview of entrepreneurship systems in Greece that I thought was outstanding. I didn't know he was in the audience. Manos was surprised that his assignment was used as an example. Alexis subsequently introduced us, and we were pleased to finally meet in person.

I later asked Manos what he got out of the series of meetups. He said that he made good connections with professors at ALBA, which he felt were useful because ALBA is quite involved with entrepreneurial activity in Greece. He later contacted Alexis to get advice on his future studies—what and where he should study—to be an entrepreneur.

He also became aware of an NGO called Metavallon that supports startups. Its accelerator includes an incubator, pre-seed funding, mentoring, growth training, business coaching, operational guidance, and international contacts.

He learned that there were venture capital investors in Greece whereas he previously thought venture capital investors only operated in Silicon Valley.

And he learned how he could help his uncle's cosmetics business. In his final project, he wrote about his uncle's business and ways to grow it. The company's products are made from organic olive oil from Crete, and Manos had developed ideas for how his uncle could collaborate with other companies and organizations. I recognize this isn't a technology business, but people who take Beyond Silicon Valley are not necessarily technology entrepreneurs.

After finishing Beyond Silicon Valley, Manos went on to obtain his master's degree in marketing. In 2016, he graduated from the University of Rotterdam in the Netherlands. Post-graduation, he remained in the Netherlands for a year so he could work in an internship in brand development at Unilever and

gain more international experience. I asked Manos what he plans to do next, and he told me that he wants to enable innovation within companies and ecosystems in Greece, primarily through improved coordination of resources.

"I enjoy creating new products and things for customer needs," he said.

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I also caught up with Alexis to ask about creating Beyond Silicon Valley: The Greek Story, and (not surprisingly) he admitted it was a big project. But he's glad he did it. He knows many people got a lot out of the course, and he thinks he also learned something. In one of his discussion forums, students discussed the problem of corruption. The Greek economy has a sizeable "gray" piece to it—that is, there is a lot of informal, back-channel, cash-only dealing, referred to as the "gray economy." A Nigerian student asked, "Okay, do you want to come to Nigeria to discuss corruption?" (In other words, this student thought there was a lot more corruption in Nigeria than in Greece.)

"That gave me a different perspective, which I found very powerful," Alexis admitted.

Todd is now in Geneva, Switzerland, on his next tour of duty with the US Embassy. But I like to think that he left behind him in Greece a superb entrepreneurial legacy—because of his leadership and the leadership of people like Alexis, Greeks can access Beyond Silicon Valley: The Greek Story videos on YouTube. The videos have had tens of thousands of views. People can continue to learn about and share ideas for how entrepreneurship could over the long term help the Greek economy.

# PERSPECTIVES COORDINATION

Manos found that more resources existed for entrepreneurship in Greece than he realized, but he believed the Greeks needed to improve coordination among those resources. Coordination is an interesting idea—who gets to play that coordinating role? Does everyone have to agree and like each other in a "coordinated" ecosystem?

I asked Randall Kempner this question. He's the executive director of Aspen Network of Development Entrepreneurs, a global network of organizations that propel entrepreneurship in emerging markets. He told me that it's important to differentiate between coordinating and connecting. "It's hard to imagine an institution forcing coordination. Ideally, there is some institution that plays a connecting function and perhaps supports alignment of various efforts," he explained.

"The idea of coordination may be too strong, but instead, there would ideally be a place where individual entrepreneurs in any region could easily identify service providers, sources of finance, and specialized programs to support small business. Having an institution or institutions that facilitate linkages like these is absolutely a positive, and you see that in micro form in a good accelerator—it helps you identify and connect to the resources you need," Randall said.

"The challenge from a regional ecosystem perspective is that an accelerator may only be working for its own investees and may or may not share information beyond that group. Here is where having an independent institution that is thinking about the overall ecosystem and focused on connecting resources is so important."

I like Randall's refinement on this idea of coordinating.

Another perspective comes from Morris Wheeler, an active venture capitalist in Cleveland.

"Government can be an important, and in some cases, necessary, catalyst for startup activity," Morris said. "But it shouldn't attempt to be the kingmaker. And it shouldn't attempt to design the startup activity. Instead, it should look at the entrepreneurs. It should look at their needs and work to be a catalyzer and enabler—but not a controller of entrepreneurial activity."

I also like Morris's "catalyzing" view. Whether coordinating, connecting, or catalyzing, the point is that communicating with each other about entrepreneurship is of critical importance in an entrepreneurial ecosystem.



Jovan Stalevski (top right) during a Beyond Silicon Valley meetup in Bitola, Macedonia, 2014.

# JOVAN STALEVSKI EXEMPLIFYING THE ROLE OF THE NGO

Through Jovan Stalevski's work and dedication, a Macedonian NGO enhanced its involvement with the national entrepreneurial ecosystem.

I met Jovan Stalevski over Skype in 2014. He leads CEFE Macedonia, an affiliate of CEFE International, a global network focused on training people in entrepreneurship. Originally formed by the German government to increase entrepreneurship and trade, CEFE eventually became its own, private, non-profit organization.

Macedonia may not be as well-known as some of its geographical neighbors, such as Greece to the south or Kosovo to the north, yet Macedonia is far more than a former Soviet and Yugoslavian country. It's a fascinating combination of cultures: Mediterranean and Balkan, with a history of Greek, Roman, and Ottoman influences. The country is home to beautiful, jagged mountains; medieval towns; and the iconic, deep-blue Lake Ohrid, which has been referred to as everything from "spiritual" to "glittering." While Macedonia isn't yet a country that's on many American tourist radars, it has a sizable tourist industry with visitors from such places as Turkey and Poland.

Its entrepreneurship infrastructure is also on the rise.

The Republic of Macedonia declared its independence from Yugoslavia over 25 years ago in 1991, making Macedonia a still-young nation. It's also a country that Jovan says has a history of mistrust of entrepreneurs. He told me about the entrepreneurial culture in Bitola, his hometown.

"If someone [at home] steps out of a luxury car, say a Ferrari, the people might say, 'Ah, look at him. Maybe he's from the mafia.' But if Macedonians see that same person in Amsterdam or LA, they would say, 'Ah, bravo for him, he's succeeded in life.'"

Jovan said he thinks the Macedonian mistrust of entrepreneurs stems partly from social upheavals. In the 1980s when Macedonia was part of the Socialist Federal Republic of Yugoslavia, there was little private enterprise. But when the Soviet Union disintegrated, so too did Yugoslavia, and the move toward more private enterprise and less socialism wasn't an easy transition.

Yugoslav political leaders tried to introduce private ownership of businesses in 1989, but the habits of many decades (if not longer) die hard, so the communist and socialist underpinnings remained. Yugoslavia also took on a lot of debt from Western countries that were trying to aid its transition; a high number of large, industrial Yugoslav companies went bankrupt; inflation skyrocketed; unemployment spiked; and the banking system fell apart.

During these enormous upheavals, some newly minted capitalists amassed wealth with startling speed, which presented a stark contrast from the general population that was making the slower transition from socialism to capitalism. In the old socialist economy with its state-sponsored companies, people had experienced some degree of stability. In the transitioning economy, they were experiencing dire instability.

The fact that some of the highest-profile entrepreneurs proved to have attained their wealth through fraud and corruption didn't help matters.

Hence the mistrust of entrepreneurs that Jovan mentioned.

Jovan earned his bachelor's degree in economics and marketing management from 2002 to 2010, about a decade after the Yugoslavian transition. He was surprised that his university didn't appear to teach much entrepreneurship. His university courses taught people how to gather and store information but not how use knowledge and information to create enterprises, grow businesses, and create jobs. He wanted more course work related to starting and growing a company, but he didn't feel that others shared this desire—to him, students seemed most interested in education that would land them a government or corporate job.

In 2009, Jovan went to work for the Business Startup Cen-

ter Bitola, the second-largest city in Macedonia and located a couple hours' drive southwest of Skopje (the capital city) close to Greece. As one of Europe's poorest cities, it has experienced a brain drain. At the Business Startup Center Bitola, Jovan met some CEFE trainers, and through them, he learned about starting a company. This was the knowledge he felt he hadn't had access to at the university. Armed with startup knowledge, he became president and chairman of CEFE Macedonia, an entrepreneurial training practice at the Bitola incubator.

While leading CEFE Macedonia, Jovan found out about Beyond Silicon Valley.

"We have an American Corner in Bitola [a program sponsored by the Department of State], which promotes American culture and opportunities," he said

One of his CEFE Macedonia colleagues, Elena Stojanovska, registered for Beyond Silicon Valley at the American Corner and invited Jovan to join her in taking the class. The US Embassy in Macedonia was, in fact, organizing Beyond Silicon Valley meetups in five American Corners across the country. The American Corners hosted meetings each week, and Americans in Macedonia served as facilitators for the meetups.

Jovan and his colleague constituted a small meetup group of three students—Elena, Natasa Cavdarovska, and Jovan—and one facilitator, Iskra Trajkovska.

"We were impressed, inspired, and encouraged by the MOOC," he said.

In fact, after taking Beyond Silicon Valley, Jovan and his colleagues started telling Macedonian colleagues about how Cleveland turned the corner in entrepreneurship and how to use Beyond Silicon Valley to generate ideas for helping Macedonia do the same.

Jovan and his colleagues didn't want to focus too much on deficits in their system; they wanted to emphasize the assets that Macedonia does have, as well as find additional people and organizations that had the same mindset of spending time building on strengths rather than fixing weaknesses.

Jovan led an effort for CEFE Macedonia to apply for funding from the US Embassy in Skopje to create new Beyond Silicon Valley videos in the Macedonian language. They created custom videos like the Greeks did.

I traveled to Bitola once in 2014 and then again in June 2016. One of my enjoyable tasks during the 2016 trip was to take part in a panel discussion, "Development of Entrepreneurship in Pelagonia Region." There I shared my experiences of helping to develop ecosystems throughout the world.

The US Embassy had invited me to Macedonia to attend the kickoff event for the videos, which I gladly agreed to do. In June 2016, I sat in a conference room of a hotel in Bitola and watched the videos with about 100 Macedonians. The videos were amazing and ended up being broadcast on Macedonian state television, TERA TV. Jovan said that the video series resulted in the ability to actively connect Macedonian entrepreneurs with institutions that could help them.

The video series also resulted in an idea for Jovan, who enlisted about ten companies, universities, associations, and state institutions to sign memos of cooperation with CEFE Macedonia to provide entrepreneurial training at the local university (as part of the UN Development Program). Jovan, whose own uni-

versity experience lacked some of the entrepreneurial training he wanted, became a business trainer for the project, Creating Job Opportunities for All. It provides training on entrepreneurship and business skills development with the goal of creating almost 1,000 jobs in Macedonia by 2020.

"People from all the faculties signed the memos," he said. "Professors are giving important theory on functions, sending us students, and giving us support . . . they trust us and leave us to train their students . . . and their faculty gain more quality promotions."

This group also decided to put on an entrepreneurship conference aimed at filling the gaps that exist between the leaders of public institutions and their efforts to support entrepreneurship, the current market opportunities for doing business and the needs and readiness of entrepreneurs.

Jovan thinks CEFE Macedonia can bridge those gaps by finding innovators, highlighting barriers to growing new companies, developing solutions, identifying specific actions policymakers can take to develop the entrepreneurial ecosystem in the country, and finding ways that ecosystem participants can collaborate.

Jovan and CEFE then began trying to create a version of Beyond Silicon Valley videos that universities and incubators throughout the European Union (EU) can use to train and connect entrepreneurs, but their first request for funding was turned down. Nonetheless, he has plenty of irons in the fire as he plays a major role at an NGO dedicated to improving entrepreneurship in Macedonia. He told me he's dedicated to the task.

"I want to realize something inside of me that tells me I'm here for a bigger purpose. I don't just work from 9 to 5, and I'm

not satisfied with a basic salary," Jovan said. "I've been working since I was 17 years old . . . in bars and companies alike . . . so I've been getting good ideas. I knew something in my life could be better."

I think CEFE Macedonia is an excellent example of an NGO that's improving entrepreneurial capacity. The employees at the offices in Bitola and Skopje can draw on and contribute to the broader CEFE network (in other countries) to help them with their goals. As an example, CEFE Macedonia created the project called Global Exchange and Training for Youth Employment Services (GET YES). In GET YES, people train teams that can help unemployed youth become entrepreneurs—it's a "train the trainer" program funded by the European Commission's Erasmus+ program. And it was the first initiative for CEFE International at which one of its affiliated organizations created an initiative that involved worldwide centers of CEFE International. In this case the centers were in the Philippines, Chile, Jamaica, Germany, and Macedonia.

"The goal of the project is to build the capacity of partner organizations, to exchange best practices about entrepreneurship intervention, and to produce new modules and trainings for empowering young people to become entrepreneurs," Jovan explained.

CEFE Macedonia is actually conducting GET YES projects in Macedonia, Germany, the Philippines, Jamaica, and Chile. The Beyond Silicon Valley network has proliferated around the world: in Chile, Jovan is working with one of my Beyond Silicon Valley students, Martin Valdivia. Jovan and his team also collaborated with Fatos Axhemi in Kosovo, another Beyond Silicon

Valley student. You'll read about Martin and Fatos in the stories that follow.

I wanted to write about Jovan because he personifies the role that entrepreneurship-oriented NGOs can play in improving entrepreneurial ecosystems. I'm glad that through Beyond Silicon Valley he gained ideas and contacts that support his role in the Macedonian entrepreneurship ecosystem.

On its website, CEFE states, "The mission of CEFE Macedonia is to improve entrepreneurial performance of economic actors by stimulating entrepreneurship and business development skills. We believe and work towards building entrepreneurial society and teach people to be innovators and entrepreneurs."

CEFE, Bitola, and Macedonia have advanced entrepreneurship. I was heartened to see that a country torn by internal strife just 25 years ago can turn its attention to entrepreneurship and develop very good opportunities in that field.

## FAST FACTS THE NGO ROLE

Jovan is at an NGO and developed a proposal for collaboration among multiple parties from different sectors—companies, NGOs, universities, and governments. This approach of convening, connecting, cooperating, and collaborating characterizes the approach that many Beyond Silicon Valley students took in their ecosystem-building work.

Our research shows that engaged Beyond Silicon Valley students were significantly more likely than were unengaged students to collaborate with NGOs, schools, and governments in order to accelerate the development of their local entrepreneurial ecosystem. About 25 percent of engaged Beyond Silicon Valley students collaborated with an NGO to improve entrepreneurial ecosystems, and 17 percent helped forge cooperation beyond NGOs with local schools, governments, and non-profits. In Zambia, Beyond Silicon Valley participants collaborated with BongoHive; in Zimbabwe, they engaged with the now-defunct Hypercube Hub; and in Namibia, with FABlab.

Those are a few examples and facts that tell me that engaged students got the message that collaboration (as well as convening, connecting, and cooperating) is vital to developing and advancing entrepreneurial ecosystems.



Students walk across the quad at Case Western Reserve University.

# THE CLEVELAND CONNECTION THE ROLE OF INTERMEDIARY **ORGANIZATIONS & NGOs**

That are "intermediary organizations"? What are NGOs? And what part do they play in growing entrepreneurship in a transitioning economy?

In brief, an intermediary organization is one that acts as a liaison or "go-between" among other organizations, and it does this for a variety of reasons.

In the entrepreneurial ecosystem, an NGO is often formed in response to laws or rules that forbid the direct funding of entrepreneurs by governments or donors. NGOs, which are a type of nonprofit, can act as an intermediary. Another advantage is that NGOs can sometimes operate internationally, providing a valuable service to aspiring entrepreneurs by making sure the funds or donations are directed to the appropriate entities.

These types of organizations play an increasingly important role in the maturation of entrepreneurial ecosystems. JumpStart, for example, is an NGO with a mission of unlocking the full potential of diverse and ambitious entrepreneurs to economically transform entire communities.

JumpStart invests in people as much as it invests in ideas, technologies, products, and services. It offers business services, including expert help and mentoring, to leaders of early stage businesses. It also offers "scaleup services," which help companies with high-growth potential in multiple ways, from loans to talent acquisition to long-range planning.

In addition, JumpStart makes equity and debt investments in startups and helps them recruit talent, as well as help place job seekers in those companies. And it promotes diversity and inclusion by investing in women- and minority-owned businesses and helping entrepreneurs and small business owners start and grow their businesses in Cleveland through its Core City: Cleveland Program.

