



SKILLS GAP TO **SKILLS SURGE:**

How foreign workers fuel talent pipelines

VISANOW[®]
GLOBAL IMMIGRATION

The **skills gap** is starting to seem more like a canyon.

Organizations experience it when jobs go unfilled, leaking tens of thousands of dollars a year per open position.¹ The U.S. economy faces it as productivity is stretched thin in science, technology, engineering and mathematics (STEM) fields. And HR and recruiters feel it as a big, empty space in the company's talent pipeline.

Yet as the skills gap persists, the global talent market is swelling. In a country that was built on immigration, the true value of uniquely qualified, highly educated international workers has never been more relevant than it is now — nor has it been a more practical and effective solution.

Implementing a talent acquisition strategy that includes foreign national recruitment helps organizations lock the right skills into place, create diverse teams and build company growth for the future.

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EXAMINING THE TALENT SHORTAGE

PART 1

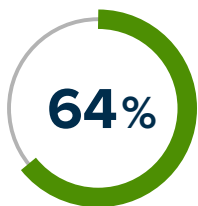
The Skills Gap Is Worsening

There are a number of reasons for the talent shortage: Baby boomers are retiring faster than they can be replaced, while Generation Xers and millennials don't have the skills employers need. Plus, technology is advancing, and replacing itself, at an astounding rate, which quickly renders qualifications obsolete if workers don't keep up. Employers already sense the consequences — almost half say they're having difficulty filling positions due to the lack of skilled workers.² But HR departments feel this absence acutely:

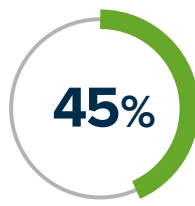
- Many resumes aren't passing the qualifying stage.
- There are significant delays between posting a job and when the prospective employee signs.
- Roles go unfilled for months.
- Productivity lags.

The talent shortage is reported at all organizational levels, as 92 percent of U.S. senior executives say there's a serious gap in workforce skills. In the C-suite, executives say the skills gap presents a threat to U.S. business, pointing to missed growth opportunities, investment lost to organizations in more STEM-capable countries abroad, stifled research and development, and suffering company profits.⁴

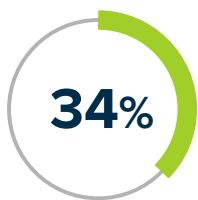
How the skills gap is a threat to U.S. business, according to C-suite executives:⁵



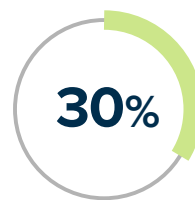
Investment is going to companies abroad instead of staying in the United States



