

and exchange best practices."

The forum, which was launched in New Delhi in August 2016, highlights the importance of government support for innovation, notes Rossow.

"Another important goal is to create a targeted small business innovation research program in India that can strengthen India's capacity to use innovation research grants to stimulate the growth of small businesses," he says, adding that this will also promote job growth.

"There is a strong belief that innovators and small businesses have a major impact on creating jobs. So, while we can't predict how many jobs the forum might create, that's certainly an important part of our focus," says Rossow.

The forum will become the premier platform for Indian innovators and entrepreneurs to draw on and leverage the expertise of the United States, he predicts.

"Here in the U.S., there is an impressively high percentage of companies in Silicon Valley founded by Indian Americans who immigrated to the U.S.," says Rossow. "You also find many examples of innovation in India. But, because the economy is more regulated and there are social constraints around entrepreneurship, it's a more difficult environment. An important part of our work is to inspire and facilitate

entrepreneurship in India."

American universities, companies and policymakers have already expressed strong support for the forum, says Rossow, adding that Uber, Qualcomm, Coca-Cola and the Wadhwani Foundation are among those who have committed financial support.

Rossow is eager to hear from those who can help promote innovation in both countries.

"There are a lot of companies and universities in America that already have some levels of partnerships in India," he says. "They're doing great things. Now they're excited to have a platform to facilitate things and provide more visibility for their efforts which, in turn, will get other groups interested and inspire folks who could make all this even bigger. We're looking for institutions and organizations that can help someone who has a cool idea and make it grow. That could be universities that have research capabilities, or incubators, accelerators, mentor networks or other organizations along those lines. Our work is going to be institution building. We want to make sure there are institutions in place that can help entrepreneurs take off.

Steve Fox is a freelance writer, former newspaper publisher and reporter based in Ventura, California.



Launch Event: U.S.-India Innovation Forum https://goo.gl/nRP4g5

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Center for Strategic and International Studies www.csis.org



Richard M. Rossow www.csis.org/people/ richard-m-rossow



oth ElsaMarie D'Silva and Sishir Garemella believed they could change the world for the better through entrepreneurship. So, they each took a shot.

D'Silva had reached the glass ceiling in the aviation industry in India. She had climbed the ladder from being a flight attendant with Jet Airways to becoming the vice president of network planning and charters at Kingfisher Airlines. But she wanted to do something to give back, especially to women and children. So in 2012, in the aftermath of the gang rape of a woman on a bus in New Delhi, D'Silva founded Safecity, a nonprofit organization that uses an online platform to crowdsource stories of sexual harassment and abuse in public spaces. These help identify hotspots in a city where women have experienced or witnessed any form of abuse.

Garemella started Sunvest Energy Private Limited in 2015, a Mumbai-based solar energy company focused on the residential and small-scale rooftop market. "Accessibility to affordable power is a basic human need, crucial in eliminating poverty and creating a level playing field in society," he says. For Garemella, "rooftop solar is best positioned to address the present challenges of energy security."

Both D'Silva and Garemella are now seeing



How to Make



Two Indian entrepreneurs, who participated in the 2016 Global Entrepreneurship Summit, talk about their journey to success.



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Above: A mural by Safecity in New Delhi on preventing harassment of women and girls. Right: A campaigner for Safecity in New Delhi shows a poster saying "change" in Hindi. Safecity also works with men and boys because it believes that without them, a sustainable solution to gender-based violence cannot be found.

their efforts pay off. D'Silva has expanded Safecity's reach by organizing awareness workshops for parents, teachers and children on issues like child sexual abuse and sexual harassment. Safecity has also developed a mentoring program for girls and women. Garemella, on the other hand, has positioned Sunvest to reach its first milestone of 100 rooftop solar installations.

Here's what the entrepreneurs say has helped them reach where they are today.

Don't be afraid to go it alone...with lots of input

Garemella says that entrepreneurship is similar to his hobby of running marathons. It's a lonely and hard journey for which "a support structure can be immensely useful." Just as runners join groups to be best prepared on race day and to meet people going through the same set of challenges, with whom they can talk through solutions, entrepreneurs benefit from a "willingness of stakeholders within the ecosystem to talk to each other and explore ideas," he says.

Garemella experienced this willingness at

the 2016 Global Entrepreneurship Summit, held at Stanford University in Silicon Valley, California, in June. There, in addition to "listening to inspiring people such as President Barack Obama, Mark Zuckerberg of Facebook, Sundar Pichai of Google, Travis Kalanick of Uber," Garemella says he got the feeling that, among entrepreneurs, there is no crazy idea. "Every idea has to be discussed and evaluated. Such openness was great to see," he says.

D'Silva also attended the summit, where she had the chance to discuss her biggest challenges as an entrepreneur in the nonprofit sector in India. Sharing these struggles at the summit helped D'Silva "receive validation that a lot of these struggles you think are personal, are really universal." She also met an investor who agreed to give her the funds she would need to develop a mobile app for Safecity.

Experience, experimentation and nersistence

Having a support system can give you confidence and so can working for someone else before—or while—striking out on your own, says D'Silva. She has translated her



If you don't have that bank balance to support you for the first three years, it's going to be really difficult. Often, when there's no money coming in and nothing's working out, you wonder, 'Am I doing the right thing? Am I silly?



Above: Safecity and Womenability, a Paris-based nongovernmental organization, conducted a safety walk in Mumbai in August 2016 to audit neighborhoods to identify factors that could impact mobility and lead to unsafe situations, especially for women and girls.

ability to optimize resources, a skill she honed while working in aviation, into running a really tight ship at Safecity, where she has "kept costs low and had maximum impact with the least amount of resources," she says. As she was starting Safecity, D'Silva volunteered with an organization in Mumbai that focused on public safety. This helped her learn how to mobilize a community around an issue.

For Garemella, the freedom to be wrong has been crucial. "We put so much pressure on ourselves to be right. But, innovation and creativity happen when you let yourself and the people around you be comfortable with experimentation," he says. Entrepreneurship involves a lot of failures on a daily basis, and success, he says, comes to those with "the mental, physical and emotional stamina to pursue their work and hold on to their beliefs."

A pragmatic, holistic approach

Entrepreneurs often need their passions to see them through challenging financial times.

D'Silva, who self-funded Safecity and funneled all revenues right back into the business, couldn't pay herself until recently. She survived for a while on her savings from her previous job. So, she encourages new entrepreneurs to make sure they have a nest egg.

"If you don't have that bank balance to support you for the first three years, it's going to be really difficult. Often, when there's no money coming in and nothing's working out, you wonder, 'Am I doing the right thing? Am I silly?'"

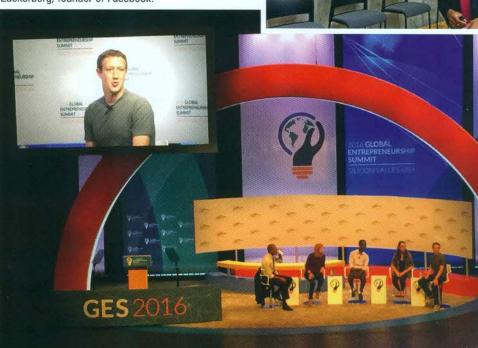
D'Silva advises entrepreneurs to take one more precautionary measure: invest in self-care.

"You spend a lot of your time developing your business and you neglect your family, you neglect your friends and you neglect your own health," she says. "To give you energy and to sustain your motivation, you need time to recharge."

Carrie Loewenthal Massey is a New York City-based freelance writer.

Right: Sishir Garemella says that listening to speakers at the 2016 Global Entrepreneurship Summit made him realize that no idea is crazy.

Below: The plenary session of the entrepreneurship summit included speakers like President Barack Obama and Mark Zuckerberg, founder of Facebook.



We put so much pressure on ourselves to be right. But, innovation and creativity happen when you let yourself and the people around you be comfortable with experimentation.

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Murturing Indian Entreman



By MICHAEL GALLANT

Sid Burback
and the IC²
Institute
educate for
entrepreneurial
wealth creation
in India.

ndia is quickly becoming a global hotspot for entrepreneurship and innovation. The IC² Institute, an interdisciplinary research unit of The University of Texas at Austin, is doing its best to stoke that creative fire on a global scale.

Pronounced "I-C-squared," the institute supports the work of international innovators as they create new technologies and companies. It also builds a broad support network of incubators, innovation centers and other organizations which can nurture growing companies toward long-term success.

The institute was founded in 1977 and has been active in India for the past decade. "We have an initiative called the India Innovation Growth Program," says Sid Burback, director of the institute's Global Commercialization Group. "We work with over 500 innovators and entrepreneurs in India to help them get ready to compete in both international and domestic markets, gain investments and take advantage of big

market opportunities."

The program receives support from the Indian government, which has "made it a priority to focus on small and mediumsized enterprises engaged in economic growth and job creation," says Burback. "It's just like in the United States, where over 60 percent of jobs are created by small enterprises. India has a mission of focusing on creating an environment where small enterprises can be successful." Further support comes from the Texasbased Lockheed Martin Aeronautics Company, partners like the Indo-U.S. Science and Technology Forum and the Federation of Indian Chambers of Commerce and Industry, both based in New Delhi, and Stanford Graduate School of Business in California, which provides educational resources to the program's budding entrepreneurs.

Indian innovators interested in working with the institute should keep an eye out every January for invitations to apply to the



IC² Institute

India Innovates

India Innovation Growth Program 2016: List of winners

program. Over 1,000 companies submit applications annually, and each undergoes a series of screenings, interviews and assessments before Burback and his colleagues select the top 100 applicants for the next round.

