

IMMIGRANTS AND BILLION DOLLAR STARTUPS

BY STUART ANDERSON

EXECUTIVE SUMMARY

Immigrants play a key role in creating new, fast-growing companies, as evidenced by the prevalence of foreign-born founders and key personnel in the nation's leading privately-held companies. Immigrants have started more than half (44 of 87) of America's startup companies valued at \$1 billion dollars or more and are key members of management or product development teams in over 70 percent (62 of 87) of these companies. The research finds that among the billion dollar startup companies, immigrant founders have created an average of approximately 760 jobs per company in the United States. The collective value of the 44 immigrant-founded companies is \$168 billion, which is close to half the value of the stock markets of Russia or Mexico.

The research involved conducting interviews and gathering information on the 87 U.S. startup companies valued at over \$1 billion (as of January 1, 2016) that have yet to become publicly traded on the U.S. stock market and are tracked by *The Wall Street Journal* and Dow Jones VentureSource. The companies, all privately-held and with the potential to become publicly traded on the stock market, are today each valued at \$1 billion or more and have received venture capital (equity) financing.

Among the key findings:

- The research finds that 51 percent, or 44 out of 87, of the country's \$1 billion startup companies had at least one immigrant founder. This illustrates the increasing importance and contributions of immigrants to the U.S. economy. A 2006 study conducted with the National Venture Capital Association (NVCA) identified an immigrant founder in 25 percent of venture-backed companies that became publicly traded between 1990 and 2005, while a 2013 NVCA study found immigrants started 33 percent of U.S. venture-backed companies that became publicly traded between 2006 and 2012.
- This study is one of the first to examine the role immigrants play on the management or product development teams in leading private companies in information technology, health, energy, financial services, and other sectors. The research found 62 of the 87 companies, or 71 percent, had at least one immigrant helping the company grow and innovate by filling a key management or product development position. Chief technology officer, CEO and vice president of engineering are the most common positions held by immigrants in these billion dollar startup companies.
- The billion dollar startup companies with an immigrant founder excel at job creation. The leading companies for employment are SpaceX (4,000 employees), Mu Sigma (3,500 employees) and Palantir Technologies (2,000 employees). Uber, co-founded by a Canadian immigrant, directly employs at least 900 people but

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reports having 162,037 “active drivers” (completed at least four trips) in the United States as of December 2014.

- Outstanding immigrant entrepreneurs profiled in the research include Elon Musk, founder of SpaceX; Garrett Camp, co-founder of Uber; Noubar Afeyan, co-founder of Moderna Therapeutics and 37 other companies, primarily through Flagship Ventures, the firm he heads; Jyoti Bansal, who waited 7 years for his employment-based green card to start AppDynamics, which employs 900 people and provides the equivalent of a 24/7 MRI for company websites; Amr Awadallah, co-founder of Cloudera, which allows organizations in various fields to profit from their data; Michelle Zatlyn, co-founder of CloudFlare, which uses the power of its global network to help websites with traffic and security; and other immigrant entrepreneurs.
- Companies with immigrant founders have produced a variety of useful products and services to benefit U.S. consumers and make U.S. companies more productive. Uber has transformed travel in American cities, while SpaceX aims to enable Americans to travel to Mars. Gusto makes it easier for employers to administer payroll, while ZocDoc allows patients to find in-network neighborhood doctors and book appointments online. Stripe, started by two Irish immigrant brothers, facilitates online payments for businesses and their customers, while AppDynamics, Cloudera, CloudFlare, Tanium, Actifio, Mu Sigma and others help U.S. companies to maintain strong information technology systems to compete in the global marketplace. Sports fans enjoy playing fantasy sports at FanDuel and gamers relish the offerings of Razer.
- Entering the United States as an international student has shown to be a good avenue for starting successful U.S. companies. Nearly one-quarter (20) of the 87 billion dollar U.S. startup companies – and almost half of the companies with an immigrant founder – had a founder who first came to America as an international student.
- With 14 entrepreneurs on the list, India was the leading country of origin for the immigrant founders of billion dollar companies, followed by Canada and the United Kingdom with 8 each, Israel (7), Germany (4), China (3), France (2), Ireland (2) and 12 other countries with one.
- California was the headquarters of 32 of the 44 immigrant-founded companies, followed by New York (6), Massachusetts (4) and Illinois (2).
- Despite the achievements of these immigrants founders and their companies, a startup visa to enable foreign nationals who start companies and create jobs would be an important addition to the U.S. immigration system, since currently it can be difficult for foreign-born entrepreneurs to stay and grow their

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business due to the absence of a reliable immigration category. The low quota on H-1B temporary visas also can make it difficult for startup companies to hire new personnel in their fast-growing businesses.

- New immigration restrictions would likely prevent many future cutting edge companies from being established in the United States. Based on an examination of the biographies of company founders, if S. 2394, a bill by Senators Ted Cruz (R-TX) and Jeff Sessions (R-AL), had been in effect over the past decade, few if any of the billion dollar startup companies with an immigrant founder would have been started in the United States. That measure would impose a variety of hurdles before any foreign national could be employed by a U.S. company on an H-1B visa (typically the only practical way for a high-skilled foreign national to work in America), including, in most cases, working at least 10 years abroad before obtaining a visa in America.

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BACKGROUND: THE NUMBERS

Immigrant entrepreneurs make important contributions to America, bringing new ideas and starting companies themselves or joining forces with native-born co-founders. Examining the stories of successful startup businesses finds each co-founder often brings something special to the table that allowed the company both to get off the ground and then thrive.

In light of recent controversies over immigration policy, this research sought to examine a unique set of companies – privately-held companies valued at \$1 billion based in the United States. These companies are sometimes called “unicorns.” They have not been listed on the stock market but may be in the future. The 87 companies examined come from a list tracked by *The Wall Street Journal* and Dow Jones VentureSource, with January 1, 2016 used as the cut-off date.¹

Immigrant Founders and Job Creation: Research uncovered that 44 of the 87 U.S. companies (51 percent) had at least one immigrant co-founder. Public data and direct contacts with the companies confirmed the biographical information on the founders. The research also identified the number of jobs created in the immigrant-founded company, revealing an average of about 760 employees per company (the vast majority in the United States).

Table 1
Most Jobs Created Among Immigrant-Founded Billion Dollar Companies

COMPANY	EMPLOYEES
SpaceX	4,000
Mu Sigma	3,500
Palantir Technologies	2,000
Zenefits	1,465
Bloom Energy	1,200
WeWork	1,200
Apttus	1,100
Cloudera	1,100
AppNexus	1,000
AppDynamics	900
Uber	900 (direct employees). Over 162,000 active drivers.

Source: National Foundation for American Policy, company sources.

¹ “The Billion Dollar Startup Club,” *The Wall Street Journal*, is updated regularly at <http://graphics.wsj.com/billion-dollar-club/>. This paper maintains the use of the word “startup” in places, although a number of the companies have been in operation several years.

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International Students as Entrepreneurs: Entering the United States as an international student has shown to be a good avenue for both immigrants and America for starting successful U.S. companies. Nearly one-quarter (20) of the 87 billion dollar startup companies had a founder who first came to America as an international student.

Table 2
International Students Who Became Entrepreneurs of Billion Dollar Companies