An organization like JumpStart can be a real game changer in any transitioning economy. Since October 2004, JumpStart has invested \$44 million in 103 portfolio companies (and more every year) Northeast Ohio startup companies through its investment funds. It has typically provided funding at the pre-seed and seed stages, helping startups that otherwise wouldn't have a chance getting off the ground.

Another important aspect of how JumpStart does business is the investment gains on its portfolio companies go back into the fund to be invested in new companies. This concept is known as an "evergreen" fund, and it differs from private investment funds in that there are no actual equity partners who receive return on investment.

That's one example of an NGO. Let's consider some questions about the role of intermediaries and NGOs in order to gain a better understanding of their purpose in entrepreneurial ecosystems.

#### 1. Why are intermediary organizations created?

Many Cleveland leaders advocated for the creation of JumpStart, including the former head of NorTech, Dorothy Baunach, and JumpStart board member, Jackie Acho.

"How do you start?" Jackie asked. "This is not an individual sport in a community, it's a group sport. You really have to engage whoever is there and ready to be engaged. In our case [in Northeast Ohio], it was the business community, where we formerly had 20-some Fortune 500 companies, and we were [going down to] single digits.

"These people said, 'If we don't do something about this, we'll be the next ones to go because the environment here isn't what we need it to be for businesses to be globally competitive.

"We had the business community that was interested, and a foundation community that was built on a spurt of entrepreneurship a hundred years ago," she continued. "And we had people that were really passionate about bringing this together . . . . The key thing was, over a 30-year period, [they had to] be ready to adapt and change, as the environment and market changed."

Jackie adds, "I don't know that any of us realized how much this would build the community when we got it all started . . . . We do hope that it fills a market gap. The intermediaries themselves create value, ultimately through exits [of portfolio companies] but also through services that have value."

#### 2. How do intermediary organizations measure success?

JumpStart, for example, can point to the tremendous success of a company that it helped during its early stages—Cover-MyMeds, which started in Cleveland.

In 2010, JumpStart invested \$250,000 in the startup, the brainchild of two men, pharmacist Sam Rajan and developer Matt Scantland, who saw a need to improve the outdated, paper-intensive, and slow methods of "prior authorization" of drug prescriptions. They describe their mission simply and succinctly: to "help patients get the medication they need to be healthy."

Seven years later, CoverMyMeds, a healthcare IT company, became Ohio's first "unicorn" company—the term for a venture-backed tech company that reaches \$1 billion in valuation. It was acquired by McKesson for \$1.1 billion in 2017. Although JumpStart did not disclose the return on its investment in CoverMyMeds, it is widely understood that the exit returned the entire fund, allowing it to continue to invest in new companies.

The success of CoverMyMeds reaches beyond economics: Glassdoor.com recently named CoverMyMeds one its 2017 Employees' Choice Best Places to Work.

Results such as these prove the investing and business services model of NGOs like JumpStart.

#### 3. What are the challenges of intermediary organizations?

The success JumpStart has had in helping entrepreneurs created a couple of issues. First, the nature of the abovementioned evergreen fund (putting profits back into a fund to be invested in new companies) makes JumpStart "unprofitable," in the traditional sense. Consequently, five years into its existence, JumpStart's funders began pressing the organization to explore new ways to become self-sustaining, including consulting to other communities on venture development and establishing a for-profit investment fund.

A second issue looms over intermediary organizations with achievement records such as JumpStart's: the problem of success. When an intermediary organization or NGO has enough accomplishments in support of entrepreneurship in a given geographical area, does it still have a reason to exist? In other words, are the JumpStarts of the world like the scaffolding of a building, no longer necessary after the building is built?

To convince funders and governments to continue funding over the long haul, JumpStart needs to continue to attract the exceptional talent to grow and manage the companies it assists. Drawing that talent from the private sector takes ample resources. To that point, JumpStart has received more than \$75 million in funds to deliver its programs.

Another challenge, according to JumpStart's CEO, Ray Leach, is to "create a wave of momentum."

Anthony Hughes directed the JumpStart mentoring program. He told me, "The analogy that I think is most appropriate for a place like Northeast Ohio is an artificial reef. The [entrepreneurial] ecosystem didn't really exist when we started to focus heavily on how to build an ecosystem—or rebuild one. In that way, JumpStart is an artificial construct on which an ecosystem can rebuild itself."

JumpStart in Cleveland is one interesting example of an NGO. But the much larger point is that for aspiring entrepreneurs in the US and around the world, partnering to access the resources of an NGO or intermediary organization is an invaluable aspect of building an effective entrepreneurial ecosystem.



Martin Valdivia (second from left) with CEFE Macedonia host Jovan Stalevski (far right) in Macedonia, 2016.

#### MARTIN VALDIVIA

## MAKING GOVERNMENT WORK

Martin Valdivia is putting in place targeted, new government programs that benefit high-growth Chilean entrepreneurs.

hen I first met him, Martin Valdivia worked as a project executive at a Chilean economic development agency, CORFO. He directed grant competitions, helped run accelerators at universities, and led projects related to entrepreneurship. CORFO also runs Startup Chile, a program that attracts foreign entrepreneurs to Chile.

In 2016, I visited Santiago, Chile, with a group of my Weath-

erhead MBA students. Santiago is a cosmopolitan city that sits on a plateau between the Andes Mountains and the Pacific Ocean. My wife, Stacy, joined me on this trip, and she and I were struck by the superb road system, impressive airport, and the cityscape of lean skyscrapers and well-lit streets. We loved the easy access Santiago offers to bike paths and routes; wide sidewalks for pedestrians; tree-lined parks; and natural, local, and fresh foods at outdoor markets.

I made time while in Santiago to visit with Martin because he had been a standout Beyond Silicon Valley student. As hostfor-a-day during our visit, he arranged meetings with CORFO, government ministries, a local university, and a group of entrepreneurs. We used the Cleveland experience as a catalyst for discussion about growing tech-based entrepreneurship in Chile.

Martin, a thoughtful, soft-spoken man, told me that in Chile, anyone can be an entrepreneur. He's in his late 20s and enjoys reading economics books such as *Freakonomics* and *Why Nations Fail*. Martin told me that a strong entrepreneurial culture is the reason Chile offers good opportunities to people who want to start a business. The country, a stable democracy since the 1980s, has had steady GDP growth and reduced poverty rates for three decades. It has a strong system of universities that, according to Martin, train entrepreneurs well and offer competitions for startup funding. "Universities have a very important place in the ecosystem," Martin said.

He talks about Catholic University of Valparaíso, Universidad Tecnica Federico Santa Maria, and Universidad del Desarrollo, where he researched social innovation for a year before he went to work for CORFO. Though mostly enthusiastic about

the universities, he cautioned that they are better at training generalists than technologists and scientists.

An article published by the World Economic Forum in January 2015 confirms that Chile also stands out as a nation where innovation-oriented businesses are created and supported. It says that Chile and Colombia are "the only countries (from a sample of 44) to have broken out of this trap to become entrepreneurial 'all-rounders': for the size of their economy, they have high levels of new businesses launched by high-impact entrepreneurs who frequently innovate and expect to create a large number of jobs." The author of the article, José Ernesto Amorós Espinosa, a professor in the School of Economics and Business at Universidad del Desarrollo, continues: "Chile, and specifically Santiago, is becoming a nexus for entrepreneurial ventures."

How did Chile become this way? Mostly through the Startup Chile program I mentioned earlier. It's a suite of public-private initiatives aimed at creating one of the world's largest startup communities. Amorós writes:

Selected entrepreneurs from around the world receive a work visa and \$40,000 seed capital from the government. In only four years, more than 1,000 entrepreneurs have heeded the call. Crucially, the government expects participants to take part in events promoting entrepreneurship awareness in local communities. The goal is not only to attract top global entrepreneurial talent but to leverage this talent for a change in Chilean business culture to be more enterprising, growth-oriented, and innovation-driven—a key ingredient in thriving entrepreneurial ecosystems.

CORFO also fits into Chile's entrepreneurial ecosystem as a government entity that focuses on *innovation and technology*, which Martin referred to as "dynamic entrepreneurship." He said that small, technology companies can create new industries in Chile and achieve sustainable economic development.

"Little entrepreneurship (such as a single-site store) has its value, but it won't change the way we do business," he said.

At one point, Martin became interested in finding new, creative ways for CORFO to interact with public and private institutions, and he discovered my course on Coursera.

"I was looking for something that would help me directly in my job, in my work to develop a better entrepreneurial ecosystem in the country," he said to me. "I had never seen a MOOC so focused on development of startup ecosystems." Martin viewed the Beyond Silicon Valley video lectures, did the reading assignments, and emailed with me. He realized while taking my course that not many resources exist in Chile for supporting *later-stage* startups with mentors, development expertise, and investors. Also in his Beyond Silicon Valley work, he discovered statistics showing that Chile had a relatively high number of applications developers, but that they focused more on the development of traditional apps. He questioned the wisdom of this focus because traditional apps inevitably compete with app-creation powerhouses like Facebook and Instagram.

"The MOOC encouraged me to open my eyes to see what they are doing in [other] countries and maybe look at whether we can do some things in the same way as others," he said.

Martin realized that Chile needed apps in the area of public health, not social networking. If the developers focused on

public health, they'd be meeting a need in a market with less competition and a higher chance of success. CORFO needed to encourage developers to put increased resources into health-care apps. Consequently, Martin pieced together funding from a few institutions to produce a tech tournament aimed at developing non-traditional technologies, especially health-related technologies.

The Beyond Silicon Valley course helped him with this idea and plan.

"Not trying to do everything the same as Silicon Valley has helped us see different things and develop technologies in what we need," he said.

Since Beyond Silicon Valley, Martin's understanding of entrepreneurial ecosystems has deepened. I introduced him to Jovan Stalevski, the head of CEFE Macedonia, because both men value entrepreneurial education. Jovan is deeply involved with train-the-trainer programs for teaching entrepreneurship globally. The next thing I knew, Martin and others from CORFO were visiting Jovan and CEFE in Macedonia.

"I am a policy maker," Martin told me. "I work with entrepreneurs and with organizations that support entrepreneurship, but I have never been an entrepreneur."

In September 2016, Martin and a couple of his colleagues spent two weeks at a hotel on Lake Ohrid near the Albanian border where they learned how to better teach entrepreneurs.

"I improved my communication skills in the classroom a lot," Martin told me afterward, "which is good because at CORFO, there are a lot of opportunities to go to universities and institutions to talk about entrepreneurship."

Since returning from the training, Martin found opportunities to help entrepreneurs one on one and has become a better mentor. He also believes his presentation skills improved as a result of the CEFE training. Lastly, through the Macedonian videos that Jovan created, he's been inspired.

Martin recently began working with a research lab at a Chilean university to create a database that contains funding and other information regarding the entrepreneurs who applied to Startup Chile between 2010 and 2016. And he's applying to a technology policy master's program abroad so he can continue improving the innovation ecosystems of developing communities.

Martin today credits Beyond Silicon Valley with expanding his vision for the Chilean ecosystem.

"I think that the way I view the other ecosystems and the way I have increased my interest for looking at other ecosystems has changed. I cannot change many things myself, but in the future, working with others could be a very powerful thing."

Martin ended an email exchange to me by writing, "I think it is fair for you to know that, in some way, this vocation is your fault."

I don't usually like being blamed, but I'll take his accusation as a compliment. I'm so glad that Beyond Silicon Valley could help Martin, one of the more enterprising government employees I've met, support Chilean innovators.

#### PERSPECTIVES GOVERNMENT WORK

As a government employee, Martin is in the minority of Beyond Silicon Valley students. In our survey, only 5 percent of Beyond Silicon Valley registrants identified themselves as working for government.

That said, after Beyond Silicon Valley, nearly 9 percent of engaged students joined government efforts to build their local entrepreneurial ecosystems, and about 8 percent ended up sitting on some sort of committee related to government ecosystems.

My involvement with various government efforts, from the U.S. Department of State to the State of Ohio, probably speak louder than words by underscoring my belief that government can be helpful in advancing entrepreneurship. Obviously, government isn't *always* helpful at advancing entrepreneurship, but certainly it *can be* helpful.

I'm glad that students in Beyond Silicon Valley occasionally make the choice to get involved with government and figure out their view on government's role(s) in building entrepreneurial ecosystems.



Daniel Knobelsdorf receives a digital entrepreneurs' award in Caracas, Venezuela, 2014.

# DANIEL ALEJANDRO **KNOBELSDORF**

#### MOVING THROUGH ROUGH SEAS

Daniel Knobelsdorf is an entrepreneur, idealist, and business developer who is finding new ways of interacting in the Venezuelan entrepreneurial ecosystem.

aniel Knobelsdorf was born in 1986 in Valencia and grew up in a large house near a city park, a place he loved to explore. He went to grade school, high school, and university in Valencia, which is in the state of Carabobo, a roughly twohour drive from the Venezuelan capital, Caracas. Lake Valencia is nestled between two mountain ranges, the Cordillera de la Costa to the north and the Serrania del Interior to the south.

Once when I was talking to Daniel, I suggested that the lake must be nice to swim in. No, he told me, it is polluted. Urban run-off caused most of the lake's native fish species to die between 1960 and 1990. He added that the lake has an old legend about a giant snake. I scrapped the swimming idea.

Daniel enjoyed drama from a young age.

"I was really into art and stuff like that. I did theater, plays, writing . . . I love anything that's related to creativity. Artists always felt like family, almost like cousins. Now I feel that way about entrepreneurs."

His favorite playwright is Luigi Pirandello, an Italian dramatist, novelist, poet, and short story writer who was awarded the 1934 Nobel Prize in Literature for his magical power to turn psychological analysis into good theater. Pirandello is known especially for turning deeply sad situations into absurdist, farcical comedy.

At university in Valencia, Daniel majored in psychology initially and then switched to media studies, graduating in 2010. He went on to receive his broadcasting certificate and cinematographer's registration, and after university, he worked on co-creating a documentary about the Venezuelan brain drain. The film never made it to market because a mockumentary on the topic preempted the serious documentary. He said this disappointing experience taught him about the importance of moving quickly with new ideas.

For a few years, Daniel was sales manager for Lunettes, a vintage eyewear brand. Then he became co-founder and chief

marketing officer of Singular, an augmented reality startup. The team was selected by Wayra—Caracas's only accelerator at the time—and this meant moving to the capital. A couple of months into his new gig in Caracas, the 2014 Venezuela protests erupted. This caused the Singular team to have to engage in super-lean entrepreneurship; for nine months, they basically lived and worked 24/7 in the accelerator. He left over an economic disagreement and became chief opportunities officer at a fledgling organization that is trying to provide an innovation lab, business development expertise, and opportunities for the creative class to convene.

Daniel continues to develop and use entrepreneurial skills and to exercise his business development interests in varied arenas. With his love for theater and film making, he works hard at expression, engagement, and voice. He was a volunteer curator for Startup Genome, a global network that maps startup ecosystems and a volunteer co-founder of a local think tank that argues peaceful, free, and profitable trade is a virtuous activity that enables humans to flourish. He has many interests—cinema, theater, startups, design thinking, civic tech, politics, comics, philosophy, and entrepreneurship.

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Venezuela has one of the highest rates of entrepreneurship of any country in the world. In 2012, Global Enterprise Monitor ranked Venezuela 11<sup>th</sup> among 54 countries, not a bad ranking. Venezuela ranks this high mostly because of the entrepreneurial spirit of Venezuelans—over 80 percent of them feel that entrepreneurship is a good choice for their career; the fear of failure in Venezuela is lower than in most nations; and Venezuelans'

belief that they can start successful companies is higher than in many places.

There's a flip-side to this good news about Venezuela's relationship to entrepreneurship. In Venezuela, the entrepreneurial drive reflects the paucity of big company-type career choices and the nation's economic instability. In 2016 when I was drafting this book, Venezuela was experiencing its worst-ever recession and some social unrest, according to a June 2016 article in *The Guardian* newspaper:

Venezuela is suffering the worst economic crisis in its history. Ordinary people in the oil-rich country are regularly going without food. Three-quarter empty supermarkets are being ransacked by angry, hungry mobs. The government has declared a state of emergency, food is now being transported under armed guard, and basic necessities are being rationed. People have to queue for hours and sometimes overnight on their assigned days to receive staples like rice and cooking oil.

By IMF figures, it has the world's worst negative growth rate (-8 percent), and the worst inflation rate (482 percent). The unemployment rate is 17 percent but is expected to climb to near 30 percent in the coming few years.