Businesses are missing out on growth opportunities



Research and product development is suffering

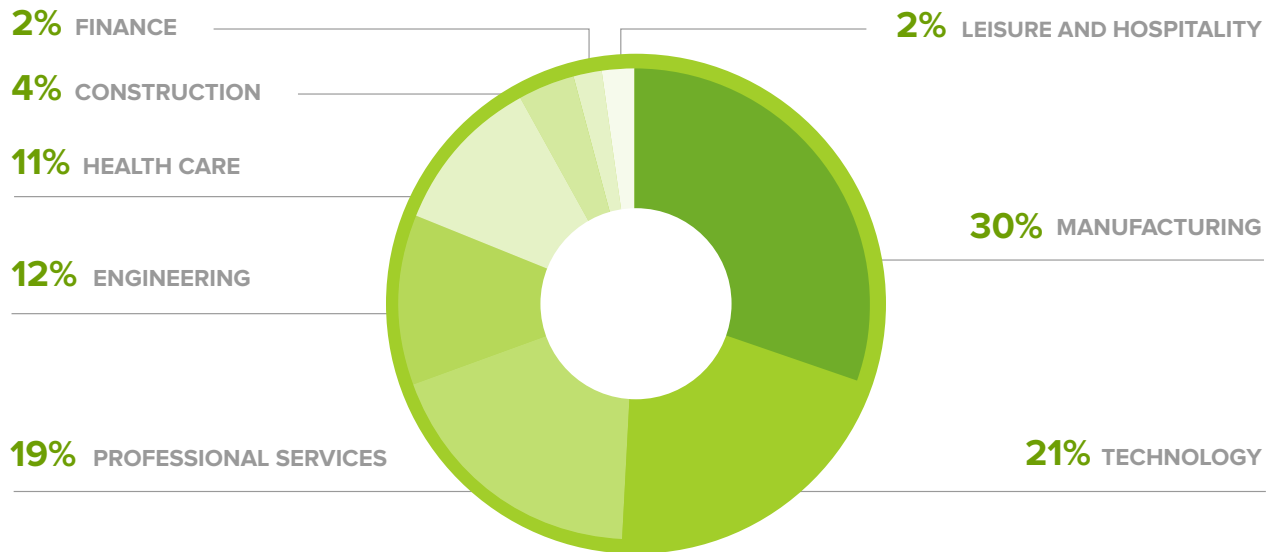


Company profits are negatively impacted

10,000
BABY BOOMERS
will retire
EVERY DAY UNTIL 2029³



What U.S. industries do leaders see most affected by the skills gap? ⁶



By 2018, there will be 2.4 million unfilled jobs in STEM fields. ⁷

STEM Fields Report the Greatest Talent Dearth

Employers, faced with the challenges of effective internal development in STEM fields and a lack of available qualified workers, are watching their talent pipelines dry up. By 2020, it's estimated that the skilled production worker shortage in the manufacturing industry will reach a staggering 63 percent, while the shortage of engineers and researchers/scientists will reach 48 and 37 percent, respectively. ⁸

This skills gap story repeats itself throughout STEM disciplines:



Cybersecurity: Fifty percent of cybersecurity professionals report a lack of people and skills as the biggest impediment to the discovery and follow up of attacks. In fact, most firms with

cybersecurity needs have between two and four full-time employees dedicated to detection and response tasks. However, around 26 percent have one or fewer individuals dedicated to this need. ⁹



Data science: According to a 2016 Crowd Flower survey, 83 percent of chief data officers believe there aren't enough data scientists to meet the industry's demand — which creates a ripple effect that impacts banking, hedge funds, oil and gas, consumer goods, and internet firms. ¹⁰ In terms of the future of data science, research firm Gartner forecasted a shortage of 100,000 data scientists by the start of the decade. ¹¹



Health care: One-third of the jobs created over the next decade will fall into the health care industry. And two of the biggest skills gap challenges in health care are finding qualified physicians/surgeons and nurses, according to the 2015 Healthcare Recruiting Trends Survey by HealthCAREERS Network. ¹²

Insert your industry here. The talent gap impacts most sectors indirectly or directly, and the problem persists with no clear end in sight.

Balancing Long- and Short-Term Solutions is Crucial

In an effort to compensate for the lack of available talent, companies are reskilling their current employees, investing in future generations through philanthropic initiatives and developing automation technology to limit dependence on human work.

Reskilling employees: Companies are investing in their own employees by providing development opportunities like coding and data science boot camps. Outside of formal education, these quick-fix certifications are accessible online and offer no-frills education at a nominal price — and are sometimes even free. Yet in the absence of a formalized accreditation system and given the novelty of the programs, their effectiveness can vary significantly. Additionally, mapping qualifications directly back to informal coding or programming certifications can be misleading and difficult to rely on consistently.

Partnering with educational institutions: Government initiatives to improve formal education opportunities in STEM fields have seen mixed success. In 2006, a federal initiative called the Workforce Innovation in Regional Economic Development injected \$325 million into 39 three-year pilot programs aimed at creating sector-based partnerships.¹³ But due to thinly spread funding across a variety of industries and a lack of organization, no substantial progress was made.

Alternately, the U.S. Chamber of Commerce Foundation's Talent Pipeline Initiative is gaining momentum. In March 2016, it received a \$2.5 million grant to fund its mission of empowering employers to partner with schools and encourage students to pursue the degree programs that are most in demand. For example, the Arizona Energy Consortium, composed of 200 organizations, launched the Arizona Sun Corridor Get into Energy Consortium, which utilized

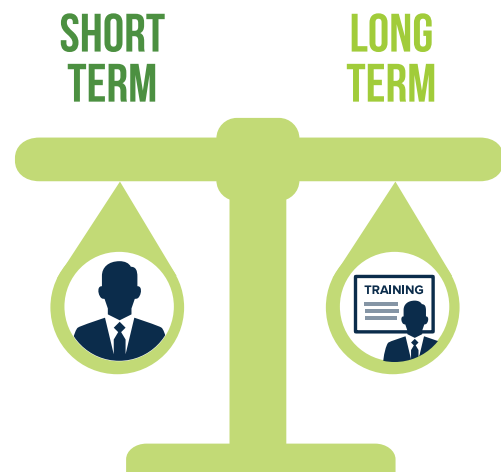
federal funds to create industry-tailored energy degree programs at five community colleges.¹⁴ While the initiative is still in its early stages, it offers a promising solution for companies to get in at the ground level and begin developing STEM competencies in students.

Directly investing in future workers: Some companies are playing the long game and investing in students as early as grade school. AT&T's Aspire initiative mobilizes learning through technology, pairs students with mentors, provides online tech certification programs and more.¹⁵

Increasing reliance on automation: Employers are also turning to robotics and automation to overcome the skills gap. But while big data competency problems may be solved by systems that can filter and analyze data digitally, a familiar problem remains — the lack of program developers trained in building systems needed to automate the process. Some companies are now outsourcing automation to teams of systems integrators who can manage large-scale integration efforts, but at a hefty cost.¹⁶

These are all important initiatives, but the bulk of their impact will not be felt for years to come.