NAME	UNIVERSITY/DEGREE	COMPANY CO-FOUNDED/FOUNDED	EMPLOYEES	VALUE OF COMPANY
Noubar Afeyan	MIT, Ph.D. Biochemical Engineering	Moderna Therapeutics	326	\$3.0 Billion
Ash Ashutosh	Penn State, M.S. Computer Science	Actifio	350	\$1.1 Billion
Mohit Aron	Rice, Ph.D. Computer Science	Nutanix	864	\$2.0 Billion
Alexander Asseily	Stanford, B.S./M.S. Elec. Engineering	Jawbone	395	\$3.3 Billion
Amr Awadallah	Stanford, Ph.D. Electrical Engineering	Cloudera	1,100	\$4.1 Billion
Jay Caudhry	Univ. of Cincinnati, MBA and M.S. Computer Engineering, Industrial Engineering	Zscaler	600	\$1.1 Billion
John Collison	Harvard	Stripe	380	\$5.0 Billion
Patrick Collison*	MIT	Stripe	(380)	(\$5.0 Billion)
Nicolas Desmarais	Amherst, B.A. Economics & Pol. Science	AppDirect	400	\$1.0 Billion
Borg Hald	Stanford, MBA, Ross School of Business (U. of Michigan), B.B.A.	Medalia	850	\$1.3 Billion
David Hindawi	U.C.-Berkeley, Ph.D. Operations Research	Tanium	300+	\$3.5 Billion
Tomer London	Stanford, M.S. Electrical Engineering	Gusto	300	\$1.1 Billion
Elon Musk	Univ. of Penn., B.A., Economics & Physics, Wharton School (UPENN), B.S. Business	SpaceX	4,000	\$12 Billion
Dheeraj Pandey*	Univ. of Texas, Austin, M.S. Computer Science	Nutanix	(864)	(\$2.0 Billion)
Adam Neumann	CUNY Bernard M Baruch College	WeWork	1,200	\$10 Billion
Dhiraj Rajaram	Wayne State, M.S. Computer Engineering, Univ. of Chicago, MBA	Mu Sigma	3,500	\$1.5 Billion
Daniel Saks*	Harvard, M.A. Finance & Accounting	AppDirect	(400)	(\$1.0 Billion)
Mario Schlosser	Harvard, MBA	Oscar Health Insurance	415	\$1.7 Billion
Eric Setton	Stanford, Ph.D. and M.S. Electrical Engineering	Tango	260	\$1.0 Billion
K.R. Sridhar	University of Illinois at Urbana-Champaign, M.S. Nuclear Engineering, Ph.D. Mechanical Engineering	Bloom Energy	1,200	\$2.9 Billion
Ragy Thomas	NYU, MBA	Sprinklr	325	\$1.2 Billion
Renaud Visage	Cornell, M.S. Engineering	Eventbrite	500	\$1.0 Billion
Michelle Zatlyn	Harvard, MBA	CloudFlare	225	\$1.0 Billion

Source: National Foundation for American Policy, company information, CrunchBase. *Denotes second international student from same company. Values as of January 1, 2016.

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Country of Origin: Immigrant entrepreneurs in billion dollar startups are diverse, hailing from a total of 21 different countries. The leading country of origin for the immigrant founders of billion dollar companies was India with 14 entrepreneurs, followed by Canada and the United Kingdom with 8, Israel (7), Germany (4), China (3), France (2), Ireland (2) and 12 other countries with one entrepreneur.²

Table 3
Country of Origin: Immigrant Founders of Billion Dollar Startup Companies

COUNTRY	NUMBER OF ENTREPRENEURS
India	14
Canada	8
United Kingdom	8
Israel	7
Germany	4
China	3
France	3
Ireland	2
Armenia	1
Azerbaijan	1
Argentina	1
Egypt	1
Holland	1
Iraq	1
Norway	1
Russia	1
Singapore	1
South Africa	1
South Korea	1
Uzbekistan	1

Source: National Foundation for American Policy. Note: Some companies were started by entrepreneurs from the same country.

Immigrants Filling Key Roles: The research also examined the role immigrants play in positions that would most affect job creation and company growth. The analysis reveals 62 of the 87 companies, or 71 percent, had at least one immigrant helping the company grow and innovate by filling a key management or product development position. In the billion dollar companies, chief technology officer, CEO and vice president of engineering are the most common positions held by immigrants. (See Table 5 in the Appendix.)

² Some co-founders of a company were born in the same country.

STORIES OF IMMIGRANT ENTREPRENEURS

NOUBAR AFEYAN, CO-FOUNDER, MODERNA THERAPEUTICS



Noubar Afeyan

Starting one successful company is a fine achievement. How does one describe someone who has helped found 38 companies?

Noubar Afeyan was born to Armenian parents in Lebanon. At the age of 13, he immigrated with his family to Canada and attended college there. Noubar was accepted to a Ph.D. program at the Massachusetts Institute of Technology (MIT), at the time the only school with an advanced program in biochemical engineering.

After earning his Ph.D. at the age of 24, Noubar started his first company. “I was naïve to think I could start a company with so little experience,” he said. But it worked out. For 10 years, Noubar Afeyan

headed PerSeptive Biosystems, which became the number two company in the bio-instrumentation field before it was acquired by Perkin Elmer/Aplera Corporation in 1998. While CEO of PerSeptive Biosystems he founded or co-founded 5 more companies.³

In 1999, he evaluated the way his startups were formed – and startups in general – and thought perhaps the often disjointed, “trial and error” approach typical of startups could be reduced to something more systematic and organized. That’s when he founded Flagship Ventures, which develops new companies through its in-house division VentureLabs. It also invests in startups.

VentureLabs, which Noubar oversees as senior managing partner and CEO of Flagship Ventures, takes a unique approach. It conducts its own research and forms new companies after the research has started to bear fruit. Using this approach, Flagship Ventures and VentureLabs have launched dozens of startup companies, primarily in the life sciences and sustainability.

“We spend a lot of time at Flagship Ventures identifying problems and coming up with solutions that produce intellectual property that can be used to create innovations and ultimately new approaches and new companies,” he said.⁴ Noubar has over 100 patents to his name.

³ Interview with Noubar Afeyan, January 28, 2016.

⁴ *Ibid.*

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Moderna Therapeutics, which Noubar co-founded and helps lead as chairman, may be Flagship Ventures' most successful startup. Founded in 2009, the Cambridge, Massachusetts-based company is already valued at \$3 billion and employs over 300 people.

Breakthroughs in using messenger RNA or mRNA have fueled growth and raised expectations for Moderna Therapeutics. CNBC named the company "number one" on its 2015 Disruptor 50 list. "Instead of making protein medicines in factories very far away, what we are trying to do is to inject you with messenger RNA so that your own body will make the protein" said Stéphane Bancel, Moderna's French-born president and CEO in a 2015 interview. "We are playing a very different game than most other biotech companies because we are inventing the technology at the same time we are developing new drugs . . . Nobody had done a messenger RNA drug and put that into a clinic."⁵

In January 2016, in a major milestone for the company, Moderna Therapeutics announced it had become a clinical stage company when it launched its first human trial, a Phase I study to treat patients with infectious diseases with investigational mRNA therapeutics in Europe. In a statement, Stéphane Bancel said, "Advancing to the clinic certainly was the most gratifying milestone. We are now a major step closer to delivering on the promise of transformative mRNA science to bring breakthrough medicines to patients across a vast array of diseases, including infectious diseases, rare diseases, cancer and cardiovascular diseases, among others."⁶

Noubar Afeyan explains the promise of messenger RNA by comparing it to the more controversial concept of changing an individual's DNA. He notes changes to DNA can be essentially permanent, like hardware. By contrast, messenger RNA is more like software: it can be used to perform a task and then can be programmed to disappear.⁷

Moderna Therapeutics is a company with the potential to benefit the health of millions of people. The irony is it may never have come into being if Noubar Afeyan had not been accepted to MIT. Noubar says what he liked about the atmosphere at MIT as an international student is that the school was merit-based. "Nobody felt they had an advantage over you just because they were born in the United States and you weren't. It was a very good environment and remains so." Noubar believes being an immigrant and an entrepreneur are complementary. "What keeps you from innovating is being comfortable," he said. "If you're an immigrant, then you're used to being out of your comfort zone."⁸

⁵ "Moderna Therapeutics," 2015 Disruptor 50, CNBC.

⁶ Moderna Therapeutics Announces Transition to a Clinical Stage Company, Provides Business Update and Outlines 2016 Strategic Priorities, Press Release, Moderna Therapeutics, January 11, 2016.

⁷ Noubar Afeyan.

⁸ Ibid.

ELON MUSK, FOUNDER, SPACEX

When Elon Musk was a boy in South Africa, he enjoyed reading science fiction, building rockets and programming computers. The companies he formed in America are fulfilling some of that vision from his youth by developing new ways to power cars and to travel elsewhere in our solar system.



Elon Musk, Founder and CEO of SpaceX.

Space Exploration Technologies, known as SpaceX, is valued at \$12 billion and employs 4,000 people. It is credited with reviving manufacturing in aerospace in California. Collectively, the three companies Musk has founded or co-founded where he remains a significant shareholder (SpaceX, Tesla, and SolarCity) employ approximately 26,000 people and are worth a combined \$45 billion.⁹

While some may wish they possessed Elon Musk's wealth and fame, few would envy his tumultuous childhood. His parents divorced when he was young and he and his brother Kimbal, also successful in America, eventually chose to live with their father. Elon's father could be stern or worse. In Ashlee Vance's fascinating biography *Elon Musk*:

⁹ Calculation based on public company information as of January 1, 2016.