Partly because of the recession, which started before 2016, World Bank Group in 2015 ranked Venezuela 186 out of 189 countries in terms of ease of starting a business. In addition to longstanding corruption (Venezuela perennially ranks in the top ten most-corrupt nations in the world), the country began to experience recession-driven inflation and shortages.

For Venezuelans to be able to start the businesses they culturally are confident they can start—to capitalize on their entrepre-

neurial spirit—they need much more support. Even before the recession, experts recommended that Venezuela relax its labor regulations, develop a more open market, reduce bureaucracy, and develop managerial capabilities with access to funding. Those major issues have, of course, been deeply exacerbated by the economic crisis.

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Daniel has the Venezuelan entrepreneurial spirit. Case in point—what did he do as the economy deteriorated? For one thing, he became a MOOC enthusiast. Starting in 2012, he began taking courses on Coursera, edX and NovoEd, and he completed about ten in three years. He explained that it's really hard to find books on topics relevant to his desired career, but he finds exactly what he wants through MOOCs, which are, he says, disruptive to the traditional educational model, but in a good way.

In 2013, while working at the augmented reality company he co-founded, he decided to take Beyond Silicon Valley. He desired to learn more about entrepreneurship, network with entrepreneurs, improve the entrepreneurial ecosystem in Caracas, and maybe find opportunities to provide business development expertise for startups.

In his apartment in Caracas, he participated in most of the live WebEx sessions, completed the readings and course materials, joined online discussion forums, and interacted with me by email. He also watched the translated Macedonia and Greek modules.

And then, guess what he did? He took Beyond Silicon Valley again.

"I loved the story of how entrepreneurship started as an indi-

vidual journey and finished as an ecosystem," he told me. "My viewpoint totally changed from being in total control and toward part of a collective effort inside an ecosystem."

After Daniel finished taking Beyond Silicon Valley for the second time, his computer and cell phone were stolen. It was December, and shortly after the devastating theft, his mother surprised him with a much-appreciated Christmas gift—a vacation to neighboring Colombia. He wanted to go, but he had no computer or phone, a bit of a problem for anyone, especially someone like Daniel who seems to need to stay busy all the time. He took the trip anyway, and in Colombia, with no laptop or phone, he began doing what he had learned in Beyond Silicon Valley—mapping stakeholders in the ecosystem in Bogota and interviewing people in government, and at non-profits and startups.

Why not? What else was an ambitious entrepreneur going to do on vacation?

He noted that Beyond Silicon Valley was "really life-changing" and had shifted his viewpoint. He realized that growing entrepreneurship in a place isn't about controlling or being controlled but about being part of a collective effort within an ecosystem. Benchmarking the activities of other entrepreneurs and supporters of innovation elsewhere helped him figure out what he wanted to do in Venezuela.

After Beyond Silicon Valley, Daniel was contacted by a member of the Venezuelan parliament who invited Daniel to join the Permanent Committee of Science, Technology and Innovation of the Venezuelan Parliament as an advisor—which he called an "unpaid but rewarding role." The committee was trying to propose a reform law supporting entrepreneurship and the de-

velopment of a technology ecosystem in Venezuela.

Daniel subsequently received the Young Leaders of the Americas Initiative (YLAI) Fellowship and traveled to the US in October 2016. I gave him a few contacts and ideas so he could get a head start digging into the innovation ecosystems of Dallas, Texas, and North Carolina. In those places, he conducted interviews with incubators, corporations, local government people, and investors.

The foundations of a new organization, Startup Venezuela, were built during the YLAI fellowship. Daniel explained that some of its key tenets were based on the Beyond Silicon Valley pillars. He is a leader at Startup Venezuela, which has the long-term goal "to establish Venezuela as an open innovation hub for the world, a place to pilot bold ideas."

Daniel sent me a short video he likes, *How Wolves Change Rivers*, in which the narrator tells the story of reintroducing wolves into Yellowstone National Park. For years, there were no wolves in Yellowstone; they disappeared in the early 1900s due to habitat loss and extermination programs. The lack of wolves caused an abundance of elk (the natural prey of wolves) and a lack of vegetation (the elk eat the vegetation). With insufficient vegetation, river beds receded by meaningful amounts, changing the entire ecosystem. The reintroduced wolves began to prey again on elk. With fewer elk and modified behavior patterns, vegetation levels were replenished, river beds stabilized, and rivers revitalized. The video considers this reintroduction into Yellowstone a "trophic cascade," which means the benefits cascade downward.

Daniel sent the video as a metaphor—the introduction of

more entrepreneurs, capital, or even a law relating to entrepreneurship could maybe be a trophic cascade event for the Venezuelan economy. Since he sent the video, the country has tumbled further into instability. And so, certainly, Venezuela is a challenging place to grow an innovation ecosystem and seemingly becoming more challenging because of the economic, political, and civil difficulties of this wonderful South American country of over 30 million people. I admire that Daniel soldiers on, trying to find tangible ways to energize trophic cascade events for the Venezuelan entrepreneurial ecosystem.

# FAST FACTS PROBLEM SEEKERS

Daniel took time to document some of the problems in his innovation ecosystem, especially as compared to nearby Colombia. The Venezuelan economy presently has more turbulence than the Colombian economy. In the typology of economies, there are transitioning economies, developing economies, frontier economies, and so on.

Regardless, Daniel is in good company in terms of documenting problems in the ecosystem as his first step. Engaged Beyond Silicon Valley students were more than twice as likely to document the problems in their local entrepreneurial ecosystem than were unengaged Beyond Silicon Valley students. You have to start your engagement with the ecosystem somewhere, and documenting problems and assets (I'd like to add!) in the local innovation ecosystem is

as good a place to start as any.

The Venezuelan situation and Daniel's hard work, complemented by varying levels of success, also remind me of a caution issued by Steven Koltai, who created the Global Entrepreneurship Program for the U.S. Department of State and also wrote a book I like called *Peace through Entrepreneurship: Investing in a Startup Culture for Security and Development*.

He said to me in one conversation, "For all of us who work in the space of promoting entrepreneurship, you know there's the risk of disappointment, that people get all excited and then they're not successful—that's always there."

Deteriorating national politics, societies, and economies are certainly a very real and strong part of the profound challenges of building entrepreneurial ecosystems.



Susan Langmann and I in St. Étienne, France, 2016.

## SUSAN LANGMANN

#### MENTORING ENTREPRENEURS EVERYWHERE

Susan Langmann has a personality and drive to mentor people, and she plays her mentoring role well in France's entrepreneurial ecosystem.

ne day, I saw a wide array of helpful mentoring posts on the Beyond Silicon Valley bulletin board from someone named Susan Langmann.

Who is she? I wondered.

Susan was so engaged and helpful that I wanted to meet her. The opportunity arose when I traveled to St. Étienne, France, to talk with French students and professors studying and teaching reindustrialization. I was there for a series of speaking engagements in Paris, Strasbourg, and Lyon. (The engagements were sponsored by the US Embassy in Paris.) My talk was titled, "Cleveland's Experience: Supporting Entrepreneurship in a Post-Industrial City."

It touched me that Susan went out of her way to meet me outside of Lyon. I really enjoyed meeting a top Beyond Silicon Valley student and mentor, and she remains one of three lead mentors for Beyond Silicon Valley (along with Elaine Slatter in Canada and Arjan Tupan in The Netherlands). In fact, Susan and Arjan developed an e-book about how to mentor Beyond Silicon Valley students on the Coursera platform. In the book, they wrote, "Building community is 'the' empowering part of your work as a mentor. In the Beyond Silicon Valley course, we want our learners to feel they are part of a community of change makers, working to better their own community through entrepreneurship. There is no better way to bring our learners into the 'tribe' then to find new, creative and innovative ways to help them learn better, and to build their knowledge and networks."

Susan Langmann's vault of experience contains challenges and successes, tragedy, and renewed purpose in her personal and business lives, making her an effective mentor for Beyond Silicon Valley.

Susan started her career on a traditional path, earning a bachelor's degree in marketing and an MBA from Wichita State University in Kansas.

"I grew up in a culture where you go get that corporate job, you get the corporate status, go up that ladder," she said.

That's how things were in the 1980s in the US. She landed a job at Knight Ridder, the media company, working in a newly created division that conducted market research for advertisers and businesses.

Susan tried to leave the corporate world when a friend convinced her to move to Paris to start a business that used props, costumes, and photographic techniques to produce vintage-looking photos. The business idea never fully launched, so Susan instead went to work as a volunteer for an English-language magazine in Paris. When that folded, she found a job as the equivalent of an online community manager at Minitel.

Minitel provided a computer terminal-like box to landline telephone customers so they could send video text messages to each other. Susan worked with a team of English language animators in the company's online forum, which was managed by a joint agreement between two commercial magazines. Forums back then operated like direct messaging does today; conversations were private and direct. A person might use a forum to chat in English to a French person who wanted contact with English-language natives to improve their language skills.

Minitel was a relatively successful pre-World Wide Web online service. It was at Minitel, while in fact using the Minitel, that Susan met the man who became her husband. They moved to Nice, on the French Riviera, so that he could work for Texas Instruments (TI), and she also found work at TI in marketing communications.

When the couple moved back to Paris in the early 1990s, Susan took a job at IBM in consumer relations and advertising. In 2004, she gave birth to triplets and took a leave of absence.

One of her triplets had complicated medical problems, so she turned her temporary leave into permanent leave to care for her daughter. Nine years later, in 2013, her daughter died.

"I was actually in kind of a transition period. I'd lost my daughter and thought I could either go back into the corporate world or spend more time with my kids."

She began volunteering to help people develop their businesses, and she began checking out e-learning, especially e-learning platforms that had a community feel to them, harkening back to her Minitel days when she had initially become fascinated by the online and community experience. In 2014, Susan found Beyond Silicon Valley while looking through the Coursera library, was intrigued by the title, and watched the introductory video.

"The content really interested me and pulled me in. I wanted to learn how entrepreneurs know what's available to help them."

Susan became active in the Beyond Silicon Valley chat rooms, and she also completed an assignment of interviewing a local entrepreneur to learn about the local entrepreneurial ecosystem.

"I didn't really know any local entrepreneurs, and I walked into a boutique that was opening in an area of town," Susan explained. The boutique sold beautiful women's clothing (not tech-related, but the assignment didn't require a tech company).

She started talking to the boutique owner, who also was a clothes designer.

"He agreed to tell me about his business and how he got going, where he got his financing."

This coursework for Silicon Valley really interested her—so much so, that after taking Beyond Silicon Valley, she became an

entrepreneur. The same friend who drew her to Paris 30 years ago ended up recruiting her as a co-founder of Retreat Inside Out—now called Retreat to Joy—in Wichita, Kansas. It's a social enterprise dedicated to improving communities through wellness. In Susan's role from afar (in France), she provides advisory services. At its inaugural events in 2016, Retreat Inside Out focused on helping people address chronic pain and opioid abuse. She's also working on an idea in the fashion industry—dresses for women aged 40 and older.

"We're in our 50s now, and we're exploring new paths," Susan said of herself and her friend. "We've followed everything else in our lives . . . spouses, kids, career paths . . . and there comes a time when you say, 'It's time for me to follow my passions.'"

Susan believes that entrepreneurship in France is easier now than it was 30 years ago. France has a famously excellent educational system, which is good except for one thing—people who want to get into elite business schools so they can find a good job tend to avoid the possible failure of a startup company. In other words, arguably the French strength of educational excellence hasn't benefited its entrepreneurial ecosystem enough.

It's true that France lacked the right entrepreneurial stuff for several decades. Most countries that belong to the Organisation for Economic Co-operation and Development, including the US, experienced rapid growth in entrepreneurship after the mid-1980s, but reports show that this was not the case for France, which saw a decline in entrepreneurship in the 1970s, 80s, and 90s.

This has changed a bit in the last decade as French government policies have concentrated on promoting venture capital, state incubators, and innovative startups to bolster its entrepreneurs. For instance, the government invested over \$200 million in accelerators, incubators, and grants in 2015.

Also in recent years, many French workers have changed their minds about job security. Global economic uncertainty in 2008 proved to French citizens that a good job at a big company no longer in itself represents financial success, and the risk of starting a business can lead to life-changing prospects and rewards. One-third of French students now say they want to create or join a startup.

Susan has witnessed this change in the form of observing the French educational system begin to develop a culture of innovation.

"My kids all talk about opening their own businesses. They don't think about going to go work for somebody else, they think about how I am going to start my own business. I think that's very encouraging."

Of course, the internet is now an entrepreneurship juggernaut compared to 25 years ago.

"Kids now have a lot of opportunity to do business through the internet; back then, it just wasn't there."

In addition, the costs of starting a business in France appear to have fallen, at least for some people. When Susan and her friend tried to establish their vintage photo business in Paris in 1986, they soon realized that it was, in her words, "an extremely costly thing to do."

She added, "You had to pay into the medical fund, into the retirement fund, whether you made a dime or not." (For the most part, France is a socialist democracy and offers costly social pro-

grams.) "We were like, 'Whoa, we can't afford to do that."

In 2009 under former President Nicolas Sarkozy, the French government simplified the rules for starting a business and lowered taxes for people forming very small businesses through a program called Auto-Entrepreneur. ("Auto" has nothing to do with cars but rather refers to "self," as in self-employed.) Enhanced awareness of startup activity in France seems to have led to an environment in which securing seed investment is easier today than it was in the 1980s. Numerous sources offer seed capital, and a 2014 change to the laws raised the cap on the amount of money entrepreneurs can raise from crowdfunding sources from 100,000 euros to a million.

The pro-entrepreneur activity has had mixed results. France reportedly gained more new businesses from 2007 to 2011 than the rest of the wealthy economies known as the Group of Seven, aka G-7, which includes the US, Canada, the UK, Germany, Italy, and Japan, combined. But other reports have shown that high-growth entrepreneurs continue to leave France because of its lasting reputation for high taxes, strict regulations, and a higher-than-average tax burden on the self-employed. To that point, *Forbes* reported that some young French businesspeople have organized a campaign called "Come Back Leon," after a 1980s TV advertisement enticing youngsters to eat at home, to woo back ex-pat entrepreneurs.

When Susan started mentoring Beyond Silicon Valley students, she found she really enjoyed having conversations about entrepreneurship, developing ecosystems, and using the Cleveland story as an example.

"I liked the mission," she said, describing it as "the real spirit

of entrepreneurship, which is to tackle the issues that impact us as humans. It's great when you've got a social mission and a lot of people are behind you."

As a mentor, Susan is Beyond Silicon Valley's most active poster. She answers a lot of student questions and helps develop a community feel for Beyond Silicon Valley students. The main thrust is to keep students engaged so they finish the course. She also recruits other mentors from around the globe.

Susan gets a lot out of her mentoring activity.

"The students are so amazing! It makes me happy. They're not all entrepreneurs. Some are aspiring entrepreneurs. But the vast majority of them want to do something good for their community, and they believe strongly in entrepreneurship."

#### FAST FACTS MENTORS

Susan Langmann is an excellent mentor and has benefited many a Beyond Silicon Valley student. But most mentoring remains local. To that point, I asked Randall Kempner from the Aspen Network of Development Entrepreneurs more about mentoring, and he said that one mentoring solution he likes (among many) is MicroMentor because it helps democratize access to mentoring. Its mentoring platform helps level the playing field for change makers and innovative thinkers from around the world, and this helps people build successful companies. As an online platform that's free to users, MicroMentor has mentoring initiatives for organizations and governments as well as entrepreneurs and companies. It has an eight-year total number of nearly 18,000 mentors and 36,000 entrepreneurs. It's also global—over 50 percent of entrepreneurs on the platform and over 34 percent of mentors are located outside the US.



Aerial view of Case Western Reserve University (foreground) and Cleveland (background).

# THE CLEVELAND CONNECTION THE ROLE OF ANCHOR INSTITUTIONS

What are "anchor institutions," and how do they fit in to successful entrepreneurial ecosystems? Clevelanders enjoy a rich ecology of such institutions, which play a lead part in the city's startup culture.

Let's define what anchor institutions are, what services they perform, and what benefits they offer to aspiring entrepreneurs around the US and the world. The good news is that many, if not most, areas with transitioning economies have access to their own anchor institutions.

The word "anchor" is apt because most such institutions universities and hospitals top the list—tend to stay in one place. They are metaphorically "anchored" to their region of origin.