"Many of the applications that we have to reject are just ideas," says Burback. "They may be very good ideas, but if they're not sufficiently developed and can't really be commercialized at the time that we're reviewing them, we unfortunately have to say no."

After deeper reviews, the IC2 Institute whittles down the group of applicants to the 50 "most promising ideas, in terms of what the East, and is a very effective diagnostic tool."

"We've also worked with [companies creating] antibiotics in India that have found licensing partnerships in South Africa and worked with companies that have devised new ways to separate, clean and process plastic waste in a sustainable way," he continues. "There are so many wonderful technologies, so many great opportunities."

The institute's activities extend beyond the India Innovation Growth Program, to include, for instance, an incubator in Andhra Pradesh. "The incubator is a place where start-ups can go and actually reside in a very nice facility that is managed by the IC2 Institute," explains



Above: In its first year, 33 companies out of 450 applicants were selected for training at the XLr8 Andhra Pradesh Technology **Business Accelerator** in Tirupati.

market is saying about technology," says Burback. These 50 winners are offered training programs on how to form and present their ideas, create the right kind of market messaging and more. "They get solid training from IC2 and Stanford on how to get ready to compete," he adds.

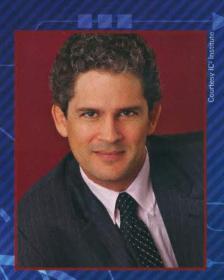
The program wraps up with a competition through which the top 30 companies are selected to spend over six months working directly with the IC2 Institute to grab global opportunities. The real-world results, thus far, have been hugely promising.

"We've worked with some very creative biotechnologies, for example," says Burback. "In one situation, we helped a company that created a device for detecting diabetic neuropathy through a table that people stand on. It's gone on to many markets, including the Middle

Burback. "It's helping advance technological innovation in the region." The Andhra Pradesh incubator currently supports 33 entrepreneurs. Burback and his colleagues expect this number to increase to 100 in the near future.

For those interested in getting involved with the IC2 Institute in India, Burback recommends thoughtful research as the key first step. "Always research and try to find as much as you can about the potential market that you want your technology to go into," he says. "Be very clear about what kinds of problems you are trying to solve and what your uniqueness is. You have to get a sense of the market and where you would be in the market, before you go anywhere further."

Michael Gallant is the founder and chief executive officer of Gallant Music. He lives in New York City.



New Connections

New Delhi

mong its other initiatives in India, the IC² Institute will soon launch a pioneering incubator program, to be hosted at the American Center in New Delhi. The institute's Erik Azulay, who is supervising the program's creation, sees great potential and a great need for it.

"The vision is to serve as a focal point for kickstarting the innovation ecosystem in New Delhi," he says. "India has become a hub for worldwide innovation. But in Delhi and other cities, the overall ecosystem hasn't really gelled and started working together yet." This means that powerful players—investors, accelerators, entrepreneurs, industrial partners and more—all exist in cities like New Delhi and already work hard to support rising start-ups, but are yet to form the deep connections with one another that can foster a truly vibrant culture of innovation and success.

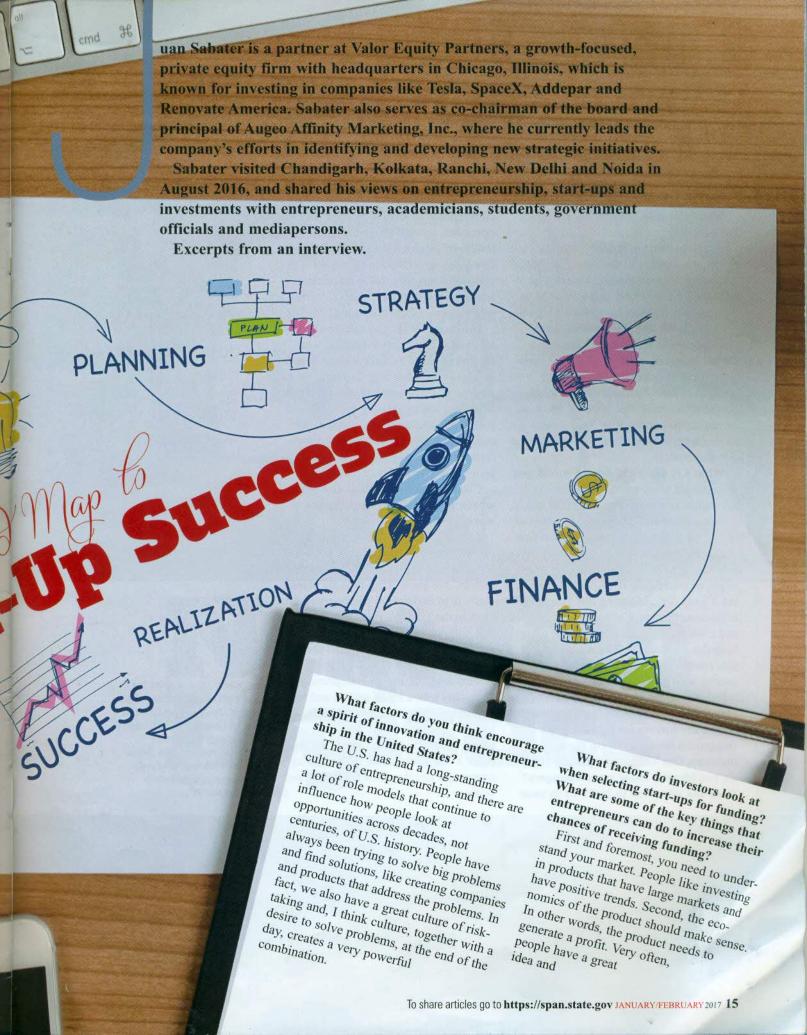
"Our incubator is based on showcasing best practices and serving as a center to attract everyone involved in the entrepreneurial ecosystem, so they can really start talking with each other," says Azulay. "By hosting events and training sessions, bringing in partners from India and the United States, and other activities, we want to get different sections to talk with each other and work together. Once the ecosystem really gets humming, it would help everybody."

Creating a cooperative culture of innovation, like those found in Silicon Valley and the IC2 Institute's home city of Austin, is no easy task. But Azulay has no doubt that the New Delhi start-up ecosystem will respond in kind. "Altruism in the world of entrepreneurship is extremely important," he says. "Whether they're investors or innovators themselves, people who have been successful often want to give back and be mentors. They also want to keep in touch with the next generation of entrepreneurs in order to keep their fingers on the pulse of the newest innovations and learn about new things that are happening. It's very much not a zero-sum game and everyone can benefit from an active, connected community."

The New Delhi incubator is expected to start operations in March 2017. —M.G.

Our incubator is based on showcasing best practices and serving as a center to attract everyone involved in the entrepreneurial ecosystem, so they can really start talking with each other.





Go Unline

they create a product, but the product does not make money; it needs to make money. Third, you need to be focusing on the theme, and the people you bring together need to have the ability to execute the strategy you are pursuing. If you can get the right product and the right market with the right team, you increase your chances incredibly to be successful.

What role does mentoring play for start-ups?

I think mentoring is a key attribute to ensuring a successful start-up. The fact of the matter is many innovators don't have answers for everything and they need to have people who can be approached; who can be helpful; and, can provide them guidance. Also, a lot of start-ups are started by young people, who need some experience to help them navigate the creation of their business. Mentors help people understand risk, and that plays an incredibly important role. So, I think, having a great ecosystem with mentorship is indispensable.

What key pieces of advice would you give Indian start-ups?

I would give them two. The first one is, find and solve real problems. The second one is, partner with people. Why the first one? It is because simply doing another platform similar to what others are doing might be interesting if you are passionate, but it's not differentiating that you want to do something that addresses a real need and it's not simply following what others have done. Second, in order to do that, you need to build a great team. So, partner with people who bring in skills together with the hope that the sum of one plus one will be three or four, not two.

You are known for investing in companies that transform their industry, like Tesla and SpaceX. How do you identify these game-changers? Does any company in India fit in your

future plans?

Given my limited experience in India, I have seen a lot of companies that can be transformed. Why? There are so many needs in India and a lot of very talented people. You bring these two things together and you can create a lot of solutions.

In the U.S., we like investing in companies that are coming into the convergence of technology, not new and advanced, but just proven technologies in traditional sectors. We like seeing how those proven technologies impact traditional spaces such as restaurants, lending for consumers, manufacturing and other sectors of the economy.

In SpaceX, what you effectively saw is a genius of a great entrepreneur who figured out how to make a reliable rocket in a less expensive way. In Tesla, the same genius of an entrepreneur figured out how to make a car safer using the same principles. We are doing it in another company called Eatsa, a quick-service restaurant which is accelerating the way people retrieve food in a restaurant.

Could you tell us about any new strategic initiative your company is working on?

I think that we would continue to focus on the same initiative, which is the convergence of technology and traditional sectors. We are looking broadly across markets to understand what opportunities exist in the U.S. We think that there are, and will continue to be, a lot of opportunities. The U.S. is a dynamic place to invest in.

That said, for Indian entrepreneurs, we have also seen a lot of people and angel networks willing to invest in India, in those entrepreneurs and that same risktaking mentality we have back home. I think it will make a real difference as companies develop new initiatives and skills.

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The economics of the product should make sense. In other words, the product needs to generate a profit.