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Tesla, SpaceX and the Quest for a Fantastic Future, he writes, “While Elon and Kimbal declined to provide an exact recounting, they clearly experienced something awful and profound during those years with their father.”¹⁰ In addition, he was hounded by bullies starting in middle school. “For some reason, they decided that I was it, and they were going to go after me nonstop,” said Musk.”¹¹

Throughout his youth, Elon Musk decided, like many immigrants before him, that America would be the place to make his mark. At 17, Musk set off on his own to the closest place to America he could find – Canada. In his teens, he learned that a change in the law gave him Canadian citizenship through his mother’s side of the family. To earn money he worked at a series of manual labor jobs. He attended Queens College in Canada but before completing his degree came to America as an international student. Elon earned a B.A. in physics and economics at the University of Pennsylvania and a B.S. in business at Penn’s Wharton School.

Musk made his way out to Silicon Valley, gained legal authorization to work in America (he has spoken of obtaining an H-1B visa) and, with his brother, soon started Zip2, which helped businesses gain a presence on the Internet. (Musk became a U.S. citizen in 2002.)¹² Shortly after the success of Zip2, which was acquired by Compaq, Musk co-founded X.com, a company to facilitate online payments. That company merged with Confinity and later became PayPal. He left PayPal after a well-publicized corporate “coup” but remained a significant shareholder.

After turning 30, having already started two successful companies, Elon Musk chose to return to the visions of his youth – rockets and space travel. He believed that to ensure humanity would persevere no matter what the future held, mankind should establish a sustainable settlement on Mars. The only way to accomplish that would be to solve a host of technical problems, including, and perhaps most importantly, making rockets and space travel economically and commercially viable.

In 2002, he founded SpaceX and attracted top-flight aerospace talent. Failure to obtain a missile from the former Soviet Union convinced Musk a new approach was needed and eventually SpaceX built a major manufacturing facility. He started logging 20-hour days and split time as the CEO of his electric car company Tesla, regularly flying between San Francisco and Los Angeles.¹³

In 2008, SpaceX had its first successful rocket launch. Yet the company’s future was not secure. It still lacked a sufficient base of customers to support a large and expensive workforce. At the same time, Tesla had experienced delays in reaching the marketplace and also had a negative cash flow.

¹⁰ Ashlee Vance, *Elon Musk: Tesla, SpaceX and the Quest for a Fantastic Future*, (HarperCollins: New York, 2015), pp. 36-37.

¹¹ Ibid. p. 41.

¹² Tom Junod, “Elon Musk: Triumph of His Will,” *Esquire*, November 14, 2012.

¹³ Ashlee Vance.

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As the year 2008 neared its end, unbeknownst to many people, both SpaceX and Tesla were within days of running out of money. Musk faced not being able to meet payroll. He put much of his personal wealth into the two companies and raised additional funding through loans. What saved the companies? “On December 23, 2008, Space X received a shock,” writes Ashlee Vance. “People inside NASA had backed SpaceX to become a supplier for the ISS [International Space Station]. The company received \$1.6 billion as payment for twelve flights to the space station.”¹⁴

SpaceX reached an important landmark on December 22, 2015, when the company “successfully landed an unmanned rocket upright, after sending 11 satellites into orbit.” The successful mission led many broadcasts around the world. BBC reported, “Mr. Musk has said the ability to return its rockets to Earth so they can be reused and reflown would hugely reduce his company's operational costs in the growing but highly competitive private space launch industry.”¹⁵ (Blue Origin, founded by Jeff Bezos, has also landed an unmanned rocket.) SpaceX has achieved commercial stability. To date, SpaceX has at least “\$7 billion under contract for the 60 missions on manifest,” according to TechCrunch.¹⁶

There are several theories about what drives Elon Musk. Many have compared him to Steve Jobs. Musk biographer Ashlee Vance argues Musk is even more intricately involved in the day to day operations of SpaceX and Tesla than Jobs was able to devote time to at both Apple and Pixar. Young people are often advised to “find something you love to do and figure out how to get paid for it.” The simplest explanation for what drives Elon Musk may be that he has found something he loves to do.

GARRETT CAMP, CO-FOUNDER, UBER

“Consumption is the sole end and purpose of all production; and the interest of the producer ought to be attended to, only so far as it may be necessary for promoting that of the consumer,” wrote Adam Smith in *The Wealth of Nations*.¹⁷ As much as any company in recent history, Uber has exposed the gulf between economic policies crafted for the benefit of consumers and those designed to protect the interests of producers.

A service that allows consumers to hail a ride from an independent Uber driver by using an app from a smartphone has raised the hackles of taxi drivers from the West coast of the United States to the streets of Rome and beyond.

¹⁴ Ibid., p. 210.

¹⁵ “SpaceX Rocket in Historic Upright Land,” *BBC News*, December 22, 2015.

¹⁶ Drew Olanoff, “SpaceX Has Nearly a Full Uber Funding in Contracts,” *TechCrunch*, September 14, 2015.

¹⁷ Adam Smith, *The Wealth Of Nations*, Book IV Chapter VIII.

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The company has weathered taxi driver protests and government attempts at undermining the Uber model of sharing revenue with independent drivers, rather than employing a large number of drivers directly.

Despite the controversies, Uber has grown tremendously and is valued at \$51 billion. To put that number in perspective, Uber has a higher market value than United Airlines and American Airlines combined. The company directly employs approximately 900 people.¹⁸ In the United States, Uber reported 162,037 “active drivers” (completed at least four trips) as of December 2014. According to data released by Uber, “Drivers who use the app to give rides-for-hire in their personal cars are making more money as chauffeurs than professional taxi drivers do — as much as \$17 an hour in the District and Los Angeles, \$23 in San Francisco and \$30 in New York.” A survey of the drivers reported that “73 percent said they prefer a job where they choose their hours and work as their own boss.”¹⁹

Garrett Camp, an immigrant from Canada, earned a B.S. in electrical engineering and an M.S. in software engineering at the University of Calgary. In 2002, Camp co-founded StumbleUpon, a “free web-browser extension which acts as an intelligent browsing tool for discovering and sharing websites.”²⁰ He also has founded Expa, a San Francisco-based startup lab and co-founded Operators, an “iPhone app that connects you to experts to help find you what you want, when you want.”²¹

In 2009, Camp co-founded Uber with Travis Kalanick. Camp serves as chairman, while Kalanick is CEO. “When I think of Uber, it was probably a year to a year-and-a-half before the product got to where it worked, and then two years before [cofounder Travis Kalanick] started rocking it,” according to Camp. “It takes a little time to get a system up and running, and everyone forgets the first couple of years because you are toiling in obscurity. But those two years are very important because that’s when you come up with a bold idea, you see all the issues, you design the whole system, and then it starts to resonate.”²²

Similar to how Reed Hasting’s frustrations with video rental late fees helped spark the idea for Netflix, Camp’s bad experiences with taxis spawned Uber. “I basically created it because I couldn’t get a cab. And now a lot of people use it.”²³

¹⁸ All valuation totals in this report come from the *Wall Street Journal’s* Billion Dollar Startup Club at <http://graphics.wsj.com/billion-dollar-club/>. Employment numbers come from company sources.

¹⁹ Emily Badger, “Now We Know How Many Drivers Uber Has – and Have a Better Idea of What They’re Making,” *Wonkblog, Washington Post*, January 22, 2015.

²⁰ StumbleUpon.

²¹ Operators.

²² Ian Mochari, “Uber Co-Founder: 3 Ways to Tell if Your Idea is Worth Pursuing,” *Inc.*, May 20, 2014.