My home university, Case Western Reserve University, established in 1826, attracted \$377.9 million in research funding in 2015-2016. This is small compared to behemoths like MIT and Stanford, but the amount is certainly meaningful in the context of our regional economy.

Quite a few other major anchor institutions call Northeast Ohio home. Cleveland State University, the University of Akron, Kent State University, and other major research and idea-generating universities are important anchor institutions.

As for hospitals, Cleveland Clinic ranks first in the world for treatment of cardiovascular disease and is well known for many other areas of medicine. The hospital is frequently visited by dignitaries and celebrities from across the US and around the world.

University Hospitals (UH) is another leading health care provider in our region. UH has the widely-known Rainbow Babies and Children's Hospital; Seidman Cancer Center; and MacDonald Women's Hospital, Ohio's only hospital for women.

These institutions render Cleveland a much richer environment in which to grow entrepreneurship than it would otherwise be. Let's look at how anchor institutions play a role by addressing these questions:

1. What are the different ways that anchor institutions stimulate entrepreneurship?

One example is LineStream Technologies, an embedded software company whose CEO is Dave Neundorfer.

"LineStream's technology was buried in a research lab [at Cleveland State University] for 12 years," Dave says. Then a venture capital fund, supplemented by state capital and some foundations, provided the resources and talent to help the company spin out.

"I believe we were, if not the first, then one of the first spinout companies that [Cleveland State University] had," Dave explains.

LineStream codes software that goes into the controls of electric motor-powered equipment, reducing power consumption. It is part of the Internet of Things concept, which is the interconnection via the internet of computing devices embedded in everyday objects, enabling them to send and receive data.

The company has attracted industry attention and a \$1.5 million from one of Denmark's largest companies, Danfoss, whose president, Vesa Laisi, said LineStream fit the bill for its own customers' demands. The main point of the LineStream example is that without the research conducted at anchor institution Cleveland State University, the LineStream core technology might still be an idea in a notebook.

2. Why might an anchor institution provide financial support for an early stage company, and how can an anchor institution's research capabilities translate into support for early stage companies?

"Why don't universities do a great job of commercializing technology?" asks Steven Girouard, a former vice president of Johnson & Johnson's corporate office of science and technology and a Beyond Silicon Valley presenter.

He answers his rhetorical question.

"It's not really their expertise," he explains. "They're great at educating, and publishing papers and writing grants, and receiving funds. Universities need to have help wrapping business models around designs that will be successful in the real world."

An example of efforts to speed up the commercialization of the research and development coming out of Cleveland anchor institutions was the creation of the Global Cardiovascular Innovation Center (GCIC), located at Cleveland Clinic. The center was funded by a grant from the Ohio Third Frontier and matched with investment from institutional partners, including Cleveland Clinic.

Mark Low, executive director at the GCIC, briefly explains the financials.

"GCIC was formed with a very generous \$60 million grant from the State of Ohio's [Third Frontier]. Roughly half of that is dedicated to provide support to new technology development and new company formation."

The partnership of the anchor institution—Cleveland Clinic—with the State of Ohio created the Global Cardiovascular Innovation Center. This is an interesting example of how an anchor institution like Cleveland Clinic can spark an economic, self-sustaining ecosystem in a geographical area: GCIC, because of Cleveland Clinic and through the help of the State of Ohio, provides medical breakthroughs, supports jobs, spurs additional innovation, and draws talent to Cleve-

land's universities, hospitals, and business community, which together also feed the nearby midtown Cleveland retail market, including restaurants.

3. What are the different ways that anchor institutions measure their own successes?

Brad Whitehead, president of The Fund for Our Economic Future, says, "Anchor institutions sit at the foundation of most economic development strategies of regions around the country, and frankly, around the world. It's well recognized that they're a source of ideas, a source of talent, innovation, and so forth."

With the necessary support, anchor institutions are showing the ability to leverage their ideas with talent instead of letting them gather dust in a lab. Success is measured in terms of the number of startup companies launched, the amount of outside private capital raised, the creation of good local jobs . . . and ultimately, revenue back to the institution after an exit event or through a licensing fee.

So if your region has hospitals and/or institutions of higher learning, you may well be looking at a large reservoir of resources that can fuel entrepreneurial dreams.



Elaine Slatter at a Toronto, Canada, conference, 2015.

# ELAINE SLATTER A MENTORING MAVEN

Elaine Slatter mentors by constantly connecting entrepreneurs to other entrepreneurs and vital resources. She's an exemplary mentor and connector.

E laine Slatter was born in the United Kingdom. She came to appreciate the entrepreneurial spirit in one of the most common ways—her father was an entrepreneur.

"He started his business from the kitchen of his mother's house. He was a tea and coffee manufacturer in the UK," she said.

Elaine immigrated to Canada in 1965 after she earned her associate's degree.

"The Canadian Government advertised for applicants in a variety of fields to qualify for immigration," she told me. "I qualified, and with a sense of adventure and one contact in the country, I left the UK to pursue a new culture."

Elaine's unique background matters, I think, because it shows how Beyond Silicon Valley speaks to a wide swath of people, from the aspiring first-time entrepreneur, to those still in school, to individuals with longtime managerial experience, like Elaine.

In Canada, Elaine earned her bachelor's degree and spent 30 years in corporate management specializing in marketing, IT project management, and international customer service at a welding products subsidiary of the US-based Thermadyne Industries. She eventually became country manager and director of marketing administration there.

Then in 2012, Elaine's husband passed away, a tragedy that thrust her into the role of owning and operating his business, Muggs Coffee Shop.

"For three years I juggled my corporate career with Thermadyne and ran the Muggs Coffee Shop until I could sell and exit the business," she said.

"Running the coffee shop involved managing 15 part-time staff in a business that was open 24/7. It wasn't my passion; it was my husband's business and required an owner who was 100-percent invested. My role was to ensure the business stayed successful while shopping for a buyer."

Elaine left Thermadyne (an acquisition had caused the name to change to Victor Technologies International) in 2012 to start

her own small business and marketing services firm, XL Consulting Group, which helps small businesses reach their next level of growth. She also advises female entrepreneurs and has published a book.

"I have a busy life but I love it!" Elaine wrote. "I love sports, so most of my activities find me outdoors, playing golf, tennis, swimming, or hanging out at the cottage. But my passion is entrepreneurship, and a lot of my volunteer time is spent mentoring women."

Many people would be content to have all that background and experience in business, and in guiding up-and-coming entrepreneurs, but not Elaine. At a stage in her life when she had two grown children and four grandchildren, she took the first run of Beyond Silicon Valley in 2014.

Why? Well, she explained, because she had worked in corporate industry for three decades, but something was lacking. She needed a new challenge.

"I was bored to death and wanted to try something new, but this something was completely foreign to me, and I had . . . no idea where to start, so the MOOC was perfect."

Though she had been in and around entrepreneurs, including her late husband, for a long time, she wanted to understand the entrepreneurial ecosystem.

"When you understand something, you understand your role in it," she said.

As a born connector who enjoys helping others, Elaine hoped this understanding would give her an idea about how people in Cleveland took a variety of good but often disconnected resources and turned them into an innovation ecosystem. By understanding one or two US ecosystems, she'd do a better job of helping ecosystems in Canada. Elaine extracted what she wanted from Beyond Silicon Valley and understood she was participating in a long-term game.

"In Canada, there is a nonprofit movement called Startup Canada, and its goal is to develop entrepreneurship ecosystems in cities and large regions of the country," Elaine explained. "Everybody understands that building an entrepreneurial ecosystem is not a short-term answer, it is a development over 25 years."

Elaine completed a final project on the topic of comparing venture funding of and by males to that of and by females. She wanted to understand the realities of gender bias in the distribution of venture capital, but she gained more general benefits, as well. "The whole MOOC," she said, "prompts thinking about how you can help improve the entrepreneurial ecosystem in your own country and help other ecosystems in other countries."

These qualities of Elaine's—a sense of adventure and the desire to help connect entrepreneurs—made her ideal for a leadership position in Beyond Silicon Valley. So, of course, when I created the lead mentor position for Beyond Silicon Valley, which is a volunteer position, Elaine was a natural choice. Elaine, Arjan Tupan, and Susan Langmann (covered in earlier chapters) work with handfuls of other mentors to answer questions, make suggestions, and connect Beyond Silicon Valley students so they can help develop entrepreneurship ecosystems in their countries.

Elaine believes that mentoring and networking are two extremely important ways that people can help entrepreneurs and entrepreneurial ecosystems grow.

And she backs up that belief. Today, relating to her interest

in women's entrepreneurship, Elaine is a mentor for quite a few women's groups, including the Women in Biz Network, which is both an online and local network in Toronto (eastern Canada) and Vancouver (on the west coast of Canada). She also has been a SheEO advisor, helping four young women entrepreneur startups with business and marketing strategy. Her local Chamber of Commerce recently established a mentorship program for entrepreneurs under the age of 40, and she has participated in that as a business mentor. Further, she runs a Fabulous Fempreneurship community on Facebook and a mentor portal at her company's website.

"The Facebook page is an open group at the moment, and we have almost 500 members from around the world," she said. "It's very interactive. For example, we post different themes every day. Members write me all the time and say how supportive members are of women entrepreneurs, so that makes me pretty excited."

One MOOC student in California wrote an interesting Beyond Silicon Valley essay on Coursera, so Elaine introduced the student to some of her contacts in Europe. The student ended up connecting with someone in London, and they helped each other write their own books. I also put Elaine in touch with a female student from South Africa who was interested in helping female entrepreneurs.

"She's an entrepreneur, but she would like to establish a funding mechanism for women entrepreneurs in South Africa," Elaine said.

Elaine met Yvette Mazariegos through Beyond Silicon Valley. (Covered in an earlier chapter, Yvette runs a couple of paper processing and wholesaling companies in Belize.)

"[Yvette] is trying to do the same thing in Belize as I'm trying to do: open up entrepreneurship to women," explained Elaine. "It's funny how it sort of comes around in little circles. It started with the Beyond Silicon Valley, and for those of us who have got this keen interest in entrepreneurship, we've all found different ways to spread it out."

Since taking Beyond Silicon Valley, Elaine has published Fabulous Fempreneurship: A Startup Guide for Entrepreneurs (for which I was pleased to write a back-cover endorsement). She's now very active on the business speaking circuit and has gained new business for XL Consulting Group—mentoring four incubating-stage companies at The Forge, a Hamilton, Ontario-based incubator, helping them navigate the entrepreneurial ecosystem and take their next steps toward success. She's also co-hosted a STEM workshop on website design for student winners of a Mathstronauts sponsored competition. The Mathstronauts company is in The Forge incubator.

"The next initiative in our local area is the establishment of a business incubator for my home town of Burlington, Ontario," Elaine said. "Once established in early June 2017, there will be a need for mentors to help the local startups, and I'll be applying to be part of this program."

Elaine sees Beyond Silicon Valley as the pebble thrown into the pool of entrepreneurship that starts the interconnecting ripples of water.

"It sounds crazy, but even in cities like Cleveland, Hamilton, and Toronto, this entrepreneurship ecosystem approach is new. Now we're not working for corporations anymore. We're asking ourselves, 'Wow, what am I going to do, and how am I going to do it?' And it's a whole new world."

That's exactly how Elaine most helps Beyond Silicon Valley students—by helping them understand what they are going to do as they enter the new world of their innovation ecosystems. With her knowledge, commitment, enthusiasm, and intelligence, she's not only helping the Burlington, Ontario, ecosystem to grow, but she's also helping ecosystems around the world.

"I've found that Beyond Silicon Valley connects people from all over the world to help them with entrepreneurship in their own countries," she said.

Elaine Slatter should know because she's one of the best mentors that I've ever encountered, as well one of the best at connecting people. Mentorship and making connections: the actions and results that Beyond Silicon Valley strives to provide for entrepreneurs around the world.

#### FAST FACTS MENTORSHIP

Elaine demonstrates an important piece of Beyond Silicon Valley—engaged students of Beyond Silicon Valley were more than twice as likely to mentor another entrepreneur as were unengaged students. These engaged students were also more than twice as likely to receive mentoring advice—almost 20 percent of engaged students had a mentor during or after the Beyond Silicon Valley course.

Mentorship is critical to new innovators and entrepreneurs. For instance, Ed Steidl, formerly with the Microsoft Innovation Centers says, "Mentorship is a huge component of success for an entrepreneur, and that is international. Whatever rock you turn over, mentorship is going to be a huge component."

Elaine's commitment to mentoring is helping to grow the ecosystem.



Fatos Axhemi (left) with my daughter, Kate, and me in Gjakova, Kosovo, 2016.

#### **FATOS AXHEMI**

## ADVANCING INFORMATION TECHNOLOGY IN KOSOVO

Fatos Axhemi runs the Jakova Innovation Center and is advancing Information Technology-related entrepreneurship in Kosovo.

Born in 1979, Fatos Axhemi was a young boy in Gjakova, Kosovo, in the 1980s, when serious trouble was brewing in his country. Albanians, who make up over 90 percent of Kosovo's population, wanted Kosovo, at the time a province of Serbia, to declare independence from Serbia.

The government of Serbia, however, did not want Kosovo

to be an independent nation. So began the lead-up to war itself. Fatos's home city of Gjakova (the "g" is silent in English), in the western region of the country, was ground-zero for the Kosovo war, which lasted from the spring of 1998 until the spring of 1999. Bombings conducted by the Federal Republic of Yugoslavia destroyed a lot of the city's central square.

In 1996 when Fatos was a teenager and as things became more tumultuous, he traveled to the US to live with his aunt and uncle in Warren, Pennsylvania, for a year.

He attended Warren Area High School but returned to Gjakova from the US just before the ethnic cleansing of Kosovo started. He was there during the campaign when Serbian dictator Slobodan Milosevic decided to try to prevent the secession of Kosovo from Serbia by ordering the expulsion of 800,000 ethnic Albanians from the city.

(The International Criminal Tribunal for the former Yugoslavia later tried Milosevic for war crimes, namely his ethnic cleansing campaign; however, he died before the verdict was issued.)

Thankfully, the war ended and Fatos continued with his schooling. In 2009, he graduated from the University of Prishtina and earned his bachelor's degree in management and informatics. He spent about five years in commercial banking, did a two-year stint as a salesman for a flour milling and pasta company, and then returned to banking for five years.

In the middle of Fatos's career path in 2008, Kosovo became its own nation, consisting of about 1.8 million people. The new Kosovar government and private economic development organizations began to support entrepreneurship as a way of creating jobs and reducing reliance on social welfare programs.

They created programs such as a fund that co-finances foreign investments in SMEs and policies that include tax exemptions for business incubators.

The government agency USAID also became involved in helping the innovation ecosystem. From 2010 to 2013, it ran a program called Young Entrepreneurs Project (YEP), which offered Kosovars ages 18-35 the opportunity to start or strengthen a business by supplying them with business-development training, seed capital grants, and business coaching.

YEP also tried to increase entrepreneurs' access to capital by building their image as a sound investment within the lending community and by working with banks to boost their youth-oriented products and services. By the end of the program, YEP had supplied business support and training to 1,328 young Kosovar entrepreneurs and seed grant capital to 363 youth-owned businesses, enabling 2,683 youth to achieve new or better employment. Between mid-2011 and the end of 2012, 24 YEP entrepreneurs received loans from banks or finance institutions.

Meanwhile, Fatos had heard one of our Beyond Silicon Valley students from Düsseldorf talk about the course at a conference in Berlin, and a week later, he emailed me to express his interest in the course. He would be in Cleveland in early June to visit his brother, who by sheer coincidence was an engineering graduate student at Case Western Reserve University. Fatos wanted to meet with me. Unfortunately, I was in Africa at the time, so I put him in touch with a couple of people at JumpStart, the venture development NGO in Cleveland.

Soon enough after his visit to Cleveland, Fatos registered to take Beyond Silicon Valley.

"The MOOC offered us a new paradigm, a new way to start thinking about the problem and the challenges on a larger scale," Fatos said. "When I heard about the Ohio Third Frontier program, I thought it would be a perfect model to base a development program on, and it's one of the models that I'm striving to mold with the local and central government whenever I have the chance."

The IT sector is one of the sectors where Kosovo may be able to compete, although larger problems present themselves.

"Kosovo has a huge corruption problem in both the central and local parliament, which unfortunately is common in most post-war countries even though 17 years have passed since the war," Fatos said.