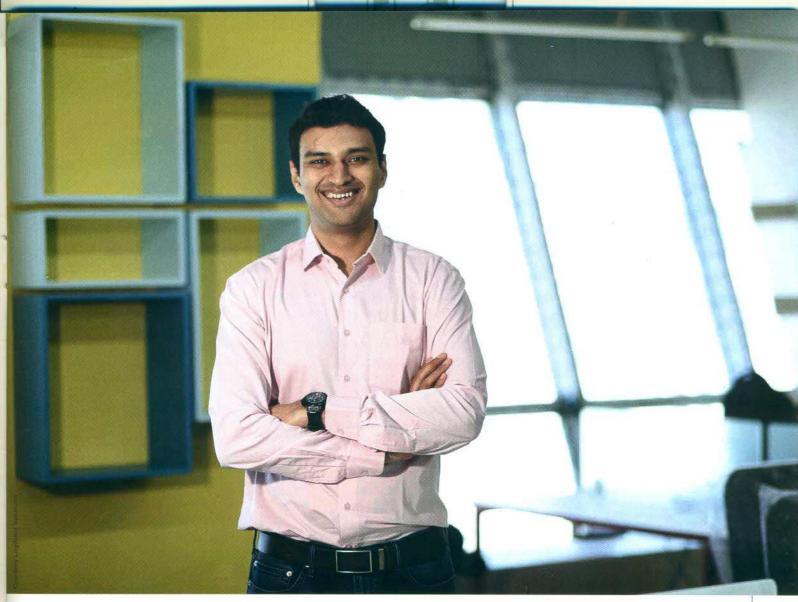
Juan Sabater https://goo.gl/WZVKz9

Valor Equity Partners www.valorep.com

Augeo Affinity
Marketing, Inc.
http://augeomarketing.com/

Juan Sabater (third from right) addresses members of the American Chamber of Commerce (AmCham) at an event hosted by AmCham Eastern Region and the U.S. Consulate General in Kolkata in August 2016.





Rext-Gen Logistics By NATASA MILAS

Indian entrepreneur

Dhruvil Sanghvi

talks about how his education in the United States has been instrumental to his success with his start-up, LogiNext Solutions.



hruvil Sanghvi, a young Indian entrepreneur and a graduate of Carnegie Mellon University in Pittsburgh, Pennsylvania, is the co-founder and chief executive officer of LogiNext Solutions. The start-up, which has offices in Mumbai and Fremont, California, operates in the delivery route planning and field service optimization space. LogiNext uses data analytics to help companies track their shipments, vehicles, carriers, as well as on-field workers in real time on a simple map interface.

Sanghvi, together with Manisha Raisinghani, conceived of the company while studying at Carnegie Mellon University. "The best part about studying at Carnegie Mellon University is the interdisciplinary and entrepreneurial culture they have set," says Sanghvi. "I remember taking courses from six different schools, including information systems, business management, computer science, robotics, and even arts and humanities. I used to focus on technology, but the education widened my horizon, and I turned into more of an explorer and risk-taker. Various competitions, financial and technical infrastructure,

start-up coursework and opportunities for exposure were a few of the reasons why we could start up much earlier in our careers."

In 2013, Sanghvi and Raisinghani, the chief technology officer of the company, noticed that, unlike in the United States, the logistics sector in emerging markets is complex, confusing and disorganized, mainly due to the lack of visibility in the delivery networks. At that time, the technology industry did not attract as much investment in India as it did in the United States. This made India a large potential market for investment in logistics technology.

"LogiNext is amongst the fastest growing SaaS [software as a service] companies in Asia, providing solutions to manage and optimize logistics and field workforce operations. LogiNext's flagship products are its cloud-based last mile delivery and route optimization software, Mile, and its field service and field workforce optimization software, Force," says Sanghvi.

The start-up typically serves large enterprises with heavy logistical needs across retail, courier, transportation, e-commerce,

The best part about studying at Carnegie Mellon University

is the interdisciplinary and entrepreneurial culture they have set.



manufacturing and home services segments. "Our clientele is spread across the world, with the majority of them using LogiNext products in Southeast Asia, Europe, the Middle East and India," says Sanghvi. The start-up works with the majority of e-commerce and ondemand logistics companies in India.

In the past two years, LogiNext has received numerous awards for its data innovation. It has been recognized by some of the major players in the field, like IBM and Microsoft, as one of the top start-ups in India.

LogiNext is backed by Paytm and Indian Angel Network and has raised more than \$10 million (Rs. 67 crores approximately) of venture investment to date. "Following the investment, LogiNext has now become a large market shareholder and an industry leader with recognitions like NetApp's Most Innovative Tech Company of 2016 and Entrepreneur magazine's Logistics Firm of 2016...for its expertise in providing tools with real-time route planning algorithms and real-time workforce performance analytics," says Sanghvi.

Every success story has a beginning. Sanghvi traces his back to Carnegie Mellon

University, a place that provided him with the opportunity to widen his horizons, take risks and work in interdisciplinary fields. "The experience of studying in the U.S. has been a life-changing one," says Sanghvi. "I remember going there as just another computer science student with a lot of enthusiasm to learn about the latest technologies. However, what I gained from my graduate degree was much more than that. It was more about being surrounded by the smartest people in the world, getting mentorship from the most experienced professors and seasoned entrepreneurs, and building an overall personality and not just limiting yourself to technology."

Having established himself in this burgeoning field, Sanghvi is now an inspiration to others.

"We are proud to inspire other entrepreneurs to enter this space and we are proud to have created a new market opportunity in non-U.S. countries."

Natasa Milas is a freelance writer based in New York City.

Far left: Manisha Raisinghani and Dhruvil Sanghvi, co-founders of LogiNext Solutions. Below: A view of the

LogiNext office in Mumbai. Below center and below far left: LogiNext team members.

LogiNext Solutions www.loginextsolutions.com



Dhruvil Sanghvi https://twitter.com/ dhruvilsanghvi









Itea

By PAROMITA PAIN

dhiraj Vable started Young Mountain Tea in 2013 to take the idea of tea beyond the cup. The company, based in Oregon, partnered with farmers in the Kumaon region in the foothills of the Himalayas to develop a new tea region. It buys teas from the Kumaon producers, exports them to the United States and then sells the products to local customers. Vable and his partner, Jeff Aspinall, whom he met at the University of Michigan as a freshman, and four other people make up the team.

"I was an electrical engineering major at the University of Michigan when I got interested in renewable energy," says Vable. During a visit to his mother's village, north of Bengaluru, Vable started working on a renewable energy project. "We managed to power a school with solar," he says. This led to more solar projects.

When Vable traveled to Uttarakhand, he wanted to continue working with rural communities, but not in the area of renewable energy. "I have always been an avid tea drinker," he says. "These mountain communities were traditionally agriculturists. So, I wondered if tea could be an option to explore in terms of sustainable livelihoods."

Laying new ground

Vable's work with the Uttarakhand-based nonprofit organization Avani, which creates livelihoods for rural communities in Kumaon, helped lay the foundation of Young Mountain Tea. In 2013, when he returned to Uttarakhand

Above left: Adhiraj Vable tastes the six new teas that Young Mountain Tea showcased at the World Tea Expo in Las Vegas, Nevada, in June 2016.

Left: Young Mountain Tea fosters cultural exchange by bringing people from different countries to remote Kumaon villages. Young Mountain Tea, Fulbrighter Adhiraj Vable's start-up in Oregon, works to create sustainable livelihoods for rural communities in the Kumaon region of Uttarakhand.

Ma IVISSION

on a Fulbright-Nehru fellowship, Vable struck a deal with Avani. If Avani would work with the communities in and around Kumaon to grow tea, he would set up a company in the United States to sell it.

"The area has a very rich history of tea growth," says Vable, adding that the villagers were already growing different types of low-quality tea that were exported to Russia. These teas weren't pushed for high-quality processing. "All the caffeinated teas like green, white and black are part of the same plant, just grown and processed differently," he says. Tea, as a crop, isn't land-intensive. It's also a fairly low-volume, high-profit-margin investment, which makes it a sustainable option for the communities involved. "Also, it's not something the monkeys will eat," laughs Vable. "That's a huge issue in the area."

Convincing the local partners to produce high-quality tea could have been difficult, but "unlike others who did one internship or volunteer experience and never came back, I kept going back," says Vable. "I worked with them for seven years. So, when we spoke about tea, we already had a long-standing relation of trust."

Tea takes about three years to reach the stage when it can be harvested. "We wrote to a nonprofit for a small grant and set the ground for cultivation," says Vable. "We reached out to pioneers in the tea industry in India to be our mentors." Young Mountain Tea sold the mentors' teas in the United States as its own tea was being grown. "We learn from our mentors, adopt new ways and hope to bring an alternative method of tea production to India," he says.

Besides outstanding quality, Young Mountain Tea says its teas are grown ethically.

Through his start-up, Vable also works to create dignified livelihoods for the remote mountain communities in the Kumaon region. The company helps make the mountain ecosystems stronger by supporting organic permaculture that intercrops tea with other mountain crops to restore biodiversity, strengthen native soils and prevent landslides.

Fostering cultural ties

"We named our company after the rising Himalayas, a mountain range that is still going up as the Indian subcontinent pushes into Asia," says Vable. "The mission of our organization is to foster cross-cultural exchange, connecting remote communities in India to the U.S."