²³ *Ibid.*

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Table 4
Immigrant Founders and Co-Founders of America's Billion Dollar Startup Companies

Company	Immigrant Founder or Co-Founder	Product/Service	Number of Employees	Latest Company Valuation
Actifio (Waltham, MA) Founded 2009	Ash Ashutosh (India)	Data management for global enterprise customers and service providers.	350	\$1.1 Billion
AppDirect (San Francisco, CA) Founded 2009	Daniel Saks (Canada), Nicolas Desmarais (Canada)	Commerce platform for selling cloud services.	400	\$1.9 Billion
AppDynamics (San Francisco, CA) Founded 2008	Jyoti Bansal (India)	Application performance management.	900+	\$1.0 Billion
AppNexus (New York, NY) Founded 2007	Mike Nolet (Holland)	Cloud-based software for online advertising.	1,000	\$1.2 Billion
Apttus (San Mateo, CA) Founded 2012	Kirk Krappe (UK)	Software built on the Salesforce1 platform.	1,100	\$1.0 Billion
Avant (Chicago, IL) Founded 2012	Al Goldstein (Uzbekistan), John Sun (China), Paul Zhang (China)	Online consumer credit.	850	\$2.0 Billion
Bloom Energy (Sunnyvale, CA) Founded 2001	KR Sridhar (India)	Power generation.	1,200	\$2.9 Billion
Cloudera (Palo Alto, CA) Founded 2008	Amr Awadallah (Egypt)	Platform for data management and software.	1,100	\$4.1 Billion
CloudFlare (San Francisco, CA) Founded 2009	Michelle Zatlyn (Canada)	Global network for websites.	225	\$1.0 Billion
ContextLogic (Wish) (San Francisco, CA) Founded 2012	Peter Szulczewski (Canada), Danny Zhang (Canada)	Developer of the mobile shopping app Wish.	n/a	\$3.0 Billion
Credit Karma (San Francisco, CA) Founded 2007	Kenneth Lin (China)	Consumer finance and credit.	400	\$3.5 Billion
Eventbrite (San Francisco, CA) Founded 2009	Renaud Visage (France)	Self-service ticketing platform for events.	500	\$1.0 Billion
Evernote (Redwood City, CA) Founded 2004)	Stepan Pachikov (Azerbaijan)	Apps and software for organizing information across platforms.	400	\$1.0 Billion
FanDuel (New York, NY) Founded 2011	Nigel Eccles (UK), Tom Griffiths (UK), Lesley Eccles (UK)	Fantasy sports.	159	\$1.3 Billion
Gusto (San Francisco, CA) Founded 2011	Tomer London (Israel)	Automates human resources functions, including payroll.	300	\$1.1 Billion
The Honest Company (Santa Monica, CA) Founded 2011	Brian Lee (South Korea)	Maker of eco-friendly baby, body and cleaning products.	517	\$1.7 Billion

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**Table 4 (cont.)
Immigrant Founders and Co-Founders of America's Billion Dollar Startup Companies**

Company	Immigrant Founder or Co-Founder	Product/Service	Number of Employees	Latest Company Valuation
Houzz (Palo Alto, CA) Founded 2009	Adi Tatarko (Israel), Alon Cohen (Israel)	Platform for home remodeling and design.	800	\$2.3 Billion
Infinidat (Needham, MA) Founded 2010	Moshe Yanai (Israel)	Data protection and storage.	350	\$1.2 Billion
Instacart (San Francisco, CA) Founded 2012	Apoorva Mehta (India)	Internet-based grocery delivery.	300+	\$2.0 Billion
Jasper (Santa Clara, CA) Founded 2004	Jahangir Mohammed (India)	Cloud-based platform for the Internet.	425	\$1.4 Billion
Jawbone (San Francisco, CA) Founded 1999	Alexander Asseily (UK)	Maker of wearable, consumer technology products.	395	\$3.3 Billion
Medallia (Palo Alto, CA) Founded 2000	Borge Hald (Norway)	Software to help companies better serve customers.	850	\$1.3 Billion
Mode Media (Brisbane, CA) Founded 2004	Samir Arora (India) Raj Narayan (India) Fernando Ruarte (Argentina)	Web publisher offering advertisers targeted audiences.	240	\$1.0 Billion
Moderna Therapeutics (Cambridge, MA) Founded 2009	Noubar Afeyan (Armenia), Derrick Rossi (Canada)	Developer of drugs made of Messenger RNA.	326	\$3.0 Billion
MuleSoft (San Francisco, CA) Founded 2003	Ross Mason (UK)	Integration platform for connecting applications in the cloud and on-premise.	600	\$1.5 Billion
Mu Sigma (Northbrook, IL) Founded 2004	Dhiraj Rajaram (India)	Provider of Big Data and analytics solutions for companies.	3,500	\$1.5 Billion
Nutanix (San Jose, CA) Founded 2004	Dheeraj Pandey (India), Ajeet Singh (India), Mohit Aron (India)	Provider of solutions for enterprise datacenter infrastructure.	864	\$2.0 Billion
Oscar Health Insurance (New York, NY) Founded 2012	Mario Schlosser (Germany)	Health insurance.	415	\$1.7 Billion
Palantir Technologies (Palo Alto, CA) Founded 2004	Peter Thiel (Germany)	Software to connect data, technologies, people and environments.	2,000	\$20 Billion
Proteus Digital Health (Redwood City, CA) Founded 2001	Andrew Thompson (UK)	Products and services for managing patient health.	300	\$1.1 Billion

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**Table 4 (cont.)
Immigrant Founders and Co-Founders of America's Billion Dollar Startup Companies**

Company	Immigrant Founder or Co-Founder	Product/Service	Number of Employees	Latest Company Valuation
Razer (Irvine, CA) Founded 2005	Min-Liang Tan (Singapore)	Products directed at gamers.	600+	\$1.0 Billion
SimpliVity (Westborough, MA) Founded 2009	Doron Kempel (Israel)	Data protection and storage.	750	\$1.0 Billion
Slack Technologies (San Francisco, CA) Founded 2009	Stewart Butterfield (Canada), Serguei Mourachov (Russia), Cal Henderson (UK)	Application for team communication.	300+	\$2.8 Billion
SpaceX (Hawthorne, CA) Founded 2002	Elon Musk (South Africa)	Designs, manufactures and launches rockets and spacecraft.	4,000	\$12 Billion
Sprinklr (New York, NY) Founded 2011	Ragy Thomas (India)	Social media software platform.	325	\$1.2 Billion
Stripe (San Francisco, CA) Founded 2009	John Collison (Ireland), Patrick Collison (Ireland)	Digital payments company.	380	\$5.0 Billion
Tango (Mountain View, CA) Founded 2009	Uri Raz (Israel), Eric Setton (France)	Mobile messaging service.	260	\$1.0 Billion
Tanium (Emeryville, CA) Founded 2007	David Hindawi (Iraq)	IT security and systems management.	300+	\$3.5 Billion
Uber Technologies (San Francisco, CA) Founded 2009	Garrett Camp (Canada)	Transportation network company.	900	\$51 Billion
Udacity (Palo Alto, CA) Founded 2011	Sebastian Thrun (Germany)	Online education company.	170	\$1.0 Billion
WeWork (New York, NY) Founded 2012	Adam Neumann (Israel)	Shared workspaces and services for individuals and businesses.	1,200	\$10 Billion
Zenefits (San Francisco, CA) Founded 2013	Laks Srinani (India)	Helps companies manage and automate human resources functions.	1,465	\$4.5 Billion
ZocDoc (New York, NY) Founded 2007	Oliver Kharraz (Germany)	Online scheduling service for medical care.	600	\$1.8 Billion
Zscaler (San Jose, CA) Founded 2007	Jay Caudhry (India)	Computer and network security.	600	\$1.0 Billion

Source: National Foundation for American Policy, company-provided information, company websites, CrunchBase, LinkedIn, *Wall Street Journal*. Information as January 1, 2016. Employee numbers are global but vast majority in the United States. Valuations from "Billion Dollar Startup Club," *Wall Street Journal* taken at various dates prior to January 1, 2016.

JYOTI BANSAL, FOUNDER, APPDYNAMICS*Jyoti Bansal*

AppDynamics has likely made your life easier, even if you didn't know it. AppDynamics works with HBO to ensure the streaming of original programming performs smoothly for HBO's online viewers. AppDynamics helps 8 of the 10 top banks in the U.S. and Europe make the online banking experience satisfying for their customers.

AppDynamics describes its service as the equivalent of a 24 hour/7 days a week MRI for an organization's website, picking up small problems before they debilitate a business and anger consumers. "AppDynamics is a fully realized website monitoring service for businesses, and a leader in both the website monitoring and application performance monitoring (APM) spaces. It's our Editors' Choice for enterprises," declared *PC Magazine* in an extensive review of the company.²⁴

²⁴ "AppDynamics," *PC Magazine*, October 14, 2015.