Corruption has cost the Kosovar economy a fair amount of foreign investment. At the same time, the low cost of labor in Kosovo attracts foreign investors.

"[Kosovo] has a relatively young population that speaks English and has more access to education," Fatos said. (He clarified that by "education" he meant formal education and informal education, through innovation centers and online platforms).

"It's not difficult to go to towns and find young, talented men and women who can do development and programming for less than \$1,000 per month," Fatos said.

After Beyond Silicon Valley in 2014, Fatos began working at the Jakova Innovation Center, an NGO (the innovation center westernizes the spelling of "Gjakova").

"Our center was established by the Ministry of Trade and Industry of the central government and the municipality of Gjakova," Fatos told me. "So the municipality of Gjakova offered the site, the ministry gave the funds for the construction, and the Innovation Centre of Pristina [the first and largest innovation center in Kosovo] hired the staff."

When the center opened in 2014, it supported two startup companies through a small startup grant fund. The innovation center and the startup fund are, according to Fatos, the first real steps for support of the startup ecosystem in Kosovo. By offering funding, the center became the first business incubator in Kosovo to offer startup grants to tenant companies.

The Jakova Innovation Center provides business services and also has an incubator that provides physical office space for up to a dozen companies. Because the idea of an innovation center is new to Kosovo, many Kosovars don't understand the business model. Fatos repeatedly explains that, "We provide training, operating systems, and facilities to startups."

It may be a simple business model, but it's new, so repetition is key. Fatos says that the IT sector is a leading area of opportunity for Kosovo.

"We are the only country in the region—in the Balkans, which includes Kosovo, Serbia, Bosnia, and Albania—that just two months ago adopted a nationwide IT development strategy," he told me.

In 2015, the Kosovar government began providing matching loans to support small bank loans to startups, including in the area of IT. A promising new company that stems from the combination of the nascent IT cluster and entrepreneurial culture of Kosovo is Gjirafa, Inc., whose main product is a search engine localized to account for the Albanian language (spoken by 12 million people worldwide) and Kosovar culture. Gjirafa

has global roots, including being founded by entrepreneurs in Detroit, Michigan; a onetime Kosovo location at an innovation center in the Kosovar capital, Pristina; a presence with Start-upYard, an incubator in the Czech Republic; and a first round of capital of over \$2 million that came from a global investing group Rockaway Capital in Prague.

Entrepreneurs in the Gjakova incubator offer things like web development and design, which they market via freelancer platforms online, and taxi delivery services, which are new to Gjakova.

Fatos wanted to meet with government representatives who invested in training at the innovation center to share information about the Ohio Third Frontier model.

"Kosovo is a very small country and doesn't have the capacity of Ohio," he said, "but this is an opportunity to learn from stories and models that work."

Unfortunately, those meetings never took place, and Fatos also saw that funding for the incubators within the innovation centers may begin to dry up. Being determined and creative, he began working on additional activities that could increase awareness of entrepreneurship.

He contacted me to ask if he could translate the Beyond Silicon Valley videos into Albanian. It's the dominant language of Kosovo.

I thought this was a terrific idea. I put him in contact with the US Embassy in Pristina as well as with Jovan Stalevski in Macedonia because Jovan had led the translation of Beyond Silicon Valley into Macedonian, creating Beyond Silicon Valley Macedonia. Fatos applied and his team won a grant from the US Embassy to make a Beyond Silicon Valley-related video series for Kosovars.

Fatos told me that, "[Kosovo: A Startup Opportunity] is something that we are promoting daily at the local and national level, not just us as an innovation center, but we're promoting all the elements of the ecosystem, including universities, municipalities, and development agencies."

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In June 2016, I traveled to Gjakova and watched Fatos launch the Beyond Silicon Valley videos during a day-long event called "Kosovo a Startup Opportunity—Developing the Entrepreneurial Ecosystem in Kosovo."

It was a profound experience to be in Kosovo and to sense the realities of a war-torn nation. As the people and institutions of this Balkan country continue to recover from a war that ended about 20 years ago, the nation faces other significant challenges. For instance, Kosovo has the youngest and poorest population on the European continent.

Yet to be in Kosovo is also to witness the heartening resiliency of a people and their country. By the time I had arrived there, the center of Gjakova had been rebuilt. Although the economy still struggled, I loved seeing so many people enjoying the square in the city, sitting around drinking coffee and eating meals. It felt wonderfully vibrant.

Fatos and others presented the first couple videos of a seven-part series at the event at Hotel La Villa in Gjakova that attracted about 100 people.

During the event, I introduced the Beyond Silicon Valley MOOC, and the Jakova Innovation Center staff moderated pan-

el discussions on the entrepreneurial ecosystem and the roles of intermediaries. Panelists included government representatives, economic development experts, and bankers.

"[It was] a great opportunity to share experiences similar to Cleveland's and stories of entrepreneurial ecosystems around the world," Fatos said. "It's strange but at the same time encouraging to know that 90 percent of startups and ecosystems have similar problems as we do in Kosovo. It makes us realize that it's not impossible to tackle these problems."

Despite the set-backs in funding and other hurdles, Fatos wants to keep growing entrepreneurship in his country. He also wants to pursue a degree in business development and entrepreneurship somewhere abroad so that he can benchmark against another entrepreneurial ecosystem as well as gain global awareness, knowledge, and understanding related to entrepreneurship.

Fatos, like Kosovo itself, is determined to see success rise from the struggle of what is still a post-war economy. I have little doubt that progress will be made—for both Fatos and Kosovo.

#### PERSPECTIVES CLUSTER STRATEGIES

Both the accelerator that Fatos leads and the government in Kosovo promoted the IT sector. I talked with Randall Kempner about his thoughts on the importance of promoting certain sectors for the growth of entrepreneurship (the main difference between a sector and cluster strategy is that a cluster also addresses industries and businesses that support the sector). As previously mentioned, Randall is the executive director of the

Aspen Network of Development Entrepreneurs (ANDE). He said, "I think sector-based economic development is important because if people are going to support the growth of small growth businesses, it certainly helps to understand the needs of certain industries, whether software design or small holder agriculture. The categories of needs for an agricultural processor are going to be the same categories of needs as for a software developer (skilled workers, access to capital, access to customers, etc.), but the specifics within those categories are going to differ enough that you need to have sector-based strategies." (He supports sector and cluster strategies but spoke with me about a sector strategy.)

Many entrepreneurs in Beyond Silicon Valley are interested in internet and application development because these are low-capital intensity and accessible industries. In some endeavors, such as in Fatos's IT efforts, government may be supportive of the sector.

In other cases, not as much so. At one point in its roll out of the Ohio Third Frontier program, the State of Ohio did not consider IT to be an industry on its own that merited state funding but rather an embedded discipline that went across industries.

Randall says, "I think you see this notion of tech convergence where almost all businesses have IT embedded in the business operations, or the products, or both, so I think that it's not always vital for 'tech' to be defined as a vertical industry."



Laurie Pickard at her home office in Kigali, Rwanda.

#### LAURIE PICKARD

## PROVIDING A BUSINESS PATH THROUGH MOOCS

Through MOOCs, Laurie Pickard helps entrepreneurs in Rwanda and elsewhere build enriching MBA-style curriculums.

Doberlin College in Ohio, Laurie Pickard joined the first cohort of what's now known as The New Teacher Project (TNTP). The mission of TNTP is to prepare people to teach students in disadvantaged communities. After teaching in Philadelphia, she earned a master's degree in geography from Temple

University, and she then married someone in the Foreign Service. Laurie and her husband knew his Foreign Service career meant they'd be in a different country every few years.

In 2013, Laurie and her husband moved to Kigali, Rwanda, where she found work trying to help Rwandan entrepreneurs. She wanted to earn her MBA to better perform her role, so she started taking business-related MOOCs, which she figured would simulate getting an MBA. It did, and she enjoyed taking MOOCs so much that within a month, she started a blog about her efforts: No-Pay MBA.

"I saw an opportunity to build the business education I had long desired without leaving the workforce and without going into debt. For me, as an international development worker, MOOCs had the added benefit of being accessible from anywhere—even my home in Kigali, Rwanda," she wrote in her No-Pay MBA blog.

Laurie used MOOCs from platforms like Coursera and edX to get a business education equivalent to an MBA—for less than 1 percent of the cost of a traditional MBA degree.

"I started this blog as a way of documenting my journey and providing a path for other learners who might want to do the same thing," she told me.

Laurie developed the No-Pay MBA initiative in the context of Rwanda's rebuilding economy, which still has a long way to go to recover from one of the biggest tragedies of our era, the 1994 genocide against the Tutsi, which killed 800,000 people and left the nation's economy in ruins. Today, Rwandans generally lead healthier, wealthier lives than they have for years, according to the World Economic Forum. Rwanda's GDP grew around 8 per-

cent per year between 2001 and 2014, making it one of the fastest-growing economies in Central Africa, the World Bank reports.

Also, the country reduced the percentage of its people who live below the poverty line from 57 percent in 2005 to 45 percent in 2010; meanwhile, life expectancy, literacy, primary school enrollment, and spending on health care improved during those years, all according to the World Bank.

Compared to many other African countries, today's Rwanda is a place of hope and stability. Still, the picture in Rwanda is hardly rosy: much of the population lives in extreme poverty on less than \$1.25 a day, and over 70 percent of the nation's 10.5 million people work in subsistence farming. Further, the Rwandan government depends heavily on foreign aid, which increased significantly after the genocide to help the country rebuild.

In its five-year-old plan for developing the economy, the Rwandan government under the controversial President Paul Kagame said that it aims to transform Rwanda from a low-income, agriculture-based economy to a knowledge-based, service-oriented economy with a middle-income status. It identified six areas for accomplishing this transformation, namely:

- Good governance and an efficient state
- Skilled human capital
- A vibrant private sector
- World-class physical infrastructure
- Modern agriculture and livestock, and
- Regional and international economic integration.

These are geared to prosper Rwanda in national, regional, and global markets.

In its plan, the Rwandan government indicated that the backbone of this development process and of any new capital formation must be a middle class of Rwandan entrepreneurs:

Productive entrepreneurship must be fostered to perform its traditional role of creating wealth, employment and vital innovations through opportunities for profit. [The private sector must be stimulated] by broadening and deepening the financial sector such as banking, insurance, capital market and the application of information technology . . . . [and providing] high-quality educational services . . . . Rwanda aims to find a niche market in the region by becoming a logistics, telecommunication and financial hub.

While Laurie took Beyond Silicon Valley as part of her No-Pay MBA efforts, she also wanted to learn how to create an innovation ecosystem in Rwanda.

"I didn't have a lot of background in entrepreneurship, so Beyond Silicon Valley seemed perfect—it touched on government, NGOs, business incubation services, and kind of the whole ecosystem," Laurie told me. "It was really a great way for me to say, 'Okay, I've got some grounding in what I'm going to be doing in this job.'"

In her No-Pay MBA journey, Laurie has taken about 30 MOOCs.

"When I started, I was very systematic about it," she said.

She explained that she eventually became more creative, opportunistic, and picky with her time; less interested in being a model student and more interested in choosing modules that advanced her learning. Since taking Beyond Silicon Valley in 2014, she has supplemented her No-Pay MBA blog with additional offerings.

"I've created a curriculum that actually embeds MOOCs within project-based challenges for people around the world who lack the ability to attend a traditional business school."

She also started a network that connects her students to each other and to No-Pay MBA resources. Laurie believes face-to-face interaction will further help the No-Pay MBA followers.

"So, what I do is create these workshops that foster peer-topeer interaction around some subject area. I've got about 50 people in the network," she said.

Laurie herself networks a lot and has talked with numerous Beyond Silicon Valley students, including Arjan Tupan in The Netherlands, one of the lead mentors for Beyond Silicon Valley. She also has met with some Beyond Silicon Valley students using video conferencing software like Skype and Zoom.

"Knitting together these disparate factions around the world is very cool and powerful," she told me.

Laurie also facilitated a run of Beyond Silicon Valley through the US Embassy in Kigali with about a dozen students who met weekly.

"We'd set up a video screen and play part of the course videos and then have discussions about them in the context of Rwanda," she said.

Jovani Ntabgoba, the former manager of a Kigali incubator called K-Lab, participated in one run of Beyond Silicon Valley. He said that through Beyond Silicon Valley he and entrepreneurs at K-Lab gained some pointers on how to cooperate with the Rwandan government. In fact, Jovani convinced the government to partially fund new computers and systems for K-Lab after taking Beyond Silicon Valley.

Additionally, he said that post-Beyond Silicon Valley, one K-Lab member successfully raised money from Indigo, a British NGO. He also learned about the power of mentorship through Beyond Silicon Valley so that afterward, he helped K-Lab develop an online forum for mentors. Thus, K-Lab could, in addition to relying on a few professors at the local university and some nearby entrepreneurs for mentorship, also tap the knowledge of online mentors.

For her part, Laurie later facilitated a second run of Beyond Silicon Valley not with Rwandan entrepreneurs but with her No-Pay MBA network. Most students were American but others came from Belgium, India, and the UK.

"I encourage people to use [Beyond Silicon Valley] as an opportunity to get out and interview people who are in these different kinds of organizations in their own city," she tells me. "And people from my network have done that with pretty amazing results."

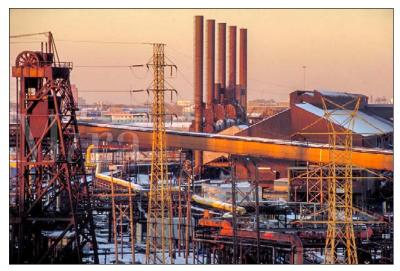
I participated in one of these sessions. Because Kigali is in the Central African Time Zone, which is seven hours ahead of Cleveland, I awoke in the middle of the night to join the students via Skype. I probably sleep-talked through the session, but I'm driven to connect with people everywhere and anywhere about how they can create and catalyze their own innovation ecosystems, and Laurie made this easy and effective.

# PERSPECTIVES THE POWER OF MOOCS

Laurie is extremely good at promoting MOOCs as a way of teaching and learning. She and I agree (not surprisingly) that although MOOCs are not *the* answer, and they have their drawbacks, they are nonetheless a terrific way to teach and learn how to build entrepreneurial ecosystems.

I talked with Lisa Delp, who in addition to being former executive director of the Ohio Third Frontier Commission was director of Innovation Fund America, and is now a partner in GDI Business Consulting, which supports private-public initiatives that build sustainable entrepreneurial networks. She summed up the power of MOOCs and of Beyond Silicon Valley.

"I think Beyond Silicon Valley, for people who want the knowledge and not the paper degree is a terrific tool," she said. "A MOOC platform for subjects like building entrepreneurial ecosystems is really ideal because we're not just sharing math formulas or macroeconomics information—we're really sharing strategies and stories and techniques for doing something . . . We're all taking our shared experiences and grassroots experiences and transferring them to people in other locations. I think that's something the macroeconomic courses don't provide and a lot of the entrepreneurial courses don't necessarily provide."



LTV's Cleveland Works, Cleveland, Ohio.

## THE CLEVELAND CONNECTION **ACCESS TO CAPITAL** & MENTORING

ere are a couple of million-dollar questions: how do you Laccess capital, and how do you go about obtaining qualified mentoring, once that funding is obtained?

We've explored the roles of government, philanthropy and private donors, intermediary organizations, and NGOs. It's time to dive into capital and mentoring, specifically, through the examples of seed accelerators and angel investors.

1. What are seed accelerators, and who has traditionally supported them?

An exemplary modern seed accelerator can be found in Y Combinator, started in 2005 by Paul Graham and other Silicon Valley denizens. This privately held organization provided carefully chosen portfolio companies with access to talent, business development partners, and follow-on investors during its startup program.

Seed accelerators are unique in that they are cohort-based, mentorship-driven, last for a fixed amount of time, and culminate in a graduation or "demo day." This combination of features makes them different from incubators, angel investors, and seed-stage venture capitalists.

Since 2005, roughly 200 seed accelerators have emerged around the world. Unlike Y Combinator's private investment model, most of the seed accelerators in transitioning economies are supported in part by governments or donors. This is because the private sector alone hasn't provided or can't provide the necessary resources.

# 2. Why do seed accelerators ask for equity in the companies that they support?

In a word, ownership. Entrepreneurs apply for admission to seed accelerators based on their idea, and if accepted, receive mentorship, training, and support over several months in exchange for yielding an ownership percentage of their company to the seed accelerator. Because seed accelerators are invested in the success of the startup, their teams try to provide portfolio companies with access to talent, business development partners, and follow-on investors during the program.