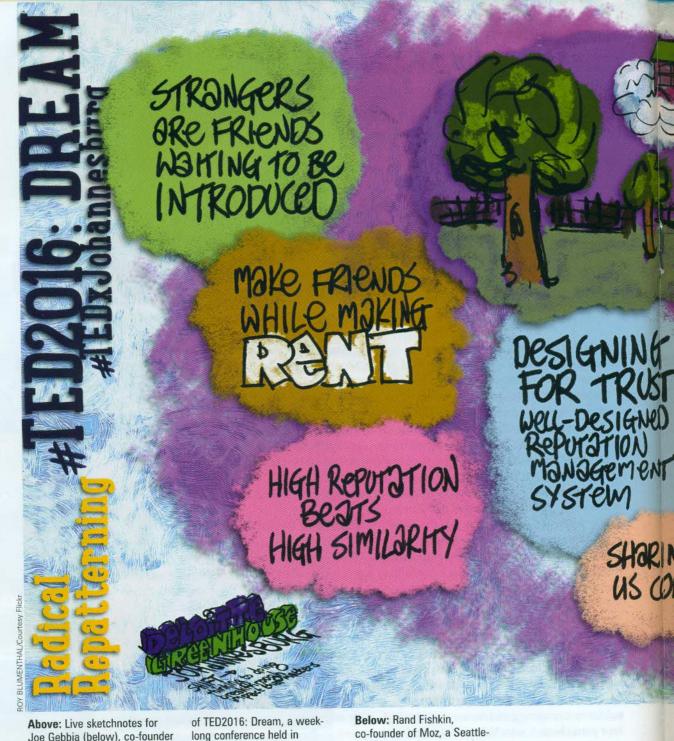
Young Mountain Tea brings people interested in learning more about these villages of India to live and work in the Kumaon area. "We stay with local families, try and understand their daily routines and work in the fields with them," he says.

New production models

Vable is confident of creating a niche in the crowded tea space in the United States. "Tea [quality] depends on how and where it's grown," he says. "Most tea companies go into tea gardens and buy what they have to offer. We have a relation with those who grow our tea. For us, improving the taste and quality of tea is an ongoing process. In that sense, no one can replicate our teas."

Paromita Pain is a journalist based in Austin, Texas.



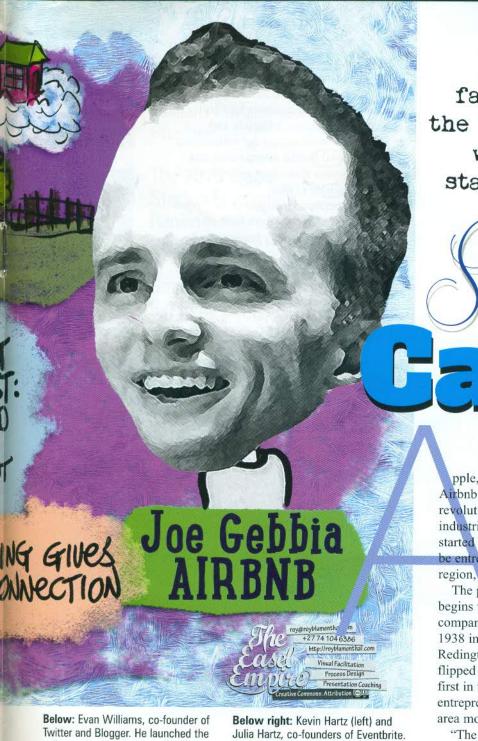


Joe Gebbia (below), co-founder and chief product officer of Airbnb, during the live-stream

Vancouver, Canada.

based software as a service (SaaS) company.





online publishing platform, Medium,

Julia Hartz, co-founders of Eventbrite. The start-up's platform can be used by organizers to plan, promote and sell tickets to events of all sizes.

A look at the factors that make the United States the world's leading start-up ecosystem.

pple, Google, Facebook, Twitter, Uber and Airbnb. All are American companies that revolutionized, and sometimes invented, entire industries. They all share something else too-they started as unorthodox ideas in the minds of wouldbe entrepreneurs in or near a Northern California region, known worldwide as Silicon Valley.

By STEVE FOX

The popular history of Silicon Valley often begins with an account of the giant computer company Hewlett-Packard, which was started in 1938 in a small garage by two friends, William Redington Hewlett and David Packard, who flipped a coin to decide whose name would go first in the company's name. However, entrepreneurial activity began percolating in the area more than a century ago.

"The real start of Silicon Valley was in 1909 when a Stanford University graduate founded the first major technology company, Federal Telegraph," says



William F. Miller, emeritus professor of public and private management at Stanford University.

"There was an entrepreneurial spirit at Stanford that quickly spread to the Valley," he says. "Stanford was founded in 1885, and this area was still regarded as the 'Wild West.' Pioneers came here. Now, pioneers have to be courageous and willing to take risks, but they're also community builders because you can't live on your own in the 'Wild West.' So, the people who started companies also worked within the political system and helped develop the infrastructure that's part of what makes the Valley what it is today."

Miller, a Silicon Valley veteran who has written extensively on start-ups, says entrepreneurial activities converge in regions with hospitable business environments. These have favorable regulatory regimes, advanced research universities and institutes that are well-connected to industry, a flexible and mobile workforce, mechanisms for maintaining global linkages, and formal associations and informal mechanisms that foster collective learning for the whole cluster.

Such regions are found throughout the United States, partially because they have built on prior start-up successes and partially because their institutions encourage entrepreneurship. A 2015 study by Startup Genome, a San Francisco-based research organization, ranked six U.S. cities among the top 10 start-up ecosystems in the world. While all six—Silicon Valley, New York City, Los Angeles, Boston, Chicago and



Above: Travis Kalanick (left), co-founder and chief executive officer of Uber, and Anthony Levandowski, co-founder of Otto, at Uber headquarters in San Francisco in August 2016. Uber has acquired Otto, a start-up which develops self-driving technology for trucks.



Above: Uber offered free rides in DeLorean DMC-12, featured in the "Back to the Future" movie franchise, to San Francisco users in 2013, in partnership with General Electric. The campaign, called Brilliant Machines, aimed to foster the development of greener hardware and software to power everything from car motors to city blocks.

It's important to have adventurous people who are willing to take

risks to start companies, but it's also important to have investors who are

have investors who are willing to take a risk on a company.

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William F. Miller https://goo.gl/YFFjSf



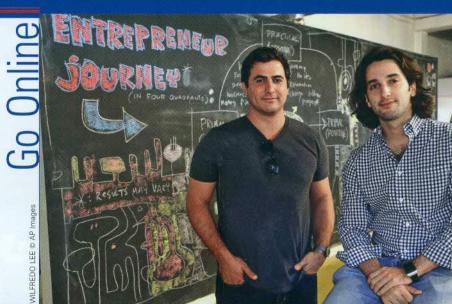
The 2015 Global Startup Ecosystem Ranking

https://goo.gl/78ky0g



Small Business, Big Impact!

https://goo.gl/EChGZb





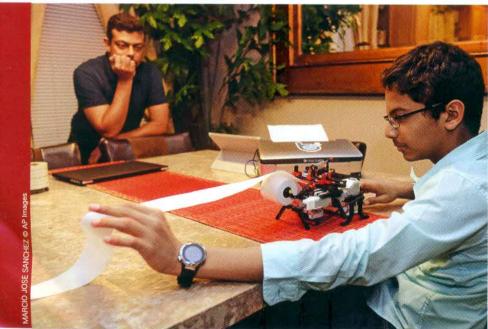


Top: Wifredo Fernandez (left) and Daniel Lafuente, co-founders of The LAB Miami, a co-working space for entrepreneurs in Miami. Above: Gavin Newsom (center), lieutenant governor of California, and Robert Greifeld (center right), chief executive officer at Nasdag, during the unveiling of the Nasdaq Entrepreneurial Center in San Francisco, California, in 2015. The center provides business

training, mentoring and networking opportunities for start-up founders. Left: Karen Quintos (from left), chief marketing officer at Dell; Anasuya Gupta, chairperson and managing director at the New Delhi-based CICO Technologies; Alexis Maybank, co-founder of Gilt Groupe; and Jane Wurwand, founder of Dermalogica, at the Dell Women's Entrepreneur Network summit 2014 in Austin, Texas.

Below: LabCentral in Massachusetts is a firstof-its-kind shared laboratory space designed as a launchpad for highpotential life-sciences and biotech start-ups. Bottom: Shubham Banerjee (right), launched a company, Braigo Labs, in 2014 to develop lowcost machines to print Braille materials. He is one of the youngest entrepreneurs to receive venture capital funding.





Seattle—share the factors that Miller mentions, they are also home to something perhaps even more important—people who are willing, and even eager, to take big risks.

"Looking at different countries, one key piece is what kind of ambitions a person has," says Marc Penzel, co-author of Startup Genome's "Global Startup Ecosystem Report" series. "In many countries, the main goal of an individual is to join a big company, stay there for decades and build a successful career. In the U.S., it's the other way round. People ask, 'Why don't you start your own company and create the change you want to see in the world?' People have a lot of freedom growing up here, and that translates into self-confidence."

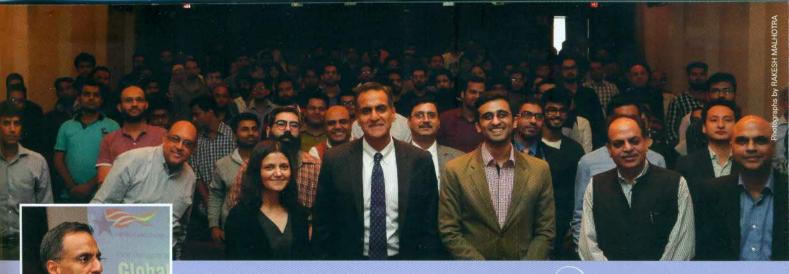
This can-do attitude has led to the ongoing creation of small businesses, a vital component of the U.S. economy that accounts for 54 percent of all sales in the country, 55 percent of all jobs and 66 percent of all net new jobs since the 1970's, according to the U.S. Small Business Administration.