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AppDynamics is not for all companies with a website. “AppDynamics is designed for extremely large environments,” explains *PC Magazine*. “For small businesses managing maybe a single website and a mobile application, it's like using a very expensive rocket ship to drive down the block. But, if you're an enterprise organization managing multiple interconnected applications and websites, AppDynamics is worth the money.”²⁵

Jyoti Bansal graduated from India's top engineering school and, like many immigrant entrepreneurs, believed America was the best place for him to build his career. “I wanted to come to Silicon Valley,” said Jyoti. “I was fascinated with the concept of startups and creation, and wanted to work for a startup company in America.”²⁶

He arrived in America on July 4, 2000. He received an H-1B visa, which proved to be both a blessing and a curse. It was a blessing because an H-1B visa is, in practice, typically the only way a foreign national can work long-term in America. It was a curse because individuals on H-1Bs are generally unable to start a company. And Jyoti worked for startup companies but he also wanted to start his own company.

“I waited 7 years for my employment-based green card and I wanted to leave my job and start a new company but couldn't,” he said. “What is most frustrating about the green card process is you have no control over a major part of your life. I have friends who became frustrated with the uncertainty and after years of waiting they finally left the United States.”²⁷

In 2007, Jyoti received an employment authorization document (EAD) as part of the green card process. He left his employer and started AppDynamics. “America has everything we need to create great companies here. We have great openness,” said Jyoti. “We have a good legal structure and access to capital. But in technology it's all about talent. We need an immigration system that allows people to keep coming here.”²⁸

Jyoti Bansal founded AppDynamics in 2008 and today the company employs over 900 people and is valued at \$1.9 billion. After serving as CEO for many years he recently changed roles to become Executive Chairman of the Board and Chief Strategist. Jyoti has received more than 30 patents related to complex software systems. While he is pleased that AppDynamics has grown so rapidly the hope is for the company to keep growing. When asked about his future, Jyoti said, “I'm not done creating companies. I want to keep creating companies and solving problems for the rest of my life.”²⁹

²⁵ Ibid.

²⁶ Interview with Jyoti Bansal, January 22, 2016.

²⁷ Ibid.

²⁸ Ibid.

²⁹ Ibid.

AMR AWADALLAH, CO-FOUNDER, CLUDERA

A ride from the airport changed Amr Awadallah's life. Amr earned a B.A. and M.A. in electrical engineering from Cairo University in Egypt. He applied for Ph.D. programs abroad and was accepted to Stanford. He intended to follow in his father's footsteps and return to Egypt to become a professor.

"Coming in from the airport, I saw the headquarters for HP and Oracle, and just seeing them excited me about the possibilities of business," said Amr. "And Stanford inspires you with the culture of entrepreneurship, the courses, the speakers, and how to start a company and raise money. It changed me."³⁰

Amr Awadallah

Amr left Stanford before completing his Ph.D. and was fortunate enough to be eligible for a J-1 visa, which allowed him to work for two years and start a company called VivaSmart, which was acquired by Yahoo!. He worked for Yahoo! for 8 years and finished his Ph.D. in electrical engineering. Despite his own Ph.D., Amr said, "When it comes to working for companies, getting a Ph.D. can be a mistake. Companies are not really that interested in Ph.D.s. One should get a Ph.D. to teach or as an important personal achievement but not for business."³¹

In 2008, Amr started Cloudera with three co-founders and today serves as chief technology officer. The four founders raised important initial capital from Accel. Cloudera's leadership feels less pressure to go public, according to Amr, because it has raised \$670 million in equity funding and its largest investor is Intel. The company has grown rapidly, employing 1,100 people with a valuation of \$4.1 billion.

Amr summarizes Cloudera as follows: "The company sells software that allows organizations to profit from their data." Based in Palo Alto, California, Cloudera describes itself as delivering "the modern platform for data management and analytics to help you get value from all your data" and Cloudera Enterprise is called "the world's most popular Apache Hadoop solution."³² Apache Hadoop is an open-source software that "allows for the distributed processing of large data sets across clusters of computers using simple programming models. It is designed to scale up from single servers to thousands of machines, each offering local computation and storage."³³

³⁰ Interview with Amr Awadallah, January 22, 2016.

³¹ Ibid.

³² Cloudera.

³³ <http://hadoop.apache.org/>.

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The idea is to help organizations use software to manage and analyze data in the most productive way possible. Cloudera helps governments use data to guard against cyberattacks, prevent terrorist attacks and predict veteran suicidality. Medical researchers have used Cloudera to learn more about the human genome and predict disease patterns. Cloudera has also helped agricultural companies to use data more effectively to increase crop yields.³⁴

The demand for tech talent is “off the charts,” notes Amr, and the pool of candidates in the U.S. is “very limited,” particularly those with skills related to big data and analysis. The inability to find enough tech talent in the United States led Cloudera to open an engineering office in Budapest. Since Hungary is a member of the European Union (EU), Budapest gives the company important access to the EU workforce. Under European Union rules, any EU citizen can work in any EU country without the need for immigration processing.³⁵

Fast-growing companies and startup companies more generally need to move quickly when hiring. The process for new H-1B visas is so uncertain that Cloudera rarely petitions for new H-1Bs, said Amr, since it can take 6 to 9 months even if an employer secures a visa before the quota is reached. The company will sometimes hire a foreign national on an existing H-1B visa, since that can usually be done without such a long wait.

When asked what he is most proud of in his career, Amr points to the large number of employees working for the company in California, today totaling over 900. “When we can hire engineers, we can create many more jobs for Americans. And when I look out on the company I see it’s not just the employees and our customers who benefit from Cloudera but all the families of those employees. That’s what makes me the most proud about what we’ve created.”³⁶

DORON KEMPEL, FOUNDER, SIMPLIVITY

Doron Kempel is no doubt the only CEO in America who trained to assassinate Saddam Hussein. Today, the Israeli-born entrepreneur is building the customer base of SimpliVity, which he founded in 2009. The company, based in Westborough, Massachusetts, is valued at \$1 billion and employs 750 people. “In 1992, a decade before the U.S. invasion of Iraq, Kempel led Israel’s secret mission to kill Saddam Hussein and alter the course of history,” according to Nathan Vardi of *Forbes*. “Instead, five soldiers died in the Israeli desert in the final rehearsal for the mission, and the lives of the survivors were upended forever. Including Kempel’s. The leader wound up in the U.S., where he now builds technology companies backed by the biggest names in venture capital.”³⁷

³⁴ Amr Awadallah.

³⁵ Ibid.

³⁶ Ibid.

³⁷ Nathan Vardi, “The Tech Innovator Who Almost Killed Saddam Hussein,” *Forbes*, June 10, 2013.

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Kempel received degrees in law and philosophy from Tel Aviv University. In America, he earned an MBA at Harvard and began his career working for a company later purchased by the data storage multinational EMC. After leaving EMC, he started Diligent Technologies, which he sold in 2008 to IBM. “After an obligatory stint at IBM Kempel became excited about the idea that corporations would soon want to eliminate the expensive sprawl that had developed in their data centers – the deployment of dozens of individual single-purpose appliances and products sold by an assortment of vendors dealing with everything from storage to data transfer – and that the boom in software that allows multiple operating systems to run on one machine would make it possible,” according to *Forbes*.³⁸

He wondered why it wasn’t possible to have just one box rather than multiple appliances for data storage and related information technology needs. Tech professionals he spoke with tried to warn him off the idea. “But they could not explain to me why this could not be done,” said Kempel. After assembling his team, he saw enough promise to start a new company. He brought together some experts to tackle the problem and within three months they figured out enough that Kempel decided to move forward.³⁹

“SimpliVity makes an all-in-one hardware box that combines server, storage and networking into one device,” explains *Business Insider*.⁴⁰ While today the company is popular with customers and investors, it was not a quick road to success for Kempel. “He set up SimpliVity in Westborough, Mass. and operated in secret for three years,” notes *Forbes*. “He didn’t even tell prospective hires what SimpliVity aimed to do until after they had agreed to join the company and signed a nondisclosure agreement . . . Working out of an office park situated where the Massachusetts Turnpike meets Route 495, Kempel devised the OmniCube, SimpliVity’s main product.”⁴¹

One of SimpliVity’s main competitors is Nutanix, based in San Jose, California. Nutanix was founded by three immigrants from India: Dheeraj Pandey, Ajeet Singh, and Mohit Aron. Nutanix is valued at \$2 billion and has over 800 employees. In December 2015, Nutanix filed paperwork for an initial public offering (IPO). In response, Doron Kempel said, “The hyper-converged infrastructure industry has seen unprecedented growth over the last couple years, and Nutanix’s IPO filing is yet another point of validation for the exploding market.” However, Kempel added that SimpliVity is not yet ready to file for an IPO but would “consider a public offering when the timing is right.”⁴²

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Julie Bort, “The CEO of this Hot Enterprise Startup Once Tried to Kill Saddam Hussein,” *Business Insider*, November 19, 2013.