3. What is an angel investor, and why would one invest in a highly risky startup?

While the emergence of private and public seed accelerators has provided access to initial seed capital and mentoring, highgrowth, innovation-oriented entrepreneurs often find they need additional investment to grow and scale their businesses.

Angel investors typically are not family members (that's the "friends and family" round of capital) and often have never met the entrepreneur before hearing the pitch for investment. Silicon Valley has generated hundreds or thousands of successful and wealthy entrepreneurs who want to invest in other startup companies. These investors often do this either individually or through organized angel funds.

Elsewhere, finding wealthy individuals to become angel investors poses many stumbling blocks. Investing in startup companies is inherently risky, and this throws off many a potential angel investor. According to an analysis done by the US Bureau of Labor Statistics, only about 35 percent of startup companies in the US reach their ten-year anniversary.

To address this challenge in a transitional economy, in 2004, Ohio leaders introduced several programs to stimulate angel investments. These included a tax credit for angel investments and matching funding from the state, designed to catalyze the formation of angel funds.

In Cleveland, Tom Lix, founder of Cleveland Whiskey, exemplifies the immediate impact that the rise of angel investors has had. Lix knew that traditional whiskey can take up to a dozen years to age. His radical idea was to use "disruptive technology" to age his whiskey in 24 hours, making it the first ever "just-in-time" whiskey.

"The industry isn't happy," Lix states, tongue-in-cheek (I think), on his website.

Lix talks about how he went about getting funding for this new technology, which allows him to offer the industry something completely different.

Having a whiskey company, he says, made it "easy for me to start conversations. I wrote a business plan, did all the right things that an entrepreneur has to do to attract investors. People are willing to introduce you to other people [in Cleveland]," he says. "And that was a big part of it."

But in Cleveland, 10 years before Lix raised his 2013 funding, he might have struggled; very little angel funding existed then. This changed when Ohio introduced its pre-seed capital program, in which matching funds are offered to private investors who commit to invest through an organized angel investment fund.

Frank Samuel, the late science and technology advisor for the State of Ohio, believed it was important for the Ohio Third Frontier to put its funding in place in 2006. And John Houston, founder of the Ohio Tech Angel Fund, adds that the Ohio Third Frontier's matching funds helped foster the angel investing environment tremendously.

4. How is an angel investor motivated differently from other investors?

Angel investors use their own money, sometimes putting it into a casually pooled fund with other angel investors, while a venture capital fund is formally structured around other people's money. The best angel investors don't make in-

back to their community or a community that means a lot to them as much as they want to generate return on investment. Cleveland has made slow but steady progress in building its base of angel investors.

vestments with a short-term view. They often want to give

5. Are there things people in a region can do to increase the level of local venture capital?

Venture capital is a global industry but a relatively local phenomenon. The majority of venture capital investors look for companies close to them so they can better provide governance and mentorship. Further, the east and west coasts of the US (especially Boston, New York, and San Francisco Bay) have what some people call "a near monopoly" on venture capital in the US. The Midwest has been wryly referred to as "the flyover zone" because venture capital investors fly from one coast to another to network, invest, and co-invest in companies, flying over the vast space in-between.

Recognizing the need for more venture capital funding in Ohio, the Ohio General Assembly created a "fund of funds," the Ohio Capital Fund, in 2005. The way the Ohio Capital Fund worked was that it raised cash by issuing bonds to private companies. The fund of funds invested its cash in venture capital funds. The twist on this setup was that the Ohio Capital Fund by statute had to provide 75 percent of its

capital to venture funds that located in Ohio and invested in Ohio companies.

The other twist on the fund of funds was it had a backstop on a potential inability to make the bond repayments to the private investors through the creation, by the specially created Ohio Venture Capital Authority, of state-sponsored tax credits. These structural elements of the fund were the reason it needed to be established by the Ohio state government rather than being a private fund of funds. The government of Ohio wasn't an investor in the Ohio Capital Fund; rather, it provided incentive, in the form of the tax credits, to the companies that invested in the Ohio Capital Fund.

The Ohio Capital Fund was not without controversy; some people thought the venture capital industry should not need government stimulus or involvement. Questions didn't diminish when the state needed to issue tax credits in 2017 so the Ohio Capital Fund could make its debt payment. This doesn't necessarily prove a lack of success, rather it proves the timing on the debt payment differed from the timing of the returns on investment.

My point is that the Ohio Capital Fund shows one way states are supporting major shifts in the location of venture capital. Private companies indicated they needed an incentive to invest in the possibility of lower returns that Ohio venture investments generate—there are fewer and smaller exits in Ohio compared to Silicon Valley. And the Ohio Capital Fund served as a motivating and differentiated source of capital to the venture capital funds interested in locating an office in

Ohio in the 2005-2015 time period. I'll add that a commitment from Ohio Capital Fund for a venture capital fund that I was considering co-founding helped convince me to move back to Cleveland in 2005. My co-founder and I then created Bridge Investment Fund, in which the Ohio Capital Fund was the largest investor.

The Ohio Capital Fund helped numerous funds make the decision to put an office in the state, and this helped early stage companies access venture capital. In fact, a dozen or more venture capital funds set up shop in Ohio-funds that had not previously had a physical presence in the state. A few of the funds that established offices in Cleveland and invested in Ohio companies include Edison Ventures, Arsenal Venture Partners, and RiverVest Ventures.

Although the particular features of the state-supported limited partner capital make Ohio Capital Fund unique, some states in the US offer fund of funds structures. Detroit, Michigan, has the Renaissance Venture Capital Fund, for example.



Mehdi Sadeghpour.



Arash Milani gives a talk in Tabriz, Iran, 2015.

# MEHDI AND ARASH CONVENING ENTREPRENEURS IN IRAN

Mehdi Sadeghpour and Arash Milani are enthusiastically building communities of innovators in Iran.

Hehdi Sadeghpour grew up in the province of Gilan, which is famous for its natural beauty. It sits at the edge of the Caspian Sea, the largest enclosed inland body of water on earth. The way the sun lights the water and land, Gilan resembles images we often associate with the Mediterranean Sea.

The north end of the province borders the Republic of Azerbaijan, and Russia is across the Caspian Sea, a geography that ex-

plains the strong Russian influence in Gilan. Were you to travel to Mehdi's native province, you'd encounter mountains, farms, and forests until you reached the coast, where you'd then come upon seaside resorts with both domestic and international tourists.

Mehdi has lived all over Gilan province. His mother was a teacher and administrator, and his father worked for the government. Because of Mehdi's father's career, the family moved frequently and lived in about six cities during his youth, moving from one cozy villa or apartment to another.

Mehdi earned his high school diploma in mathematics, but he learned English less formally.

"I never took an English class. I learned English by watching movies," he explained. "The first TV series that I watched was *Friends*. That was the greatest TV show of all my life, so I watched every episode like five or six times. That will remain my favorite TV series of all time. I will probably watch it with my son."

Mehdi received his bachelor's degree in mechanical engineering at Tabriz University in the northern Iranian province of Azerbaijan. Tabriz is a top-ten Iranian university in terms of selectiveness, and it's where Mehdi figured out that he loved adventure and travel. Although he's only traveled abroad once (to Turkey), he loves to travel inside Iran, heading south to the Persian Gulf, which features beautiful islands and a climate that's always warm and spring-like.

Mehdi especially likes Hormuz, a tiny island five miles off the Iranian coast. Hormuz is called "Rainbow Island" because of the lustrous colors of the minerals there and is considered a geological wonderland with tremendous marine biodiversity. Mehdi

is told that people can observe two-meter long turtles swimming off the coast of Hormuz.

After university, Mehdi moved to Tehran, the capital of Iran, and found work as a consultant specializing in HVAC engineering.

"Then one day, I realized I'm not made for engineering; I'm in the wrong place, like most people," he said.

He left his job and began tutoring students in mechanics, physics, and math while trying to figure out what he wanted to do with his life. One day, he came across a Facebook post about a MOOC on Coursera. The course, offered by Penn State University, was called Creativity, Innovation, and Change. Mehdi said the course changed his life; he realized he was interested in entrepreneurship. He applied to MBA programs, and the Imam Khomeini International University in Tehran accepted him. At Imam Khomeini, he focused on general management, but after two semesters, he transferred to Sharif University of Technology to focus specifically on e-commerce.

Mehdi learned a lot about entrepreneurship. I asked him what people and companies he admires, and he said he loves Google because of its product and culture. He "follows" (on social media platforms) technologist Paul Graham, the founder of Y Combinator, as well as Silicon Valley CEOs Elon Musk and Sergey Brin. He loves Musk's notion of continuous innovation. He's read a lot of tech books, but a couple he likes a lot are *The 5th Commandment* by Peter Senge, because Mehdi is keenly interested in system dynamics, and *Outliers* by Malcolm Gladwell.

Mehdi fell in love with MOOCs. After that first MOOC offered on Coursera, he completed about 20 MOOCs. Through

these, he decided that learning should be frictionless and continuous in the way MOOCs are improving education around the world.

"People don't need to go to university anymore. Right now, I truly believe there is no value in going to university at all because if you value learning, there is nothing better than MOOCs . . . it's pure learning."

He came upon Beyond Silicon Valley when he was looking for information on innovation ecosystems in Brazil, China, Malaysia, Singapore, and other places.

"One day in April I was surfing Coursera, which is one of my favorite websites ever, and suddenly a brilliant title caught my eye: Beyond Silicon Valley: Growing Entrepreneurship in Transitioning Economies," Mehdi told me.

"The title seemed like a miraculous answer to my question! The first thing that fascinated me was that this course was coming from an American university and not from a university from a developing country. I said to myself: 'Do they have these concerns too?'

"I eagerly decided to enroll in the MOOC," continued Mehdi. "It was about Cleveland's programs and its movement and changing entrepreneurial scene. I thought I could learn a lot and maybe someday I could transfer what I learned to people in charge. Silicon Valley is the paradise of ecosystems. Throughout the world, people know of it, and they know it as a role model and a utopia. They want their place to be like that."

By taking the Beyond Silicon Valley course, Mehdi wanted to network with entrepreneurs and supporters of entrepreneurship and improve Tehran's entrepreneurial ecosystem. The Iranian economy is poised for growth. With a GDP of \$400 billion, it's the second-largest economy in the Middle East after Saudi Arabia. The World Bank projected Iranian GDP to grow almost 7 percent in 2017

Mehdi says that Iran is in a "golden time for startups." He likes Iran's economic and business prospects in many respects, and he bases this assertion on his experience. He says the internet has become 10 times faster and 5 times cheaper in only a couple of years, and it's proliferating massively. Surrounded by Armenia, Azerbaijan, Pakistan, and Turkey, Iran's tech infrastructure is quite a bit more developed than the tech infrastructure of three of those countries. (He says Turkey is more advanced.) We talked a bit about Telegram, an instant messaging service like WhatsApp.

"It's so common that my grandfather has it," he said.

About 20 million people, or a quarter of the population, use it. (Since our interview, a security breach rocked Telegram in Iran, but the fact remains that it is used by 100 million people in the Middle East.) He shops on Digikala, considered one of the most successful startups in Iran. Started in 2006, it's the Iranian version of Amazon, selling tools, electronics, baby bottles, women's clothes, bicycles, carpets, refrigerators, musical instruments, and much more. It says it has "the best price, authentic goods, and rapid delivery."

Also, for 1stQuest.com, the online travel agency he co-founded (after he took Beyond Silicon Valley), there is, according to Mehdi, no competition. No hotels.com, Expedia, Travelocity, or Priceline with which to compete.

But Mehdi said innovators have paltry access to capital, and Iran doesn't have much of a support system for innovators.

He gave an example: It took 75 days for him and his co-founders to register 1stQuest.com to do business, which he considered a long time. He also said that Iranian tolerance for business risk is quite low.

"If you start a business and you fail," Mehdi said, "your family will probably condemn you. They won't support you. 'Why is he not working for another company? Why doesn't he accept the salary? Why are you making yourself a fool?' But not in my case—my family was truly supportive. They helped me to raise some angel funds."

Another problem is access to technology talent. Mehdi told me that plenty of talent exists, but *accessing* that talent presents challenges because LinkedIn and equivalent online matchmakers aren't prominent in Iran. This leads to the biggest thing he'd like to change—the community aspect of innovation. He sees hope in the fact that events like Startup weekend and TEDx have been held in Iran, and a few accelerators and venture capital funds have arisen in recent years.

Mehdi watched all the Beyond Silicon Valley video lectures, took quizzes, did exercises, and read a few papers.

"It was an amazing six-week course," he said.

He appreciated finding out about the problems and programs in Cleveland, and he relished the fact that Beyond Silicon Valley was structured as a deep case study that provided accounts from people in the trenches. He was relieved to see that some Cleveland problems were similar to those in Tehran—figuring out how to persuade donors to support the entrepreneurial com-

munity and gaining support from government being a couple of examples.

"For emerging countries like Iran, Cleveland is a good case because you can use it as a role model, as an underdeveloped locality that did all the things that turned it into a good ecosystem." And he liked how many people participated in the class—it inspired him. He wrote to me, "It seems everybody these days is in love with this magical French word, 'entrepreneurship.'"

Mehdi learned the most from the Beyond Silicon Valley pillars on the importance of how communities can help entrepreneurs—particularly the emphasis on community.

"One of them stands apart from others, and that was the one about the communities and the role of community organizations," Mehdi said. "It was interesting for me because having strong communities is a sign of a modern and improved society. The emphasis on the role of community showed me how powerfully a strong community affects the way government operates."

The problem, Mehdi explained, is that, "We don't have that in Iran. Typically, if improvement is brought to society, it is always top-down in Iran; it's always government that starts it. But that's a bad thing. We should have a bottom-up movement and improvements. We should take care of society ourselves.

After taking Beyond Silicon Valley, Mehdi and some colleagues and friends at Sharif University of Technology worked to translate it into Persian, making the course accessible to more students and making it the first Coursera course with Persian subtitles. He also invited me to present via Skype to an institute based at the Sharif University of Technology.

Mehdi was introduced to participants at a City Club of

Cleveland event late in 2014. The City Club is an organization that promotes dialogue among civic leaders and members of the community, including the global community (through virtual connections). It is America's oldest continuously running debate forum and hosts regular debates that are mostly in-person but also air on radio and TV. Mehdi joined me, via WebEx, along with four other in-person panelists, for a discussion about Beyond Silicon Valley. This cultural exchange made for a great opportunity to show commonalities between the US and Iran.

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By the time the second session of Beyond Silicon Valley came around in October 2014, I was eager to connect with more Beyond Silicon Valley participants in more meaningful ways. I asked another Iranian student, Arash Milani, if he would be interested in organizing some meetups in Iran related to Beyond Silicon Valley.

Luckily for me, Arash said he would like to organize these meetups.

Arash lives in Tabriz, in the Iranian province of East Azerbaijan. He told me that in addition to being an entrepreneur, he's a "happiness ninja."

"What does that mean?" I asked.

"One of my main goals in business is to make my customers and team members happy," he answered. "Ninjas were famous for using any weapon that they could obtain to accomplish their missions, unlike samurais who practiced strict rules about combat. So, by 'happiness ninja,' I'm referring to a person that will use anything at his/her disposal to make other people [customers, team members] happy."

Arash loves computer programming, biking, and cooking (he experiments with omelets). About a decade ago, he graduated from Tabriz University of Medical Sciences, at which point he and three friends, whom he met through the internet, collaborated to create web applications for university research and continuing education programs. Eventually Arash left that effort and formed Overding, a startup that enables people to learn about software programming while working on real-life projects and with the help of mentors. Overding's people are currently focused on web and mobile app development.

Iran lacks expert programmers, and finding technical people and founders is very difficult.

"I thought, how can I make a difference to create new programmers?" Arash said. "So, I started Overding."

At Overding, Arash is trying to do two things—first, create web and mobile apps for customers and second, attract more people to programming, which is a workforce development initiative. In transitioning economies, entrepreneurs often need to do additional work like this just to create a company.

Arash said that in Iran, the lack of good technology ideas is a huge obstacle, and he talked about how in Iran they replicate ideas well. He gave the example of a well-known Iranian company called Aparat. YouTube was banned in 2009 in Iran—to fill the void, Aparat was launched in 2010 as a video-sharing site. Arash's point is that entrepreneurs in Iran need to expand their vision beyond replicating other people's ideas. He believes they need to think in world scale to develop new ideas.