But start-ups are as likely to fail as they are to succeed—fewer than half of new companies survive past their first five years, according to the Small Business Administration. In the United States, however, it's acceptable for people to fail.

Miller says: "Bill [William] Hewlett told me, 'In Silicon Valley, it's OK to change your job—people learn as they move from job to job. It's OK to talk to your competitors—you don't give away trade secrets but you talk, and that creates a collective mind. It's also OK to fail. Not too often, but you can fail in public and start over here in Silicon Valley.' Many students who have come to Stanford from India have told me that it was here they learned that it's OK to try something, and if you fail, learn from it and then start over."

The acceptance of failure extends to another element critical to start-ups—investors. Many provide funding to new companies knowing that while many will fail, some will prove to be huge successes.

"It's important to have adventurous people who are willing to take risks to start companies,



Innovation and Entrepreneurship

Ambassador
Richard
R. Verma
at the Global
Entrepreneurship
Week 2016 in
New Delhi.

ndia, too, has a rich tradition of entrepreneurship. In recent years, Indian American innovators have contributed to the success of Silicon Valley and its start-up culture, and there are strong ties between Silicon Valley and such Indian tech hubs as Bengaluru and Hyderabad. And that same strain of innovation and entrepreneurship is

manifest in the growing wave of start-ups in India: in health technology, mobile apps, e-commerce and so much more.

Entrepreneurship and innovation are central to Prime Minister [Narendra] Modi's vision for transforming India. When the Prime Minister visited Silicon Valley last fall, I heard him speak about the need to bring together the

best minds in India and the United States to solve our two countries'—and the world's—biggest challenges. He encouraged all of us to look at ways to harness our great networks of entrepreneurs and innovators to improve the lives of ordinary people.

Source: https://in.usembassy.gov/ introductory-remarksglobal-entrepreneurship-weekambassador-verma/

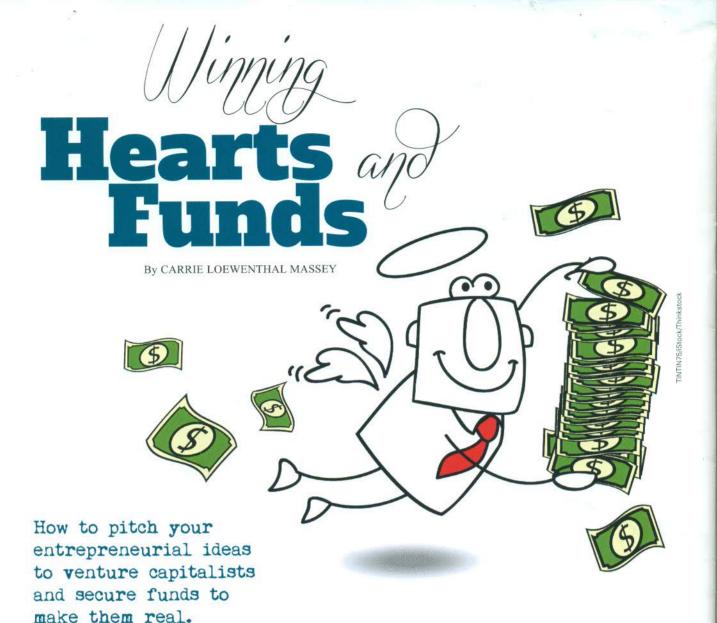
but it's also important to have investors who are willing to take a risk on a company," says Miller, who helped establish Silicon Valley's renowned venture capital industry in the 1960's. "You need both."

For start-ups, the key ingredients for success, including ready access to funding, talented employees, business infrastructure, experienced management, marketing and distribution, are almost always found in major U.S. cities. Although the United States has long led the way in encouraging start-ups, the ways in which its cities can help companies succeed in today's globally-interconnected and digital economy remain the subject of intense study. A 2016 U.S. Chamber of Commerce Foundation report, "Innovation That Matters,"

provides recommendations to U.S. cities on how to help new companies succeed.

"Today's start-ups are effectively 'micro-multinationals,'" says Michael Hendrix, director for emerging issues at the foundation and researcher on the report. "The successful ones are both hyper-local and hyper-global. In many ways, what makes start-ups successful can be expressed in a single word: community. The degree to which start-ups can accelerate and succeed is the degree to which a community—its government, universities, existing businesses, nonprofits, overall environment—are primed for success in the future."

Steve Fox is a freelance writer, former newspaper publisher and reporter based in Ventura, California.



ou've got the passion and the business plan. But, you don't have the funds to bring that business plan to life...yet.

As an entrepreneur, you have several options for funding your business. You can raise funds from family and friends, and amplify that fundraising through online platforms like Kickstarter. You can bootstrap, which means start small and grow your business by reinvesting revenues as they come in. And as revenues build, business loans may also become available.

Or, you can seek venture capital—money invested in the business by firms or funds.

Who can use venture capital?

Venture capital is good in three scenarios, says Pedro Torres-Mackie,

venture capitalist and founder and managing director of Quotidian Ventures in New York City. These scenarios are where "you are in a very competitive industry, and you need capital to scale up fast before you are eaten by competitors; you are in a very new industry, or innovating in an old one, and need capital to be able to experiment and figure out a business model without worrying about revenues for the first year or two; [or] you are in a very capital-intensive business like hardware, or a highly regulated industry."

If you see a path to develop and expand your business without venture capital, take that path, advises Torres-Mackie, because venture capital comes with strings attached.

"Understand that once you raise

Pitch & Right

aunched in 2006, Seedfund (http://seedfund.in) is an earlystage venture capital firm with offices in Mumbai, Bengaluru and Noida. It has about \$70 million (Rs. 470 crores approximately) under management and has invested in companies like RedBus, Chumbak,

EduSports, Voonik and many others.

Seedfund receives hundreds of proposals every month from start-ups seeking funding. The task of evaluating these proposals lies with Tarana Lalwani, who also mentors early stage companies and works closely with them to help them move up to the next level. Lalwani has an undergraduate degree in accounting from La Salle University in Pennsylvania and a M.B.A. from Columbia Business School in New York City.

Excerpts from an interview.

What are the main things you look for when you evaluate proposals from start-ups?

We look at these points while evaluating proposals from start-ups:

- a) The team, and whether we think they are capable of executing the idea outlined in the proposal. We also take into account the team's integrity and work ethic.
- b) The personality of the people who submitted the proposal. For instance, whether they are likable or not. Ultimately, they are the face of

the company with employees, investors and customers.

- c) Whether the idea has the potential for expansion and scaling up. Not all good ideas are necessarily "venture capitalist fundable." They might instead just be good ideas for a lifestyle business.
- d) Whether the idea is something disruptive or new. If it's not, we evaluate what makes this venture better than similar ones already in the market.
- e) The ecosystem or infrastructure for the sector to which the idea belongs, in terms of regulations and technology.

What are the ways in which start-ups can impress potential

The focus should be on having a credible idea and building it-let the work speak for itself. Having a wellthought-out plan and having a team. instead of an individual, behind the proposal also help.

What are the most common mistakes start-ups make while drafting and submitting proposals

At times, start-ups are too focused on working on an optimistic plan rather than a realistic plan, which incorporates an understanding of the real costs associated with the business, and which looks at the business from a bottom-up approach versus a topdown approach.



The focus should be on having a and building itlet the work speak for itself.





Seedfund has invested in companies like RedBus (far left) and Chumbak (left).





specific focus on growth that might not be the Everybody best thing for your company," he says. "Make sure you are ready and excited to lead this thinks their idea company for the next 10 plus years." is great, but

want to be convinced there are real paying customers

investors

who also think

SO.

Let's say venture capital is right for your startup. You're focused and passionate, eager to be at the helm of your operation for the foreseeable future. Then, Torres-Mackie says, "figure out what milestone this round of funding is going to help you achieve in the next 18 months, and work backward from there to decide how much

you have to raise to get there. Then, keep that milestone always on your mind."

Winning over investors

Securing venture capital funding depends on strategic and compelling storytelling. "How you tell the story of your company matters almost as much as the story itself," says Torres-Mackie. That story, told at the first meeting with a potential investor, needs to contain certain elements like the "opportunity you are pursuing, why it is very big, why now is the right time to pursue it and why you are the right person or people to build a company to own that opportunity."

It's also important to demonstrate the value your business will bring to its customers.

"A strong sales pitch for investors is one that convinces investors that somewhere out there, right now, there are lots of people sitting in their offices or their homes wishing they had your product," says Jeff Hoffman, co-founder of ColorJar, a Chicago-based digital agency that specializes in brand positioning and creating websites and apps. He is also a longtime entrepreneur, whose projects have included cofounding Priceline, a website where users can obtain discounts while booking airline tickets and hotels. "Everybody thinks their idea is great, but investors want to be convinced there are real paying customers who also think so."

Hoffman recommends incorporating "customer proofs...short videos and testimonials from customers and potential customers," preferably, before you seek investors.