⁴¹ *Forbes*, June 10, 2013.

⁴² Kevin McLaughlin, “SimpliVity CEO to Nutanix: Congrats on the IPO Filing, We’ll Follow Suit ‘When Timing is Right.’” CRN, December 24, 2015.

MICHELLE ZATLYN, CO-FOUNDER, CLOUDFLARE*Michelle Zatlyn*

When Michelle Zatlyn was growing up as a girl in Saskatchewan it was not obvious she would someday co-found a \$1 billion company in America. After attending college in Canada, the time came for a decision, one that few people make casually – in which country would she live?

“My older sister had moved to the U.S. and was successful and I decided I wanted to come to America as well,” said Michelle.⁴³ She found a prospective employer but could not obtain a work visa and had to return to Canada. As fate would have it, that turned out to be a blessing in disguise.

⁴³ Interview with Michelle Zatlyn, February 2, 2016.

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Michelle's second attempt to make it to America proved more successful – and it changed the course of her life. She was accepted to Harvard Business School and it was there she met Matthew Prince, one of her future co-founders.

Matthew and a friend, Lee Holloway, who became the third co-founder of CloudFlare, had established an entity called Project Honey Pot, an “open source initiative to track abuse, fraud, and other malicious behavior that occurs online.”⁴⁴ To Michelle's ears, this was a noble, public-spirited endeavor that involved thousands of people helping to stop bad guys on the web but she didn't see any commercial prospects for it. However, as she and Matthew discussed it, she thought there was a potential for a company that harnessed the power of the crowd to help individual and company website owners.

Michelle and Matthew worked on the idea while at Harvard. Following graduation, Michelle obtained 12 months of work authorization under Optional Practical Training (OPT). “The best thing the U.S. government has done on immigration is OPT to allow international students a chance to stay and work for a time after graduation,” she said. “It allowed me to work with Matthew on the business plan that helped create the company.”⁴⁵

After Matthew and Michelle graduated from Harvard, they packed up a U-Haul, driven by Matthew's mother, and headed to Silicon Valley. They joined with Lee Holloway to create CloudFlare and began raising money from venture capital firms. But Michelle was not finished with the U.S. immigration system, which contains no mechanism to stay in America as a founder of a company. The only way to stay in America would be for the company to apply for an H-1B visa on Michelle's behalf.

At first her case was not approved and additional evidence was requested to support the application. “It was not fun,” recalls Michelle. The company submitted letters of recommendations, including from investors, and ultimately the H-1B visa was approved. “If I hadn't obtained the visa I would have gone back to Canada and tried to work on CloudFlare from there,” she said. “If that had happened, CloudFlare would not be where it is today. It would have clearly affected our development.”⁴⁶

One reason for that is CloudFlare, like other companies with three co-founders, started as a proverbial three-legged stool – remove one leg from the stool and it no longer functions as intended.⁴⁷ Matthew is the company's CEO and

⁴⁴ Project Honey Pot.

⁴⁵ Michelle Zatlyn.

⁴⁶ Ibid.

⁴⁷ Glaukos is another good example of this phenomenon, with different founders bringing different skills to the table.

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strategist. Lee is the technical co-founder and lead engineer. Michelle is head of user experience. Her job is “Translating the technical capabilities of the company into something customers understand.”⁴⁸

It would be hard to argue with the team’s success. In addition to employing 225 people, which Michelle says could potentially grow to 400 over the next 12 months, the company has developed a large customer base since its founding in 2009. There are 4 million websites now in the CloudFlare network, with an average of 7,000 new sites added each day.

What does CloudFlare do for these websites? CloudFlare helps websites with traffic and security, with a sliding scale of services that includes a free option. Many websites are able to operate fine with the free service. Others pay \$20, while larger customers pay hundreds or thousands of dollars a month depending on the range and complexity of their needs. Customers are also able to add “third party services,” such as Google AdWords, with one click, rather than individuals needing to add JavaScript themselves.

“Once your website is a part of the CloudFlare community, its web traffic is routed through our intelligent global network,” according to CloudFlare’s description of its service. “We automatically optimize the delivery of your web pages so your visitors get the fastest page load times and best performance. We also block threats and limit abusive bots and crawlers from wasting your bandwidth and server resources. The result: CloudFlare-powered websites see a significant improvement in performance and a decrease in spam and other attacks.”⁴⁹

Michelle believes the diverse backgrounds of CloudFlare’s founders has contributed to the company’s success. “Diversity is ideal when solving hard problems because people who are different look at problems in different ways, whether it’s their gender, where they’re from, or other characteristics,” said Michelle. “Combine that with trust and a shared vision and you’re likely to have success.”⁵⁰ Given that CloudFlare is now valued at \$1 billion it is apparent that Michelle and her co-founders have discovered a formula for success.

⁴⁸ Michelle Zatlyn.

⁴⁹ CloudFlare.

⁵⁰ Ibid.

BRIAN LEE, CO-FOUNDER, THE HONEST COMPANY

Most people would be satisfied with starting one high-profile company. Brian Lee has started three. Born in South Korea and brought here to America as a child, Lee graduated from UCLA with a B.A. in economics and business and later earned his J.D. from UCLA School of Law.

In 2008, he combined his law background with tech and business savvy to co-found LegalZoom, an online legal services company aimed at consumers, with high-profile L.A. attorney Robert Shapiro. Lee followed up LegalZoom by joining forces with Kim Kardashian to start ShoeDazzle, an online subscription service for shoes and other fashion items.

Lee's current venture may be his biggest. When actress Jessica Alba was pregnant, she used a baby detergent to wash the clothes she had received as gifts from a baby shower. The detergent caused Alba to "break out in ugly red welts," which also happened to her sometimes as a child.⁵¹

Alba researched potentially safer alternatives for children and reached out to Christopher Gavigan, who ran a nonprofit organization. Alba's husband suggested she meet with Brian Lee. At first Lee, in the middle of launching ShoeDazzle, did not come on board with Alba. But two years later, in 2011, she approached Lee and he agreed to work with Alba and Gavigan and to bring in a fourth co-founder, Sean Kane, who had Internet commerce experience. They called the startup The Honest Company and Lee serves as CEO.

Less than 5 years later, The Honest Company is valued at \$1.7 billion and employs 517 people. It specializes in selling products considered non-toxic to consumers. Lee's track record is credited with helping the company raise \$222 million in equity funding.

After bringing the family to America, Lee's South Korean immigrant father worked in a furniture factory at first but later started his one steel import company. Before Brian Lee co-founded three companies and a venture capital firm BAM Ventures, his first entrepreneurial venture was selling candy to other children when he was 8 years old. "This is my advice to entrepreneurs," said Lee. "It's easy to give up, but believe in your ideas."⁵²

⁵¹ Clare O'Connor, "How Jessica Alba Built a \$1 Billion Company, and \$200 Million Fortune, Selling Parents Peace of Mind," *Forbes*, May 27, 2015.

⁵² Parija Kavilanz, "Kim Kardashian and Jessica Alba Power His Startups," *CNNMoney*, November 20, 2015.

PATRICK AND JOHN COLLISON, CO-FOUNDERS, STRIPE

It would be fair to call Patrick and John Collison, born in Ireland, child prodigies. Patrick left high school a year early after being accepted as an international student at MIT, while his brother John received a record-setting score on the Irish public school's Leaving Certification Exam. And, for good measure, Patrick received the Young Scientist of the Year Award at 16 years old.⁵³

When a business opportunity arose, Patrick, like a number of successful young entrepreneurs before him, left college. He and his brother started a company that became Auctomatic, an auction management system for online sellers, and worked with the Y Combinator, a startup accelerator in Silicon Valley. By the time he was 19, Patrick (and John) sold Auctomatic to Live Current Media, a Canadian company.