Arash added that in Tabriz, few people take financial risks in business.

"It's a bad scene for people trying to convince others to give them money."

Although in Tehran, where Mehdi lives and works, accelerators exist (and they have access to capital), in Tabriz there are no accelerators.

"For people to flourish, you need a liberal culture, and that's not the current culture of Tabriz and Iran. It's not a liberal culture."

With Overding, Arash is trying to build a profitable business and solve these problems—culture, workforce, money, community. He had previously participated in MOOCs that related to learning new computer programming languages on both the Udacity and Coursera platforms. One of his favorites was called Machine Learning.

One day, he saw the Beyond Silicon Valley course and liked how it described the experiment in Cleveland. He wanted to get new ideas about how to sidestep entrepreneurship obstacles and repeat successes in developing areas. In Iran he had no other way of learning about these things; organized entrepreneurship groups simply don't exist.

"I wanted to grow a community of entrepreneurs in Tabriz," Arash told me.

How could he grow a community of entrepreneurs if there was no organized group to help him do this?

I introduced Arash to Mehdi, and the two collaborated. They did an amazing job organizing meetups around Iran. In the meetups, people viewed the Beyond Silicon Valley videos, which were subtitled in Farsi, and read the course materials.

Arash attended meetups in Tabriz and Tehran, and meetups

were also held in Mashhad (northeast Iran). Each location had six meetups (an introduction, and then one for each pillar of the course), and 15-20 people attended each one, usually at different companies that hosted the entrepreneurs and other attendees.

Mehdi and Arash told me the meetups generated fascinating and fruitful discussions. First, participants viewed a Beyond Silicon Valley video to generate discussion, and then they talked around a couple of roundtables. Sometimes someone needed to facilitate the discussion. Like Mehdi, Arash believed that using Cleveland as the case study was important because participants saw that every locale has its problems, and not everywhere in the US is Silicon Valley.

"That's why it was interesting to me," he said. "It couldn't have been about any city in the world because I was interested in the Cleveland process and what happened."

Arash used Beyond Silicon Valley to raise his own awareness of what to do as an entrepreneur in his local community. Since participating in the MOOC, he has brought two co-founders into Overding—a designer and a coder—both of whom live in Tabriz, like Arash.

Arash has become a more active member of his community and tries to mentor people at startups, transferring some of his experience, but at the same time, he's also still trying to raise capital for Overding.

Through Beyond Silicon Valley, Mehdi gained encouragement to try creating the entrepreneurial community that he wants to see in Iran. Through Beyond Silicon Valley meetups in Tehran, Mehdi and Arash met each other.

Mehdi explained, "This notion that a strong community can

do wonders is in my mind forever. It's one of my interests: I will try to create a strong, powerful, responsible entrepreneur community in Iran, and I will contribute in every way I can. That was the real take-away for me."

At 1stQuest.com, the portal for traveling to Iran that he co-founded and which he leads, Mehdi has brought on ten employees who sit in a small (90 square meters), open office space in West Tehran.

"We barely fit in the space. There's no room for number 10," he said.

For the company's offerings—travel services such as hotels reservations, visa applications, domestic flight booking for international travelers, and tours—the business opportunity seems good. In Iran, tourists (who aren't Americans, Canadians, or British) can travel on a budget or in full luxury, independently or with a group (Americans, Canadians, and the British must travel in groups and be accompanied by a guide because of their countries' troubled diplomatic relations with Iran.) Whatever the case, there's so much to see, from the Persian architecture to the bazaars laden with common and exotic goods alike, from the friendly people to the legendary hospitality, from the ancient cultures to the modern cities, from ocean vistas to mountain views, and from desert landscapes to lush forests.

1stQuest.com has \$250,000 in sales, has raised \$70K in an initial investment round, and was, during our conversations in early 2017, in discussions for an additional \$500K investment. Mehdi wants to expand the team to 30 people and hit \$2 million in sales in 2018.

Mehdi recently went to a conference in Istanbul called Start-

up Istanbul. Attendees included people like Dave McClure of 500 Startups and leaders from TechStars and Y Combinator. Mehdi pitched to some of them but finally one foreign investor dealt him the plain and simple truth.

"You can tell me you're building the next PayPal, but I still can't invest because you're in Iran," the investor said.

Although that disappoints Mehdi, he is able to turn it around and see it as an opportunity—the lack of investment in tech in Iran limits competition.

Mehdi calls himself an activist in Iran's growing entrepreneurial community. He organizes events and meetups, and invites entrepreneurs, academics, investors, and government officials to increase the awareness about good ways to develop an entrepreneurial ecosystem. He lives in an apartment with his 1stQuest.com co-founder, who was also the chief marketing officer—after a year of working together, they began to date, and then they got married.

"That's the best thing that has happened in my life," he said. "Having a partner in business and life."

### FAST FACTS NETWORKING

Meeting new people and networking are important to innovation because those are the ways new ideas are shared. Case in point, Mehdi and Arash met through Beyond Silicon Valley students, and the numbers show that engaged Beyond Silicon Valley students like Mehdi and Arash were significantly more likely to meet other entrepreneurs both inside and outside their local regions. After taking the class, about 47 percent of engaged Beyond Silicon Valley students met with someone related to their regional entrepreneurial ecosystem, and 37 percent of engaged students met someone related to a non-local entrepreneurial ecosystem. In total, engaged students like Mehdi and Arash were more than twice as likely as unengaged students to expand their networks after taking Beyond Silicon Valley.



Luis Ruano, me, and Juan Manuel Dominguez (L to R), with government officials in La Rioja, Spain.

# JUAN MANUEL AND LUIS ADVISING AND INVESTING IN LA RIOJA

Juan Manuel Dominguez Ortega and Luis Ruano are advising entrepreneurs and investing in innovative businesses in a region known more for its wine than its entrepreneurial ecosystem.

Juan Manuel lives in Logroño, Spain, the 150,000-resident capital city of the La Rioja region, which altogether, has 315,000 people. Because it sits on the much traveled Santiago de Compostela pilgrimage route, Logroño sees a lot of tourists. But La Rioja is best known for its wine production—it packs about 16,000 vineyards and 600 wineries into its roughly 2,000

square miles. That's eight vineyards per square mile (on average) and a winery every few square miles.

Spaniards have been producing wine for more than 2,000 years. (There's actually evidence of winemaking as far back as 6,000 years.) La Rioja, which has adopted 21<sup>st</sup> century, advanced winemaking technology, produces immensely popular Spanish wines, including the most popular Spanish wine in the US. Its elevation at 1,500 feet and higher helps provide La Rioja with a microclimate that makes its vineyard and grapes unique in Spain.

Wine grapes and climate played vital roles in Juan Manuel's young life. His father worked at Compañía Vinícola del Norte de España (CVNE), a large winery formerly listed on the Madrid stock exchange. Juan Manuel said his father worked in technical and managerial roles in the Vineyard Department, and that he loved his job. Juan Manuel assumed he himself would end up in the winery industry, but first he wanted to gain expertise in other areas. He attended the University of Rioja and majored in food engineering.

"I was a science student, but I didn't feel like doing something really tough in science terms like construction or physics—I'm not that kind of a science guy. I opted for something more in-between, and I always liked food and environment, so I decided to do that."

In addition to his bachelor's degree, Juan Manuel went on to get his master's degree in food engineering from Universitat de Lleida, and then he stayed in Lleida in Catalonia, which is in the northeast corner of Spain on the Mediterranean Sea. He worked at Gain Agro Enginyeria, where he developed food industry projects with budgets typically in the millions of euros. He liked this job, but after five years, he decided he should gain a deeper understanding of global business. He went to IE Business School to learn more about finance and marketing, and then he became a business consultant, eventually becoming managing partner at SD Group, which provides business advisory services. Juan Manuel typically works on mid-sized and large projects and serves as interim manager for client companies.

Two other people, one in Valencia and one in Madrid, are part owners of SD Group. The firm has no employees because the three partners prefer to contract with individual subject matter experts on a project-by-project basis. Consulting to mid-sized and large companies is SD Group's bread and butter because bigger companies are able to write bigger checks. Small businesses usually can't afford SD Group's services, and Juan Manuel doesn't want to commoditize his consulting work by decreasing his pricing. Instead, he advises his small company clients on an informal basis.

Juan Manuel fueled his interest in continuous learning through MOOCs. In 2013, he began registering for MOOCs through both Coursera and Stanford. At night after a long day's work, he often relaxed with a cup of coffee, watching experts discuss topics that interested him. He was sorting through the contents of Coursera one evening when he saw something about Silicon Valley. He saw the course description and liked it, although he admits that he believed that because it had "Silicon Valley" in its name, it would cover the topic of Silicon Valley (obviously, it doesn't).

Juan Manuel wanted to understand different angles on innovation so he could help improve the entrepreneurial environment

in La Rioja. He registered for Beyond Silicon Valley, viewed the videos, and completed the readings and course materials. He liked how Beyond Silicon Valley was organized.

"I saw the experience in Ohio, how the investments system was built, and how it was structured, and it seemed like an opportunity to learn from others how to do things," he told me.

"The brilliant thing in the MOOC is that Professor Goldberg was able to translate complexities into a simple structure, and it was easy to understand by almost everyone without a high level of knowledge about entrepreneurship. I was able to take advantage of most of the content, and a person new to entrepreneurship is also able to take advantage. It was like a self-service restaurant—you can take what you want depending on how hungry you are. I think this is a very smart approach."

Juan Manuel wanted to become more aware of the entrepreneurial ecosystem in Logroño and develop a more holistic understanding of it. The Logroño ecosystem, Juan Manuel said, has aspects to it that "make you think, 'Okay, here you can do something." It was named by the World Bank as the Best Spanish City for Doing Business, and the same World-Banksponsored report cited the ease of starting a new business in and around Logroño. Evidence exists that Logroño technology companies can succeed.

Take Arsys, a web hosting company founded there in 1996. Arsys grew to become one of Spain's top web hosting providers, and in 2013, the German company United Internet acquired it for 140 million euros. United Internet made the acquisition because it believed that Arsys was among the most innovative companies in the technology sector in Europe.

Juan Manuel also told me that because La Rioja's wine is known and loved in many corners of the world, this helps insulate the region economically. For example, when Spain suffered around the time of the 2008 financial crisis, the La Rioja wine industry didn't plummet. Even though Spaniards weren't buying much wine, international sales remained strong. People in La Rioja reinforced for themselves the notion of how beneficial it is to be globally connected and globally known.

Taking a global entrepreneurial approach can be difficult in La Rioja, though, because entrepreneurs and economic development people in places like La Rioja—and locales that aren't global entrepreneurship hubs—can tend to think too small. Part of the issue is pragmatic. For instance, La Rioja is a long-day trip, or more likely an overnight trip, to the entrepreneurial hub of Madrid (3-5 hour by car or train.) Further, Logroño struggles with the perception that the likelihood of startup success is lower there (and in all small cities) as compared to large, entrepreneurial cities. Juan Manuel thinks that geography and psychology have prompted too many aspiring innovators to conclude they need to be in Madrid or Barcelona to be global players. He said he feels this seems to be accepted wisdom, passed on not in the form of facts but almost through accepted behavioral psychology.

In 2014, I traveled to Madrid to conduct seminars around Beyond Silicon Valley for the US Embassy. When I contacted Juan Manuel to let him know I'd be in Spain, he invited me to visit him.

Juan Manuel, also put me in touch with another Spaniard he thought I should meet, Luis Ruano. As CEO and CFO of Ricari, Desarrollo de Inversiones Riojanas S.A. (Ricari), Luis is a paragon of an investor in innovation. By background, Luis earned his MBA from IE Business School, one of the world's best (the school's alumni club is how Juan Manuel and Luis met each other). The *Financial Times* ranked it the top business school in Europe, and *Bloomberg Business Week* ranked its MBA program second in the world. Luis grew up in Valladolid in northwestern Spain, and his father worked in production at Renault in Valladolid. At the University of Valladolid, Luis studied forestry and engineering and then added economics to the mix.

"I liked learning about how money flows," he said.

The firm he runs, Ricari, is a small venture capital firm that started in 1990 and has invested in about 40 seed or expansion-stage companies, primarily in the IT, biotech, industrial, renewable energy, and nanotech sectors. It has 6 million euros under management and is currently invested in six companies. It's an evergreen fund, which means that returns on investments go back into the fund rather than being distributed to the limited partners (LPs) or investors in the fund. Ohio funds that are similar include Rev1 Ventures (formerly Tech Columbus), CincyTech, and JumpStart.

The main purpose of Ricari is to help La Rioja's economy—it invests only in companies that are started in La Rioja or those seeking to relocate there. Luis looks for companies from other parts of Spain to see if they want to move to La Rioja.

"I help these companies and entrepreneurs, not only with the money, but I also put them in contact with the universities, banks, public administration, and companies that can be customers," Luis said. He has no co-workers and reports to his board of directors and eight LPs—the economic development agency of La Rioja, Ibercaja Bank, Iberdrola (electric company), the La Rioja chamber of commerce, the La Rioja Business Federation, and a couple of private enterprises or associations. These LPs are committed as much to the growth of the La Rioja economy as they are to generating return on investment.

Luis cites some barriers to growing a company in Spain. He echoes Juan Manuel's contention that the Spanish market alone isn't very large, so entrepreneurs have to market, sell, and deliver their products and services throughout Europe and beyond to Asia and the US. Spanish entrepreneurs need the flexibility, knowledge, and resources to enter many markets. Despite the existence of the EU and the common currency, France remains a different market from Germany, which is different from Greece, and so on.

"We have different idioms and different cultures, and you have to spend more money in Spain to go to the other markets than you do in the USA to go to other states."

At the height of the European debt crisis in 2012, nearly no one listed a company on the Madrid Stock Market, the nation's largest and most international stock exchange.

"Looking back at that time," a June 25, 2015, *Financial Times* article stated, "with government borrowing costs surging and investors questioning whether the Eurozone would survive intact, the window for initial public offerings in Spain appeared firmly shut."

Although capital markets in Spain have improved since 2012, Luis still believes that the only realistic way to achieve an exit is not through an IPO but, instead, through a sale of your company.

"If you want, we could spend all the morning talking about this," he said with a rueful laugh.

His financial success as an investor relies in no small part on the exits environment created by fickle capital markets. On the upside, Luis said that the 2006 crisis improved the Spanish entrepreneurial landscape. Before the start of the crisis in Spain, no one talked about starting a new business as an entrepreneur because there was low unemployment. When the financial crisis arrived, a lot of skilled people lost their jobs. Many started to think about creating their own employment through creating a new business. Then a lot of institutions—private and public—big corporations, universities, and business schools created programs to help and encourage the entrepreneurial spirit.

"In this revolution, business angels, VCs, and other financial instruments specific for startups arose," Luis said. "Now, I think we in Spain have one of the best ecosystems in the world, and we are ready to nurse and help develop startups that emerge from Spanish entrepreneurs or people who come here to incubate their business idea and create their startup."

Luis told me that being an entrepreneur is cool.

"Years ago, if you told your mother, 'I want to be an entrepreneur,' your mother would say you are crazy. But now when your mother talks with her friends and says her son is an entrepreneur, it's a good thing."

He believes the entrepreneurial ecosystem also has changed to allow it to invest more in the emerging successes.

"In the past, the ecosystem has created a lot of entrepre-

neurs," he said. "Now, the view has changed—we have to create entrepreneurs, but let's consolidate the ones that really have potential."

Luis and Juan Manuel set up for me a meeting with the local Logroño ministry of industry and innovation, and they organized a meetup with about 30 startup companies. When I went to Logroño for the meetup, Luis had never participated in any MOOC, including Beyond Silicon Valley. After the meetup, Luis took the Beyond Silicon Valley course. In part, he wanted to get information for his PhD because in addition to running an investment fund, he's also earning his PhD in business. His main interest is smart money and how a venture capital investor can add value to startups and the entrepreneurs who lead them.

"I wanted to know more about being an entrepreneur, especially in other parts of the world," he said. "I think I know the Spanish ecosystem very well, but I want know what people are doing in other parts of the world and to meet them."

In the meantime, Luis continues to invest in early stage, innovative companies through Ricari. Building the ecosystem makes for a busy life, but it's a good one. He can walk from his home in Logroño to his downtown office in about 15 minutes. From his office window, he has a magnificent view of the mountains and the countryside. He used to mountain bike there regularly, but now as a father of two daughters, a PhD student, and a full-time investor, mountain biking seems a distant memory.