The right investor at the right time

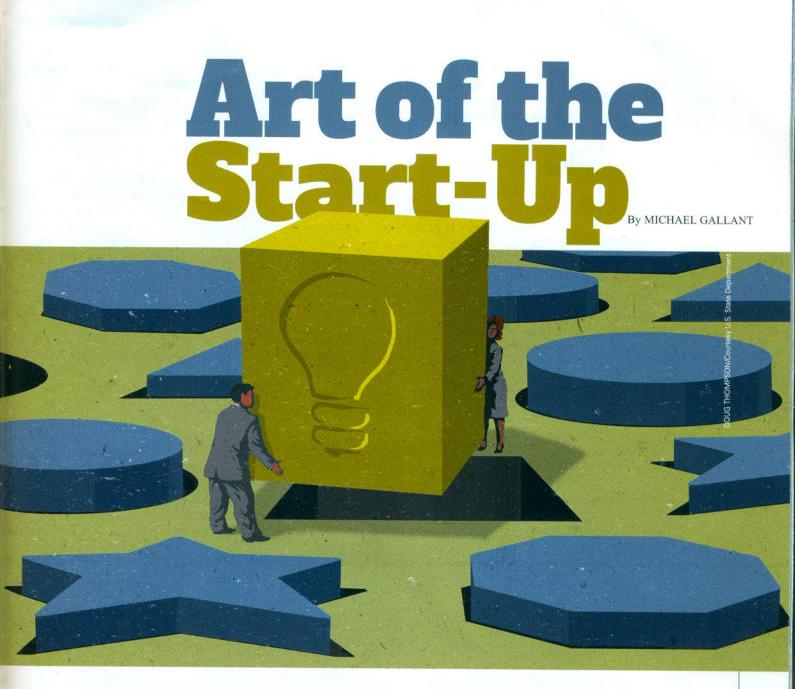
When Torres-Mackie evaluates an investment opportunity, he considers whether the entrepreneur or company is likely to succeed in the specific market in question. He evaluates the market's size, growth and potential, and then he asks what sets the particular entrepreneur or company apart in the eyes of possible customers or partners.

Torres-Mackie acknowledges that even though he has defined his process as an investor, for an entrepreneur, locking in venture capital funding involves a certain amount of chance. "The most surprising thing is how much investment decisions depend on factors that are outside of your control, like luck, the way you were introduced to the investor, where the investor is in their life cycle, mood, etc.," he says.

Hoffman advises entrepreneurs to "research and segment investors with the same detail you do for customers. Pick investors most likely to like your deal." And, expect that the process might require some legwork. Hoffman once researched investors to the point that he "finally zeroed in on the investor who loved deals like mine, and had invested in lots of similar companies." But he couldn't get an appointment until he really put that research to work.

"I had done so much research that I knew [the investor] liked horses and polo. I guessed he might be at a nearby polo match that Saturday, so I bought a ticket," says Hoffman. "Sure enough, I saw him at the food table and 20 minutes of casual conversation later, I had my meeting set up!"

Carrie Loewenthal Massey is a New York Citybased freelance writer.



Partnership
building,
customer
understanding
and competitive
analysis are
just a few of
the key factors
in creating a
successful
business.

or those who dream of being the next Steve Jobs or Elon Musk, having a brilliant idea for a new product or technology is just the beginning. Transforming an inspiration into a successful business is another challenge entirely—one that start-ups, all around the world, must deal with.

Luckily, aspiring innovators don't have to face this often-intimidating world of entrepreneurship alone. "There is so much information available to people who want to be entrepreneurs—books, blogs, podcasts, online resources," says Donna Harris, co-founder of 1776, a global incubator and seed fund helping start-ups transform different industries. The incubator is based in Washington, D.C.,

and has offices in New York City, San Francisco, Arlington and Dubai.

For starters, Harris recommends a book called "The Lean Startup" by Eric Ries, a resource which, she says, is especially helpful when it comes to customer discovery—a fundamental process for any new start-up.

Customer discovery refers to figuring out if your idea for a start-up, no matter how innovative and inspired it may be, will actually appeal to a customer base that can make your enterprise grow and thrive. "You won't know if your big idea is indeed needed, and big enough to warrant starting a company, until you get out and talk to people who have the problem that you

Go Online

1776 www.1776.vc

Donna Harris www.1776.vc/profile/ donna-harris

> IsItYou www.isityou.biz

Clayton Christensen www.claytonchristensen.com

The Lean Startup http://theleanstartup.com/

think your idea addresses," says Harris.

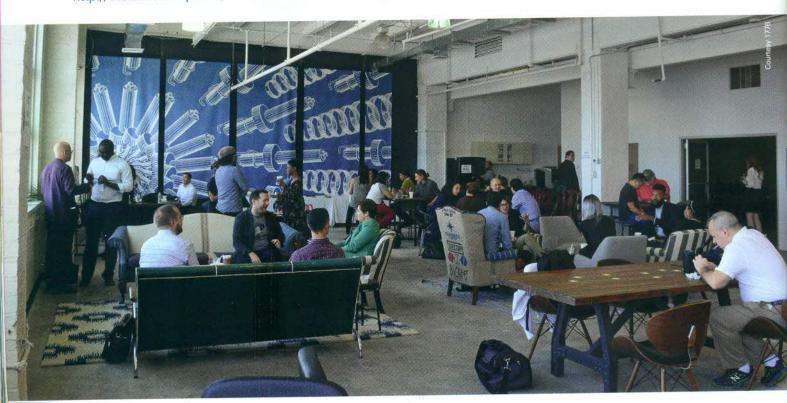
Another key element of growing a successful start-up is understanding the competition your company might face. To tackle this topic, entrepreneur Benjamin Levy recommends diving into something called the "Jobs-To-Be-Done Theory."

"It's an idea that came from Professor Clayton Christensen [of Harvard Business School], and it's a great way to think about competitive analysis," says Levy, who founded the face biometrics security firm IsItYou. "Let's say that your company makes nails. The truth is, nobody just wants a nail. People want to hang pictures on the wall, for example, and doing so requires a nail and a hammer. If you focus on selling nails just as nails, you're not meeting the needs of the customer. If you focus on giving them the tools they need to successfully hang pictures, you are."

"There are countless jobs in the world that need to be done and, as an entrepreneur, you are creating tools or services to do those jobs," Levy continues. "To start to think about your company's place in the world, and amidst competition, don't just think about the nail—think about the job that the nail does."

Once entrepreneurs can pinpoint the tasks their innovations help accomplish, understanding the competition can easily follow. "Ask yourself, how is the job that you're trying to help with being done today?" says Levy. "Maybe, it's only getting done halfway, and other solutions are either too expensive or aren't doing it well enough. That's your hole, and that's where you need to concentrate. Your company is going to try to do something cheaper, better, or both."

Many successful ventures, both brand new and real-world tested, rely on partnering with other companies and organizations for success. Finding the right partners—whether they help you spread the word about your company or distribute your product, co-manage your



Above: 1776 members at its Dubai office. 1776 helps start-ups which tackle challenges in areas like education, energy and sustainability, health, transportation and smart cities.



Above: Revathi Roy, founder of FORSCHE, with one of its taxis in Mumbai in 2007. Below: Roy (center) with HeyDeedee staff.

By SUPARNA MUKHERJI

evathi Roy is the hief executive HeyDeedee, a Mumbai-based start-up which aims to empower and employ underprivileged and low-income women in the service industry. She also pioneered Asia's firstever women taxi service, FORSCHE, in trained more than 1,000 girls to take up

the profession. She has three new companies under her belt and envisions training 10,000 women in the next three years and providing them employment in the twowheeler rider and taxi driving sector. Roy is also an alumna of the 2012 South Asia Women's **Entrepreneurship Symposium, held** in Dhaka, Bangladesh, supported by the U.S. Department of State. Excerpts from an interview.

Please tell us about HeyDeedee.

HeyDeedee is a logistics platform on two-wheelers run by women and girls. It is fundamentally a parcel delivery service.

In your opinion, what are some of the key factors that help create a successful start-up?

One has to have focus and perseverance. The traditional formula is 1,000 days. In Punjabi, there is a saying: the first year is chatti, which means you pay from your pocket; second year is hatti. which means you start easing out; and third year is khatti, which means you can start making money in the business.

How important is forming partnerships for entrepreneurs?

Today's world and business work on synergies, so growth without partnerships is not possible. Hence, it's most crucial.

What role does competition play in the entrepreneurial world?

In my opinion, competition should be considered positive. It helps in growing the industry. Our demographics and population only add to the fact the market size is so huge that there's a slice for everyone.

What are some of the challenges unique to India?

I can talk of my sector, which is skillbuilding for employability and transport. Both of these are fairly new. So for us, it's a challenge as a start-up to convince women and girls to take up this profession.

What advice do you have for young Indian entrepreneurs?

Many a times, I ask youngsters, "What's your idea? What do you want to do?" They answer, "I want to make money." That is OK, but that's not an idea. That's an offshoot of what you will do. So, the idea really has to be something you are passionate about and one which can make a difference.



When you're starting a company, don't go it alone.
Join a start-up community, hub, incubator or other programs.



inventory or help you obtain the raw materials you need—can be vital for success.

"The key is really understanding your potential partners—what challenges do they have, what's important to them and so on—and how their needs intersect with your offerings," says Harris. "The ideal partnership is one where everyone is giving something and getting something. Listening is key."

Beyond finding partners who can directly help your business, Harris recommends tapping into the bubbling community of global entrepreneurs for knowledge, support and friendship. "When you're starting a company, don't go it alone," she says. "Join a start-up community, hub, incubator or other programs.

Benjamin Levy

Entrepreneurship is an experiential activity, and it's important to surround yourself with people who have already been down the path you're about to take."

For all start-ups, Harris recommends a focus on diligent research and preparation. Unfortunately, she says, many young and aspiring entrepreneurs neglect this work. "You should be self-directed enough to find and use the best free resources to get 80 percent of your questions answered. Then go to experts to supplement that," she says. "Don't rely on others to do your thinking and work for you."