After Patrick served as director of product engineering at Live Current Media and John studied at Harvard, the two brothers developed the concept that became Stripe. When a business sets up a website with an e-commerce element, the developers want a payment system that is easy to integrate with the website and user-friendly for the business. "Essentially, Stripe is a straightforward, lightweight API that developers can embed on their websites to accept payments," notes *Fast Company*. "The Stripe Javascript enables developers to create simple payment forms, without the hassle of contracts or setting up a merchant account . . . Once the account is activated, Stripe provides a clean dashboard for developers and merchants to track everything from payments to customers to transfers to coupons."⁵⁴

Founded in 2009, Stripe is valued at \$5 billion and has grown to employ 380 people. In addition to Patrick and John, many key employees at Stripe are immigrants. Michael Villar, born in Belgium, is a user interface developer working at the company's office in San Francisco. Villar helped develop the product design for the Stripe dashboard on iPhones. This is important to the company and its customers, as Villar explains, "Because of the service it provides, Stripe didn't start as a mobile-first company, like many other startups these days." He notes that while the web dashboard "makes it easy for everyone on a team to track and manage subscriptions, payments, customers, and transfers" it was really designed "for larger screens and as such, is barely usable on mobile."⁵⁵ The new design helped launch Stripe into the mobile business space.

⁵³ Derek Andersen, "The Collison Brothers and Story Behind the Founding of Stripe," *Startup Grind*, February 9, 2012.

⁵⁴ Austin Carr, "Inside Stripe, the PayPal Competitor Backed by PayPal Founders Peter Thiel, Elon Musk, Fast Company," *Fast Company*, February 1, 2012.

⁵⁵ Michael Villar, "Exploring the Product Design of the Stripe Dashboard for iPhone, Medium.com, October 19, 2015.

JAHANGIR MOHAMMED, FOUNDER, JASPER TECHNOLOGIES

“The Internet of Things (IoT) is a computing concept that describes a future where everyday physical objects will be connected to the Internet and be able to identify themselves to other devices.”⁵⁶ Some people have heard of the “Internet of Things.” Jahangir Mohammed figured out how to provide a way for companies to make money from it.

“The Internet of Things is now a familiar phrase. But no one was using the term when Jahangir Mohammed founded Jasper Technologies Inc., even though the Silicon Valley entrepreneur was predicting that all kinds of everyday devices were going to start exchanging data,” according to the *Wall Street Journal*. “He has gradually been proven right. Companies are using wireless technologies to help monitor things like soft drink machines, office copiers, manufacturing tools, jet engines and home security systems. Jasper developed a cloud service that customers log into to help manage the various interactions and handle any necessary billing arrangements with cellular carriers.”⁵⁷

Born in India, Jahangir Mohammed has a bachelor of engineering from Coimbatore Institute of Technology and an M.S. in electrical engineering from Concordia University in Canada. He worked at AT&T’s Bell Labs and founded Kineto Wireless in California in 2001. Jahangir founded Jasper Technologies in 2004. The company, based in Santa Clara, California, is valued at \$1.4 billion and employs 425 people.

ADI TATARKO AND ALON COHEN, CO-FOUNDERS, HOUZZ

Husband and wife business startups are not that common. Ones as successful as Houzz are even rarer. Houzz is a platform for home remodeling, decorating and design. “If you’re a homeowner looking for dreamy new ideas for your kitchen remodel or if you’re a designer wanting to drum up business, Houzz may well be your happy place,” notes George Anders of *Forbes*. “Each month Houzz draws more than 25 million visitors to its endlessly shoppable photo galleries, more traffic than retailing giants such as Nordstrom, Gap and Staples enjoy.”⁵⁸

Adi Tatarko serves as CEO and her husband Alon Cohen is president. Australian-born Senior Global Business Development Lead Bryan Lip has helped manage the company’s expansion. While Houzz’s headquarters are in Palo Alto, California, it also has offices in London, Berlin, Tokyo and other cities.

“In 2009, my husband Alon Cohen and I started renovating a 1950s ranch home we had just bought in Palo Alto, CA,” explains Adi Tatarko. “We were excited for the renovation, and had big dreams for our home and what it would

⁵⁶ “Internet of Things,” Technopedia.

⁵⁷ “The Billion Dollar Startup Club,” *Wall Street Journal*.

⁵⁸ George Anders, “Houzz’s Founders Have Become Tech’s Newest Power Couple,” *Forbes*, October 15, 2014.

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be like to renovate it together. Unfortunately, we quickly found the process to be incredibly difficult and frustrating. We had a hard time finding good resources and inspiration to help us articulate a vision for our home and selecting the right professionals to make it a reality.”⁵⁹

Adi was surprised to find how little of what she needed on design and home remodeling could be found online. “We relied on the clumsy process of clipping pictures out of magazines and on professional referrals from friends and family who didn’t necessarily have the same vision or needs as we did,” she writes. “We were so frustrated with the process that Alon and I decided to create Houzz as a side-project to help us through our remodel. We thought that if we could bring homeowners like ourselves together with professionals in one community, we could address many of the challenges we were experiencing.”⁶⁰

After an acquaintance told her of a relative that had recommended Houzz, “We quickly realized that Houzz could be much more than a personal side project. So, in the fall of 2010, Alon and I both left our jobs to dedicate ourselves to building Houzz full time.”⁶¹ Founded in 2009 by Israeli immigrants Adi Tatarko and Alon Cohen, the company today is valued at \$2.4 billion and has 800 employees.

The success of Houzz illustrates that a good idea may be less important than the ability to implement that idea. Adi Tatarko and Alon Cohen were not a random married couple seeking remodeling advice. Alon earned a bachelor’s degree in mathematics and computer science, as well as an MBA from Tel Aviv University. He held an important position at eBay, senior director of engineering. Adi had worked for an investment firm and started a software company with her husband Alon. The husband and wife team identified a need not being met in the marketplace – and possessed the skills to turn their idea into a multi-billion dollar company.

ASH ASHUTOSH, FOUNDER/CO-FOUNDER, ACTIFIO

Ash Ashutosh came to America as an international student and earned a degree in electrical engineering and a master’s degree in computer science at Penn State. He worked at LSI and Intergraph before becoming senior vice president at StorageNetworks, which provided storage services. He founded two companies that were later acquired by bigger companies, Serano Systems, which was purchased in 1999, and AppliQ, which HP bought in 2005. Ash stayed on as vice president and chief technologist for HP Storage but left and became a partner at the venture capital firm Greylock Partners.

⁵⁹ Adi Tatarko, “How I Did It: Adi Tatarko, Co-Founder & CEO of Houzz, MariaShriver.com, September 25, 2013.

⁶⁰ Ibid.

⁶¹ Ibid.

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It was from his perch at Greylock that he saw an opportunity in the marketplace, one that took advantage of his years of experience in data storage. “We started looking at opportunities to figure out what’s the new stuff that’s going to happen,” said Ash. “The cloud was just starting to form. This whole cloud, virtualized IT was beginning to happen.”⁶²

In 2009, Ash founded Actifio, which is based in Waltham, Massachusetts. According to the company, Actifio’s “copy data virtualization decouples data from infrastructure, enabling dramatic improvements in business resiliency, agility, and access to the cloud.”⁶³

Ash has said the key is not worry about a company’s valuation. However, today Actifio is valued at over \$1 billion with 350 employees. “It’s not about the \$300 million or billion-dollar valuation. We are focused on getting the right feedback from the users and keeping the customers absolutely delighted.” To date, the company reports it has 600 customers in 36 countries.⁶⁴

MIN-LIANG TAN, CO-FOUNDER, RAZER

PC Magazine named the Razer Blade Stealth the “Best Gaming Laptop” of 2016. “When you’re ready to play, pair it with Razer’s accompanying external graphics bay, the Core, and you get a gaming desktop that can rip through *Fallout 4* without a hiccup,” writes Ben Radding. “And Razer’s Chroma lighting technology, capable of 16.8 million customizable color options, adds to the fun.”⁶⁵

Min-Liang Tan, born in Singapore, and Robert Krakoff started Razer in 2005.⁶⁶ “Razer began in a tiny shared office of gamers, with a mission to create high quality products designed solely to meet the demanding needs of gamers like themselves,” according to the company’s website. While the company’s headquarters is in Irvine, California, Razer has three offices in the United States, as well as offices in China, Germany, Taiwan, Singapore and South Korea.⁶⁷

“Razer has an almost ‘cult status’ brand image that it has built up,” according to video game analyst Peter Warman. “What also sets it apart from most competitors is the range of products that includes both console and PC peripherals, as well as gaming laptops.” Min Liang-Tan says that producing both hardware and software has been crucial to the company’s success. “While other companies either sell hardware or make software, we do both,” said

⁶² David Harris, “Executive Profile: Ash Ashutosh of Actifio,” *Boston Business Journal*, August 15, 2014.

⁶³ Actifio.

⁶⁴ *The Wall Street Journal*, “The Billion Dollar Startup Club.”