Regardless, he enjoys what he does because gets to meet a lot of people who want to do things.

"If I worked in a bank or restaurant, or in the loans business, I'd meet with people with problems. I'm lucky to have this job."

After the meetups, I drove around La Rioja, and the scenery of the drive illustrated vividly for me what a high quality of life a person can enjoy in Logroño.

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This brings me back to Juan Manuel, who also lives and works in Logroño. His main job as a paid advisor at SD Group continues to go very well. He's working on a couple projects—one for an Israeli wine company and another investing in and helping develop a small spirits business.

For his side work, Beyond Silicon Valley helped him improve his ability to advise entrepreneurs. In fact, after Beyond Silicon Valley, he became an informal mentor to a few La Rioja entrepreneurs, and he then landed a part-time gig officially mentoring startups in Rioja's regional incubator.

During my visit, Juan Manuel and Luis took my family out one evening for the famed "pinchos crawl" in Logroño. While the wines were typically excellent, so were the *pinchos*—a word that comes from the Spanish verb *pinchar*, "to pierce." These delicious small bites of food are usually held together with a small, sharp wooden stick. One that I particularly enjoyed was made of mushrooms and meatballs, and another had an almost raw egg in the middle.

Juan Manuel's parting advice to me, after talking a bit about the importance of confidence in your own ecosystem and its unique capabilities: "Don't try to be Silicon Valley; there is just one Silicon Valley. You must understand your ecosystem and design a future that takes advantage of its particular characteristics."

# FAST FACTS CONSULTANTS AND INVESTORS

Juan Manuel is a consultant who mainly advises other businesses. Consulting was a popular profession for Beyond Silicon Valley students. Around 23 percent of engaged students secured paid consulting work relating to entrepreneurial ecosystems, as compared to only 14 percent of disengaged students. In other words, engaged students were 65 percent more likely to become paid consultants.

Luis, meanwhile, is an investor in early stage companies. Our data shows, not surprisingly, I might add, that engaged Beyond Silicon Valley students were more likely than were unengaged students to start or join a group of angel investors, invest in startups, ask for investment in their startups, and receive an investment in their startups.



Lighthouse at Headlands Dunes State Nature Preserve, Fairport Harbor, Ohio.

## THE CLEVELAND CONNECTION CONCLUSION

leveland and other transitioning economies are unlike Sili-✓ con Valley in many if not most ways. People growing companies in Kigali, Santiago, Hanoi, and yes, Cleveland, participate in ecosystems that differ meaningfully from Silicon Valley.

Some lessons from Cleveland include:

■ Be patient. Rome wasn't built in a day. Those who try to measure success by how many companies flourish immediately will face deep disappointment. Perseverance has paid eventual dividends in Cleveland, as demonstrated by examples such as the successful "unicorn" company, CoverMyMeds.

- Embrace or at least accept failure. Failures will happen as an ecosystem transitions and develops toward an innovation basis. Although I haven't detailed the failures in this book, Cleveland had more failures than successes. (We try to accept, grow, and learn from failure because the alternative of mourning failures and placing blame isn't productive.)
- Celebrate success. A single organizational success, amidst failures—one story, one individual, one growth trajectory—sometimes is all that's needed to help prove out the idea that a region can begin to create at least the seeds of an innovation ecosystem.
- Reap rewards. As the innovation ecosystem establishes itself, it begins to build on itself in increasingly positive ways.

In transitioning economies, patience, creative thinking, celebrating successes, and a long-term view are necessary ingredients. But still, they are insufficient.

Because the thing that's really needed is: You.

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I am grateful to the thousands of students who have taken my online course. Their eagerness to participate and share ideas has created a world-wide community and global entrepreneurial ecosystem from which we have all learned and gained support. I especially thank my MOOC students who lent their time to be interviewed and profiled in this book.

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#### **ENDNOTES**

uotes from the subjects of each chapter come from multiple interviews and emails over the course of 24 months conducted by a team of researcher-writers and me. Sources of all other direct quotes are cited below. Information on economies, politics, and societies comes from numerous sources for each location, and below I have chosen to cite only those sources from which we utilized a specific figure from a commissioned study.

I used many sources in this book in my attempt to provide very short overviews of economies, politics, and societies in various places. I plainly did not intend for these commentaries to be in-depth studies of any region's economy but included enough details to provide a snapshot of the general environment that the grassroots entrepreneur or economic development professional in question likely faced. My alternative to providing these snapshots was to provide no information at all on any of the 15-20 economic, political, and societal backdrops faced by the people covered in this book. I felt that not trying to offer a snapshot in each case would be a worse choice than trying to provide some information, even if cursory and (considering the pace of change and of business today) quickly outdated.

Unless otherwise stated, the viewpoints on economies, politics, and societies are my own based on my visits and scores of interviews, and my and my team's research and are not the viewpoints of the subjects of the stories or any other individual or organization in this book, including Case Western Reserve University, Burton D. Morgan Foundation, or Coursera.

#### NOTES TO CHAPTER 1—MICHAEL GOLDBERG

Information on the populations for various segments of Cleveland and Northeast Ohio comes from the *Wikipedia*, "Greater Cleveland" entry, which indicates 2.1 million people live in the Greater Cleveland Metropolitan Statistical Area (MSA) that includes five counties. The *Wikipedia* entry considers Northeast Ohio to be 16 counties and 4.5 million people. There are many ways to slice and dice the Cleveland geography. In this book, I use "Greater Cleveland" and "Cleveland" in a similar way, generally encompassing the five-county MSA. When I use "Northeast Ohio," I generally mean the 16-county area. Cleveland proper—the physical city limits including no suburbs or surrounding counties—has a residential population of under 400,000.

Facts about MOOC numbers come from two primary sources: "By The Numbers: MOOCS in 2015—Class Central," by Dhawal Shah in *Class Central's 2015 MOOC Roundup Series*, published Dec. 21, 2015, https://www.class-central.com/report/moocs-2015-stats/; and "U.S. Teams Up With Operator of Online Courses to Plan a Global Network," an article by Tamar Lewin in *The New York Times* on 31 Oct. 2013, http://www.nytimes.com/2013/11/01/education/us-plans-global-network-of-free-online-courses.html.

Although rankings such as "Top Cities For [X, Y, or Z]" don't use the scientific method and are basically a marketing device, I cite them here broadly to make the point that the city's entrepreneurship rankings began to improve. The Cleveland MSA ranked 61st out of 61 in a 2002 *Entrepreneur* survey and 40th of 50 cities on an *Inc.* magazine survey, so it was in or near bottom quartile at that time. Cleveland began to rank higher in various surveys as its entrepreneurial ecosystem emerged, but to be clear, these rankings are neither the same ranking systems as earlier ones nor do they have consistent criteria. Nonetheless, in 2005 Cleveland ranked 24th of 50 hot cities in *Entrepreneur*, and it subsequently began to join the upper half of entrepreneurship rankings. The information about the 2015 combined entrepreneurship ranking comes from *MBA Central*, which averaged "entrepreneurship friendly" rankings found in *Entrepreneur*, NerdWallet, *Forbes*, and *Fortune* magazines.

#### NOTES TO CHAPTER 3—PHAN DINH TUAN ANH

Information about Doi Moi comes from: the "Economic Renovation: Doi Moi" article on the Embassy of Vietnam in South Africa's webpage, dated Nov. 27, 2016, http://www.vietnam.co.za/index.php/vietnam/history-of-vietnam/economic-renovation-doi-moi; and the *Vietnam Development Report 2012: Market Economy for a Middle-Income Vietnam* report by the World Bank, dated Dec. 6, 2011, pages 10-11, http://documents.worldbank.org/curated/en/495721468327934602/pdf/659800AR-00PUBL0elopment0Report02012.pdf.

The information about 70 percent of Vietnamese workers not being trained for technical work comes from, "Key Determinants of SMEs in Vietnam; Combining Quantitative and Qualitative Studies," a journal article by lead author Uyen H. P. Phan in the *Review of European Studies*, No.11, in 2015, on page 359, http://www.ccsenet.org/journal/index.php/res/article/view/52409.

Information about Vietnam since Doi Moi comes primarily from the chapter, "Economic Reform and Entrepreneurship in Vietnam: A Policy Perspective," by Quan Anh Nguyen and Gillian Sullivan Mort in the book, *Economic Development and Entrepreneurship in Transition Economies: Issues, Obstacles and Perspectives*, edited by Jovo Ateljevića and Jelena Trivić, and published in 2016 by Springer International Publishing on Google Books, no page number, https://play.google.com/books/reader?printsec=frontcover&output=reader&id=RcvtCwAAQBAJ&pg=GBS.PP1.

Information about the number of SMEs also comes from "Key Determinants of SMEs in Vietnam," page 359.

#### NOTES TO CHAPTER 4—GIORGI TUKHASHVILI

The Georgian Civil War began in 1988 in other areas of Georgia but came to Tbilisi, where Giorgi has always lived, in Sept. 1991—shortly after the dissolution of the Soviet Union—culminating in the coup d'etat against Georgia's first democratically elected president and his subsequent attempt to regain power (ended in 1993).

That they've created these two results (inflation and unemployment) comes from the report, *Government of Georgia. Social-Economic Development Strategy of Georgia: Georgia 2020*, by the Georgian government, on page 3, https://www.adb.org/sites/default/files/linked-documents/cps-geo-2014-2018-sd-01.pdf.

#### NOTES TO CHAPTER 5—YVETTE MAZARIEGOS

This information about 41 percent of the population living below poverty level comes from *Belize Criminal Laws*, *Regulations and Procedures Handbook - Strategic Information and Basic Laws* by IBP Inc., page 31, at https://books.google.com/books?id=AU6qCwAAQBAJ.

The Wofford quote comes from my *Huffington Post* blog item entitled, "MOOCs and meetups together make for better learning," published Jan. 28, 2015, at http://www.huffingtonpost.com/michaelgoldberg/moocs-and-meetups-togethe\_b\_6538414.html.

#### NOTE TO CHAPTER 6—AJIT NIGAM

Source of Thakur quote is, "Op-Ed: Here's Why Entrepreneurship in India Is Setting Records," by Yatin Thakur published Nov. 16, 2016, at *CNBC.com*, https://www.cnbc.com/2016/11/16/india-entrepreneurship-is-at-an-all-time-high.html.

#### NOTE TO CHAPTER 7—PATEL BARWABATSILE

Information on the partnership with the US angel investing organization comes from the *Entrepreneurship Roundtables Report* about the US Embassy and from Botswana Innovation Hub roundtables in which I participated in June 2015.

#### NOTES TO CHAPTER 9—JOVAN STALEVSKI

Information on Yugoslavia comes from several sources, including *Federal Republic* of *Yugoslavia: Economic Assessment*, a 2001 report by John Litwack and Tristan Price, of the Organisation for Economic Co-operation and Development, at http://www.oecd.org/newsroom/archives/1840294.pdf.

The quote about the goals of the conference comes from the June 2015 CEFE Macedonia report, A Unique Conference for Strengthening the Entrepreneurial Ecosystem in Macedonia, by Stefan Spasenovski, http://cefe.mk/Investiraj/a-unique-conference-for-strengthening-the-entrepreneurial-ecosystem-in-macedonia/?lang=en.

#### NOTES TO CHAPTER 10—MARTIN VALDIVIA

Quotes by Amorós come from the World Economic Forum blog post, "Why Chile and Colombia Lead the World for Entrepreneurship," by José Ernesto Amorós Espinosa, https://www.weforum.org/agenda/2015/01/why-chile-and-colombia-lead-the-world-for-entrepreneurship/. Amorós' blog post is based on the January 2015 report, Leveraging Entrepreneurial Ambition and Innovation: A Global Perspective on Entrepreneurship, Competitiveness and Development, by the World Economic Forum and Global Entrepreneurship Monitor, at http://www3.weforum.org/docs/WEFUSA\_EntrepreneurialInnovation\_Report.pdf.

#### NOTES TO CHAPTER 11—DANIEL KNOBELSDORF

Information about the Venezuelan parliament's technology committee comes from the January 2013 article, "Entrepreneurship in Colombia: 'Try Fast, Learn Fast, Fail Cheap'" by Melissa Blohm, Andre Fernandes, and Bulat Khalitov at *Knowledge@Wharton*, http://knowledge.wharton.upenn.edu/article/entrepreneurship-in-colombia-try-fast-learn-fast-fail-cheap/.

The trophic cascade video of the wolves can be found at https://www.nps.gov/yell/learn/nature/wolves.htm.

#### NOTES TO CHAPTER 12—SUSAN LANGMANN

Information on falling entrepreneurship in France and recent investment by the government comes in part from the "French Entrepreneurs - Entrepreneurs in France" blog item at Gaebler Ventures' website, http://www.gaebler.com/French-Entrepreneurs.htm.

This information about one-third of French citizens wanting to join a startup comes from the April 2016 report, *Rise of Entrepreneurship in France | KPMG | GLOBAL*, written by François Bloch, https://home.kpmg.com/xx/en/home/insights/2016/02/rise-of-entrepreneurship-in-france.html.

Information on the increased seed funds and increase in crowd funding cap comes from the François Bloch report at the KPMG | GLOBAL website.

#### NOTE TO CHAPTER 13—ELAINE SLATTER

The blog quote from Elaine comes from the *Company of Women* webpage entitled, "Company of Women Supports, Connects and Promotes Women in Business," http://www.companyofwomen.ca/Elaine\_Slatter\_XL\_Consulting\_Group\_Consulting\_2237.xmp.

#### NOTES TO CHAPTER 15—LAURIE PICKARD

I use the descriptor "controversial" for President Kagame of Rwanda because he is known to have brought stability to Rwanda since the 1994 genocide, but he has also been accused of running an authoritarian state.

The quotes on the Rwandan economic vision come from Republic of Rwanda's report, *Rwanda Vision 2020* (Revised 2012), page 8, at http://www.minecofin.gov.rw/fileadmin/templates/documents/NDPR/Vision\_2020\_.pdf.

#### NOTES TO CHAPTER 17—JUAN MANUEL ORTEGA AND LUIS RUANO

The World Bank ranks Logroño as the No. 1 Spanish city for doing business in its *Doing Business* report, http://www.doingbusiness.org/data/exploreeconomies/spain/sub/logro%C3%B1o.

The quote about Spain's IPO market comes from the June 2015 article, "Listings Activity in Spain Enjoys a Huge Reversal of Fortune," in *Financial Times*, https://www.ft.com/content/aedba1ce-0096-11e5-a908-00144feabdc0.

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Kevin Kopanski for Case Western Reserve University

Professor of Entrepreneurship in the Department of Design and Innovation at the Weatherhead School of Management, Case Western Reserve University. Goldberg created the massive open online course, or MOOC, called Beyond Silicon Valley: Growing Entrepreneurship in Transitioning Economies, which has attracted over 135,000 students from 190 countries with subtitles in 16 languages (the most on the Coursera platform). Inc.com named Beyond Silicon Valley one of the top online classes that "will make you smarter and more interesting." Goldberg spoke about the impact of his MOOC at TEDx-Heraklion in Crete and TEDxFulbright in Santa Monica.

Goldberg co-founded an international venture capital fund (Bridge Investment Fund) and also previously worked at America Online and Microsoft.

Goldberg has deep experience teaching entrepreneurship in international markets. He was awarded Fulbright fellowships to teach entrepreneurship in Vietnam and Namibia. He has conducted seminars on behalf of the U.S. Department of State on entrepreneurship in Argentina, Austria, Botswana, Cambodia, Chile, Czech Republic, France, Germany, Greece, Indonesia, Kosovo, Laos, Macedonia, Morocco, Myanmar, Namibia, the Netherlands, Philippines, Russia, Slovenia, Spain, Switzerland, Tanzania, Tunisia, Vietnam, Zambia, and Zimbabwe.

He has appeared as a frequent guest panelist on MSNBC's "Your Business" and written on international entrepreneurship for CNBC, Entrepreneur.com and The Huffington Post.

Goldberg earned a BA from the Woodrow Wilson School of Public and International Affairs at Princeton University, an MA in International Relations from the School of Advanced International Studies (SAIS) at Johns Hopkins University, and an MBA from The Wharton School at the University of Pennsylvania.











(Top left) in my office; (top right) in Namibia, 2015; (middle left) in Kosovo, 2016; (middle right) in Gaborone, 2015; (bottom) in Laos, 2012.