Michael Gallant is the founder and chief executive officer of Gallant Music. He lives in New York City.

There are countless **jobs** in the world that need to be done and, as an entrepreneur, you are creating tools or services to do those jobs.





Social Media



Toolbox for

Online tools

entrepreneurs
can use to
reach out to
their target
audiences and
improve their
chances of
success.

Right: Social media marketing tools like YouTube, Facebook Live, Periscope, Instagram and Snapchat Stories, and Buyable Pins are increasingly being used by start-ups to capture the attention of their audiences.













Start-Ups By JASON CHIANG

ver the last several years, a huge transformation has happened throughout the global business community. Social media and other online tools have created unprecedented opportunities for businesses to connect directly with billions of Internet users across the world. These new platforms have become essential for entrepreneurs and start-ups to streamline their communications

and create smarter consumer engagement strategies. The traditional approaches to branding, content distribution, advertising and customer service have all changed in this digital age, where start-ups can use powerful social media marketing tools on any budget size. Here are a few online tools that entrepreneurs can use to maximize the power of social media.



Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update

https://goo.gl/ylTuVx



I don't like this post



The Ultimate Guide to Facebook Live for Business



How Major Brands Are Making an Impression on Snapchat

httns://non.al/7/15.IST



How Pinterest Drives Purchases Online and Off

https://goo.gl/eCJ5lz

The original online video forum

Video content is now more popular than ever, with adults in the United States spending an average of one hour and 39 minutes every day watching videos on digital devices. In India, according to a 2014 Assocham-Deloitte joint study, the share of videos in the country's data traffic is expected to rise to 64 percent in the fiscal year 2017.

Google's YouTube has been the pioneering forum for shared online videos since its launch in 2005. It is a vital tool for entrepreneurs who want to engage online audiences.

Having a YouTube channel allows start-ups and entrepreneurs to establish a landing page on the biggest video-sharing platform, which boasts of over a billion users who watch hundreds of millions of hours of content every day. As the second most popular search engine and the third most visited webpage, YouTube is simply too big a platform for any start-up to ignore.

Live video streaming

As of 2015, there were over 7.9 billion mobile devices and connections in the world, reports Cisco. And by January 2016, India had crossed the milestone of having a subscriber base of one billion. This means people are consuming media content anywhere and anytime. Now, with new tools like Facebook Live and Twitter's Periscope, users have the power to create and share in-the-moment, or livestream, videos directly from their mobile phones or webcams, while simultaneously inviting viewers' comments and reactions in real time.

Livestreamed videos have gained immense popularity, largely because of their unscripted authenticity, engaging immediacy and interactivity. For start-ups and entrepreneurs, livestreaming means a free tool to broadcast company announcements and events, answer public queries, conduct tours or share any other information with the public in video form.

Video snippets

While Facebook Live and Periscope are popular platforms for sharing long-form live broadcasts, Instagram and Snapchat Stories offer a creative way for brands to share quick-hitting video vignettes. These snippets are just 10 seconds long and are viewable for only a 24-hour window, giving them a more playful and spontaneous appeal. Both of these platforms are crucial for attracting younger audiences. Snapchat's largest user group is

18- to 24-year-old and over 90 percent of Instagram users are under the age of 35. In India, Snapchat is "popular among the age group of 15 to 25 years," says Rajiv Dingra, founder and chief executive officer at WATConsult, a digital and social media agency. And, 90 percent of Instagram users in the country are below the age of 30.

For start-ups and entrepreneurs, Instagram and Snapchat Stories are fantastic opportunities to curate an inside look at a start-up's unique personality. By sharing a series of 10-second videos to their daily "story," upstart brands can give consumers a unique glimpse into their operations and organizational culture.

Branded location tags

Over the past year, Snapchat has reached over 100 million users, who view over 10 billion "Snaps" per day. Despite its meteoric rise, the platform caters to more than just big-budget advertisers. With its latest tool, Geofilters, small businesses and individuals alike can design photo or video filters that distinctively promote their event or business.

With Geofilters, users submit their own design for a branded overlay that appears when a Snapchat user is in proximity of their event or business' global positioning system location. The users can then decorate their image or video with the brand's Geofilter before sharing it with their network. At just \$5 (Rs. 340 approximately), it is a fun and cost-effective way for entrepreneurs and start-ups to promote themselves.

E-commerce goes social

Last, but not least, is Buyable Pins, Pinterest's newest e-commerce tool. Pinterest has described itself as "the world's catalog of ideas," where over 110 million active users, of which 71 percent are female, contribute to collections of searchable images. Research has shown that 93 percent of Pinterest users have used the site to research a planned purchase, making it a valuable hub that inspires ideas and even shopping.

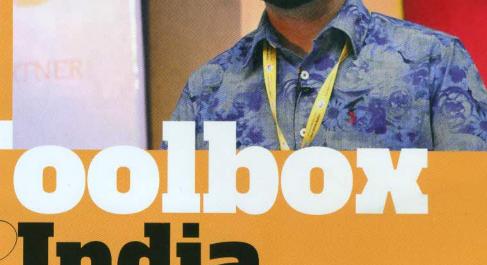
With Buyable Pins, Pinterest now has the ability to directly connect social networks with e-commerce vendors. For entrepreneurs and start-ups offering physical goods to consumers, this new tool is a game-changer for finally connecting the dots between online inspiration, social media and the direct point-of-sale.

Jason Chiang is a freelance writer based in Silver Lake, Los Angeles.









Pratik Dholakiya

is the co-founder of E2M, a full-service digital marketing agency, and MoveoApps, a mobile app design and development company. With offices in Gujarat and California, the companies' client list includes international brands, business-to-business companies and emerging start-ups.

Excerpts from an interview.

What role does social media play in supporting entrepreneurs and start-ups in their endeavors?

By SUPARNA MUKHERJI

Social media helps level the playing field for small businesses and startups by providing effective, low-cost crowdsourcing opportunities. Campaign creativity, combined with communication of brand culture and lifestyle benefits, provides measurable gains for [small and midsize businesses].

How can social media help increase engagement, and build and maintain relationships with target audiences?

Responsiveness is critical to creating an engaged community. Social media has evolved and it is no longer exclusively about sharing content; consumers expect relationships. Be responsive or talk to your customers when they follow, retweet or share your post, and be appreciative of their feedback in comments. Customers who care, leave comments; brands which respond, convert customers.

What are some of the most innovative tools entrepreneurs can use to streamline their online

communications?

There are a variety of different tools that can be used to optimize response with notifications. Here are some, in no particular order: Google Alerts, Social Mention, Talkwalker, Sprout Social, Followerwonk, BuzzSumo, Commun.it and SocialPilot.

What are the most popular social media tools used by Indian entrepreneurs?

Buffer, Hootsuite, SocialOomph and Brandwatch are some of the most heavily used social media tools in India. Also, watch out for some improvements to WhatsApp, as it moves from a messaging service to a social network format.

Do you have any tips for young entrepreneurs and start-ups?

Don't quit. I believe that entrepreneurial drive is a genetic thing and that growing your own business provides a rewarding career path. Seek mentors within your industry and ask them for advice. Stay humble and maintain a results- and serviceoriented relationship with your customers for retention, referrals and business growth.

Some of the most promising sectors

for start-ups in the United States.

Start Me Up

By JASON CHIANG



nvention drives the U.S. economy, where constant innovation attracts some of the brightest minds and most aggressive investors in the world. In 2015, venture capital investors funded U.S. start-ups with a record \$63.3 billion (Rs. 4,40,000 crores approximately), all hoping to strike it rich with the next "unicorn"—a privately-owned start-up that eventually grows to a valuation of \$1 billion (Rs. 6,700 crores approximately) or more. Here are some U.S. business sectors projected to become the most profitable in the near future.

The sharing economy

Uber and Airbnb began as start-ups in the "sharing economy," where two-sided online marketplaces helped connect the supply and demand sides of e-services. Today, they are two of the most valuable U.S. "unicorn" companies in the world, boasting valuations of \$62 billion (Rs. 4,20,000 crores approximately) and \$25.5 billion (approximately Rs. 1,70,000 crores), respectively, according to FORTUNE.com. Tomasz Tunguz, partner at Redpoint Ventures, a venture capital firm focused on investment in seed, early



The Bright Spots in India

By DEEPANJALI KAKATI



hailesh
Vickram Singh
is executive
director at Seedfund,
an Indian venture
capital fund which
has invested in more
than 30 companies,
including afaqs!,
AxisRooms, Heckyl,
Jeevanti, Jeeves,

ThinkLabs and Vaatsalya. Singh has over 20 years of experience in investing, business operations and strategy, and takes active interest in grooming future entrepreneurs and business students.

Excerpts from an interview.

What are the most profitable sectors for start-ups in India at present? What do you think about their long-term prospects?

As the Indian economy evolves and marches toward a more digital, cashless and brand-focused mode, we are witnessing a surge in consumption as well as in consumer affinity for branded solutions. This emerging area has opened up huge opportunities for entrepreneurs.

The second pillar of growth is technology, which is helping to remove stumbling blocks and reduce costs, thus leading to a massive jump in consumption. Booking bus tickets online was one such opportunity—it allowed users to reduce uncertainty and book tickets, without worrying about availability of seats, at the last minute. Reduction of hotel room rates and standardization of hotels are other areas which are spurring consumption.

The other shift we are seeing in the economy is, of late, businesses, especially small businesses, are being more open to adopting technology and buying software tools to improve their productivity, reach and efficiency. This shift is opening up huge business opportunities in B2B (business to business) and SaaS (software as a service) products.