⁶⁵ Ben Radding, “Best Gaming Laptop,” from “The Best of CES 2016,” *PC Magazine*, January 8, 2016.

⁶⁶ Razer. Other sources list the company’s founding as earlier.

⁶⁷ *Ibid.*

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Tan says. “If you go on Facebook or Twitter or WeChat we are the world’s leading lifestyle brand for gamers, and gaming has become a larger subculture over the years”⁶⁸

Min-Liang Tan serves as Razer’s CEO and has a unique background for the chief executive of a tech company. Before co-founding Razer he was an attorney specializing in intellectual property and technology law in Singapore and received his law degree at the National University of Singapore. “I’ve always been a gamer first up and a lawyer second,” said Tan. “While I enjoyed being a lawyer, there was always something inside of me that wanted to go out and do something different.” Today, Razer is valued at \$1 billion and employs more than 600 people. It seems to have been a good decision.⁶⁹

CONCLUSION

Entrepreneurs are the lifeblood of a market economy. But startup companies do not happen everywhere or by luck. Entrepreneurs need a legal structure and access to capital and workers to take an idea and make it a flourishing reality. In the case of individuals not born in the United States, they also need immigration laws that allow them to work in the United States legally and hire other foreign-born individuals with technical expertise to help them grow.

For example, requiring that to obtain an H-1B visa anyone with a bachelor’s or master’s degrees must first work for 10 years out of the United States, as mandated in S. 2394, a bill by Senators Ted Cruz (R-TX) and Jeff Sessions (R-AL), would have guaranteed that almost none of the billion dollar startup companies with an immigrant founder would have been started in the United States. AppDynamics founder Jyoti Bansal explains that America would lose many talented people forever if they were required to be outside the country for 10 years, since by their mid-thirties people would have already established careers and families in other nations.⁷⁰ Cloudera co-founder Amr Awadallah points out if one wants to fuel talent in the private sector it makes little sense to favor those with Ph.D.s over those with a bachelor or master’s degree, since few tech companies find a Ph.D. necessary for their employees.⁷¹

Even measures less restrictive could present problems. For example, a “points-based system” – awarding points to those who have a high degree of education as a way to admit immigrants – would probably exclude many individuals with good ideas but who possess a bachelor’s degree or less. In fact, it is likely the founders of a number of today’s most valuable billion dollar startups, such as SpaceX and Stripe, would not have achieved enough “points” to immigrate to America.

⁶⁸ John Gaudiosi, “This Gaming Company is Worth \$1 Billion and You’ve Probably Never Heard of It,” *Fortune*, April 6, 2015.

⁶⁹ “5 Questions With Razer CEO,” CNBC.com, February 23, 2011.

⁷⁰ Interview with Jyoti Bansal.

⁷¹ Interview with Amr Awadallah.

Immigrants and Billion Dollar Startups

The achievements of the immigrant entrepreneurs cited in this report are impressive. The job creation generated by their businesses has benefited tens of thousands of Americans, while the products and services produced by these immigrant-founded companies have been enjoyed by millions of American consumers. The research shows immigrants continue to provide many benefits to our country and their successes illustrate that America remains a land of opportunity.

APPENDIX

Table 5
Immigrant Key Member of Management or Product Development Team in U.S. Billion Dollar Startups

Company	Industry	Immigrant Key Member of Management or Product Development Team
Actifio	Data Storage and Management	CEO, Sr. V.P. of Global Services and Customer Success
Adaptive Biotechnologies	Biotechnology	Sr. VP, Innovation
AppDirect	Cloud Software and Platform	Co-CEO
AppDynamics	Software, Enterprise Analytics	Ex. Chairman, Chief Technology Officer
AppNexus	Advertising, Software	President, CIO
Apttus	Sales, Software	CEO, President, CTO
Automattic	Software, Web Development	Product Experience Director
Avant	Online Lending	CEO, CTO, Chief Credit Officer
Bloom Energy	Energy	CEO, Chief Technology Officer
Cloudera	Cloud Software, Data Analysis	Chief Technology Officer
CloudFlare	Cloud Software, Web Hosting	Head of User Experience
ContextLogic (Wish)	Online retail	CEO, CTO
Coupa Software	Software	V.P., Engineering
Credit Karma	Online Financial Services	CEO
Deem	E-Commerce Network	Chief Technology Officer
DocuSign	Software	Chief Operating Officer
Dropbox	Software	V.P., Engineering
Eventbrite	Software	Chief Technology Officer
Evernote	Software	V.P. of Research & Development
FanDuel	Fantasy Sports	CEO, E.V.P. of Marketing, V.P. Product
Gusto	Human Resources	Chief Product Officer
The Honest Company	Retail	CEO
Houzz	Remodeling/Home Platform	CEO, President, Senior Global Business Development Lead
InsideSales.com	Sales, Software	Sr. V.P., Channel and Alliances
Instacart	Software	CEO, VP Business Development & Strategy
Infinidat	Software	CEO
Intarcia Therapeutics	Medical	V.P., Global Regulatory Affairs and Quality
Jasper	Software	CEO, Chief Technology Officer
Jawbone	Software	Chief Creative Officer
Lookout	Software	V.P. of Products, V.P. of Platform Products

Immigrants and Billion Dollar Startups

Table 5 (cont.)
Immigrant Key Member of Management or Product Development Team in U.S. Billion Dollar Startups

Company	Industry	Immigrant Key Member of Management or Product Development Team
Magic Leap	Software	Exec. V.P. of Software Engineering, Chief Business Officer
MarkLogic	Software	Sr. V.P of Engineering
Medallia	Software	CEO, V.P. Engineering and Operations
Mode Media	Medical	CEO, CTO, Sr. V.P., Consumer Products Engineering
Moderna Therapeutics	Medical	CEO, Chief Medical Officer
MongoDB	Software	President/CEO
MuleSoft	Software	VP Engineering, VP, Product Strategy, CTO
Mu Sigma	Software	CEO, Head of Products & Strategy
Nutanix	Software	CEO, Sr. V.P. of Engineering
Okta	Software	CTO/Sr. V.P. of Engineering
Oscar Health Insurance	Insurance	CEO
Palantir Technologies	Software	Director of Forward Deployed Engineering
Prosper Marketplace	Online Retail	CTO
Proteus Digital Health	Medical	CEO, Head of Global Development
Qualtrics	Software	V.P., Engineering
Razer	Gaming Hardware/Software	CEO, Sr. V.P., Operations, V.P., Engineering
SimpliVity	Software	CEO, V.P., Engineering
Slack Technologies	Software	CEO, Server Lead, CTO
Snapchat	Online Messaging	Head of Product
Social Finance	Online Lending	V.P., Engineering
SpaceX	Maker of Rockets and Spacecraft	CEO and Chief Designer (same individual), V.P. of Quality
Sprinklr	Software	CEO, V.P. of Product Development
Stripe	Online Payment	CEO, President
Tango	Software	CEO, Executive Chairman, Chief Operating Officer, Chief Monetization Officer
Tanium	Internet Security	CEO and Chairman
Twilio	Software	V.P. Engineering
Uber Technologies	Software	Chairman, Chief Technology Officer
Udacity	Software	CEO
WeWork	Software	CEO, head of digital
Zenefits	Software for Human Resources	CTO
ZocDoc	Software	CEO, V.P., Engineering
Zscaler	Software	CEO, CTO

Source: National Foundation for American Policy, company-provided information, company websites, CrunchBase, LinkedIn, *Wall Street Journal*.

ABOUT THE AUTHOR

Stuart Anderson is Executive Director of the National Foundation for American Policy, a non-profit, non-partisan public policy research organization in Arlington, Va. Stuart served as Executive Associate Commissioner for Policy and Planning and Counselor to the Commissioner at the Immigration and Naturalization Service from August 2001 to January 2003. He spent four and a half years on Capitol Hill on the Senate Immigration Subcommittee, first for Senator Spencer Abraham and then as Staff Director of the subcommittee for Senator Sam Brownback. Prior to that, Stuart was Director of Trade and Immigration Studies at the Cato Institute in Washington, D.C., where he produced reports on the military contributions of immigrants and the role of immigrants in high technology. He has an M.A. from Georgetown University and a B.A. in Political Science from Drew University. Stuart has published articles in the *Wall Street Journal*, *New York Times*, *Los Angeles Times*, and other publications. He is the author of the book *Immigration* (Greenwood, 2010).

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