In every segment, there are always inefficiencies for which entrepreneurs

can come up with solutions. As an investor, I look at those inefficiencies, my understanding of those markets, the entrepreneurs' solution for those inefficiencies and their capability to implement those solutions. If all these are in sync, it creates a wonderful opportunity to build a great business.

Do you think new sectors would emerge in the next two to three years to overtake the currently profitable ones?

Yes, definitely. We have seen massive shifts in consumer behavior every three to four years. There are always some sectors which come up at the right time, some are ahead of their times and some are behind the times. SaaS was much talked-about around 2006, but it is clear now that it was too early then for this sector. Now is the right time for this sector to take off in India. E-commerce is no longer an opportunity as most of the pole positions have already been taken. Financial technology, also known as fintech, is emerging and will evolve in the next two to three years as we get more clarity in terms of regulations, user behavior and emerging technologies.

How easy or difficult is it for start-ups in emerging sectors to find a foothold in India? Are Indian customers ready for innovative offerings?

Indian users are quite mature and willing to experiment if the offering is right and helps them make their lives easier. In 2003-4, Indians were trying to do e-commerce transactions at 24 kbps speed at cyber cafes with unsecure computers and figuring out debit or credit cards, because these online transactions were helping them book a rail ticket and saving them from a six-hour wait at the railway ticket window. So, if the solution is right, people will lap it up. But if one assumes that something will work in India because it worked in China, the United States or some other country, then they would be in for a huge surprise, as India is a unique market.

Go Online

How Venture Capital Works https://goo.gl/Nac4Ss

Who Gets Venture Capital Funding? https://goo.gl/CxyVIL

Airbnb and Uber Are Just the Beginning. What's Next for the Sharing Economy. https://goo.gl/ywtsKz

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Investors are betting big on technologies to disrupt several huge industries in coming years. and growth-stage companies, estimates that two-sided marketplaces now command over 10 percent of all seed and Series A investments—the initial fundings for start-ups. "The astronomical growth rate and size of these businesses have seen investors pursuing new and novel categories," he notes. Since the sector's recent expansion, consumers have seen two-sided marketplaces pop up for pet-sitting, guided tours, equipment rentals, grocery shopping and personal couriers, just to name a few. With peer-to-peer e-services expected to grow to \$335 billion (Rs. 22,00,000 crores approximately) by 2025, the sharing economy still has to explore plenty of innovative solutions.

Drone manufacturing

The small unmanned aerial vehicles sector, which encompasses commercial, recreational and military drones, is estimated to be a \$3.3 billion (Rs. 22,000 crores approximately) market in the United States. This manufacturing sector is on track for rapid growth as a result of a U.S. Federal Aviation Administration legislation, which has eased regulations for commercial drone use.

An economic report by the Association for Unmanned Vehicle Systems International in 2013 projected that 70,000 new jobs would be created in the United States during the first three years of drone integration, with a potential

Left: University of North Dakota business students attend a presentation on use of large drones for precision agriculture. The class teaches students to fly drones as well as develop business plans to present to venture capitalists.

Below left: Real estate tech start-ups raised more than \$1.8 billion in the first half of 2016.

Below: A self-driving Uber car in Pittsburgh, Pennsylvania. Bottom: Director and animation supervisor Ramiro Lopez Dau works at the Oculus Story Studio in San Francisco, California. The studio creates real-time story-driven virtual reality experiences.

Below right: Bruce Bennet prepares a room to rent in his home in San Francisco.

Bottom right: Gamers explore the Minecraft video game with Oculus virtual reality headsets in Los Angeles, California. economic impact of more than \$13.6 billion (Rs. 90,000 crores approximately). The intriguing uses for these commercial drones—disaster relief, scientific research, law enforcement and freight delivery—point to the sector's incredible potential.

Virtual reality and augmented reality

Virtual reality and augmented reality have already begun to captivate global audiences with 360-degree simulated worlds and interactive spatial information. Investors are betting big on these technologies to disrupt several huge industries in coming years. Recent Goldman Sachs research has predicted that the virtual reality and augmented reality industry could soar to an \$80 billion (Rs. 5,40,000 crores approximately) market by 2025, dramatically impacting industries like television and film production, video games, live music, sports, architecture, travel and education.

Facebook's \$2 billion (Rs. 13,300 crores approximately) acquisition of headset manufacturer Oculus in 2014 is an example of virtual reality's exciting new possibilities. "This is a good candidate to be the next major computing platform," Facebook founder Mark Zuckerberg explained in an interview with

Bloomberg Businessweek. "It's worthy of a lot of investment over a long period."

Real estate tech

Real estate is the largest asset class in the United States, valued at an estimated \$40 trillion (Rs. 27,00,00,000 crores approximately) according to the Federal Reserve Bank. However, many industry experts believe the sector could benefit from technological innovation, as many traditional workflows and processes have not been rethought in decades. Investors agree, as real estate tech start-ups have raised more than \$1.8 billion (Rs. 12,000 crores approximately) in the first half of 2016—an 85 percent increase over the same period in 2015. There are opportunities for new software tools and platforms to streamline nearly every aspect of the sector. including brokerage, acquisition and disposition, investment, lending, property management and appraisal. With such a huge amount of money on the line, you can bet new productivity tools are just around the corner for this sector.

Jason Chiang is a freelance writer based in Silver Lake, Los Angeles.









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Advancing Start-Ups // Inclia By HILLARY HOPPOCK

Yatin Thakur

shares his
experience of
helping to
strengthen
India's
entrepreneurship
movement.



atin K. Thakur is a major new player in India's entrepreneurship movement. Starting his first company as a high school student, he has founded over seven start-ups; scaled up Startup Weekend events in India, during which participants pitch ideas for new start-ups, form teams around those ideas and develop a working prototype, demo or presentation—all in 54 hours; and co-founded Startup India, a company that works with entrepreneurs to develop solutions to some of India's biggest problems.

In June 2016, the Washington, D.C.-based Global Entrepreneurship Network (GEN) selected Thakur to serve as the acting managing director of its new affiliate, GEN India. What Thakur brings to GEN India is business innovation, development and entrepreneurial experience.

Global Entrepreneurship Network President Jonathan Ortmans describes the Indian government as a great and active proponent of entrepreneurial growth. "We look forward to contributing to that effort and connecting the ecosystem to a global movement that reaches 160 countries," he says.

Thakur sees his primary role in GEN India as putting in place "an ecosystem for India's entrepreneurs with access to investors and customers as well as government, legal, technical and business plan advisors." He will also play an active role in planning the upcoming Global Entrepreneurship Summit, an annual event created by President Barack Obama in 2010 to support entrepreneurship around the world. Thakur notes the 2017 summit will be held in India, "attracting a large number of



entrepreneurs to India and strengthening India's presence for a global exchange of ideas."

A self-described social entrepreneur, Thakur's 13-year business career reveals a consistent pattern of development in both urban and rural settings, and "in the smallest of towns across the country to provide all entrepreneurs with a support system and create an ecosystem within their towns, where they can leverage networks to start their enterprise, perhaps a handicraft business, or try to solve social issues like sanitation or access to water."

Thakur founded Optaamaze Corporate Solutions Private Limited in 2007 to train Indian youth by providing them basic communication and industry skills for employment as insurance agents, security guards, etc. Within a short time, Optaamaze grew to a \$10 million (Rs. 67 crores approximately) company. In 2008, he founded Grameenmobia Social Enterprise to empower farmers through mobile technology, providing them access to stock prices, soil reports, land details, crop patterns and weather information. And in 2011, Thakur co-founded Moonlighting Delhi. By 2012, Thakur was working on Startup Weekend events in India, "where you come up with an idea and you walk out with a start-up by the end of the weekend." Entrepreneurs who attended Startup Weekend started coming back to Thakur asking for additional support for their companies.

In 2013, Thakur launched his start-up CoworkIn "to provide the developing start-up economy with access to affordable office

space as well as a community for validation of their ideas and help in scaling up their small businesses." He says that multimillion dollar enterprises, including OYO Rooms and UrbanClap, grew out of these coworking hubs.

Thakur recalls his struggles to sustain and grow his companies. "I didn't have access to capital or friends to motivate and support me. It was just me, Google and my computer," he says. So, he decided to help youngsters start out because "they were in the same state of mind I was in when I was 16"

During his visit to the United States as a participant of the U.S. Department of State's International Visitor Leadership Program (IVLP) in 2015, Thakur reflected on the impact of his work and what he could do to help define the digital future of India. He learned about U.S. cities and universities adopting technology for civic innovations and how the government, industries, educational institutions and private individuals could integrate effectively to solve problems. This experience convinced Thakur "the strength of collaborations between different stakeholders in an ecosystem leads to a very high-impact and innovative environment."

Defining entrepreneurship as the power to change and make a difference, Thakur developed a simple philosophy: "If you really want to be an entrepreneur, you will require a lot of help. and to get help, you need to give help."

Hillary Hoppock is a freelance writer, former newspaper publisher and reporter based in Orinda, California.



Yatin K. Thakur http://yatinthakur.co



Startup Weekend https://twitter.com/ swinindia



Optaamaze www.optaamaze.com





Top far left: Yatin K. Thakur (left) with CoworkIn team

Above far left: Thakur at the 2016 Global Entrepreneurship Summit held in Silicon Valley in June.

Far left: Thakur (center) with other International Visitor Leadership Program participants from India at the Massachusetts Institute of Technology Media Lab in December 2015.

Left: Thakur (fourth from left) participated in an exchange program to understand more about the adoption of technology by U.S. citizens and the government.