Companies have to balance long-term investment in training with finding workers who have these skills today.



CREATING A SUSTAINABLE TALENT PIPELINE

PART 2

While the long-term fixes of training current and future workforces are critical, short-term skills gap solutions are available now. Every year, qualified, educated foreign national workers send the government hundreds of thousands of applications to work in the United States — and companies are recognizing their capacity to spur innovation, meet the demands of highly technical roles and drive business success.

As employers open the door to a far larger, more diverse and highly skilled world of foreign talent, a clear pipeline emerges. Skilled international workers not only enable the functions of the roles being filled, they benefit the entire organization.

Immigrant Investment Pays Off

SpaceX. Uber. Gusto. CloudFlare. These billion-dollar companies share the common thread of having immigrant founders. In fact, more than half of billion-dollar startups in the United States were founded by immigrants — and many of those companies have management and product development teams that are also driven by immigrants, according to a March 2016 report from National Foundation for American Policy (NFAP).¹⁷ The study also reveals that immigrant founders created an average of 760 jobs per company in the United States, and the value of those companies is \$168 billion — which, NFAP points out, is close to half the value of the stock markets of Russia or Mexico. Further, 71 percent of billion-dollar startups have at

least one immigrant driving growth and innovation, usually at the executive level.

In addition to generating opportunities within organizations, foreign workers are also stimulating job growth for the rest of the U.S. economy. The U.S. Chamber of Commerce reports that for each foreign national worker with a STEM graduate degree, about two and a half jobs are created for U.S. workers, and each H-1B specialty occupation visa holder creates about two jobs.¹⁸ On a macro level, immigrants are driving growth across multiple industries and play an indispensable role in the development of U.S. innovations and technological progress.

IMMIGRANT FOUNDERS

created an average of

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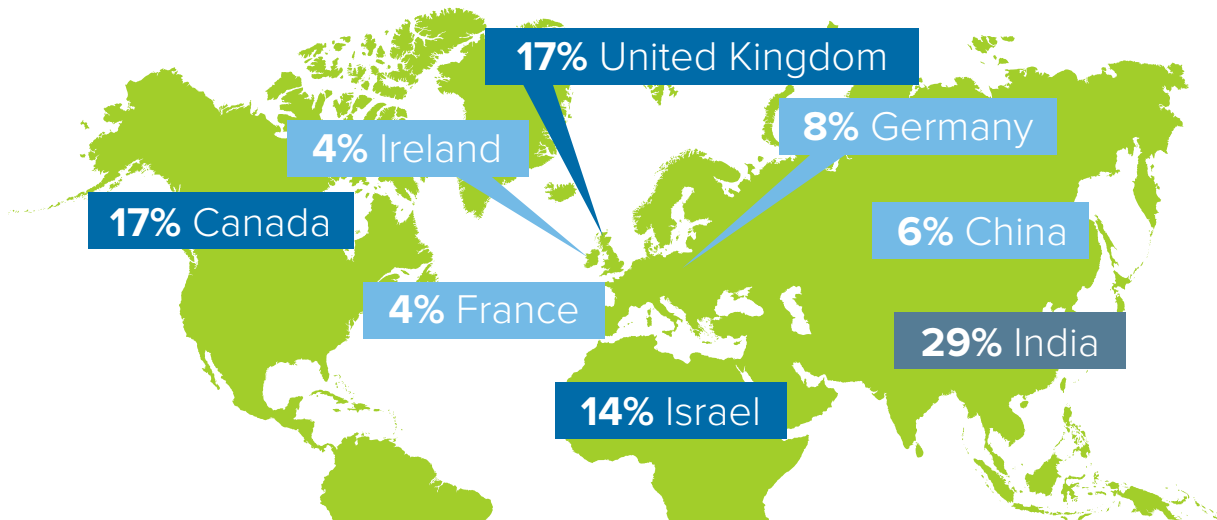
of companies had at least one key management or product development position held by an immigrant



had a founder who came to the United States as an international student

There were 48 immigrant founders or co-founders at the 87 startup companies.

Where were they from?



In the fight to stay competitive in the global market, talent is front and center — and many organizations are cluing into the need for international workers. In the [VISANOW Immigration Trends 2016 survey](#), one-third of employers say they expect their company's foreign national headcount to increase during the next year, while only one in 10 expects a decrease. In other words, companies not recruiting abroad will lag behind.

Diversity boosts the bottom line

The diversity that accompanies a global talent acquisition strategy drives bottom-line results: Ethnically diverse companies are 35 percent more likely to outperform their less-diverse counterparts, according to a 2015 McKinsey report, and for every 10 percent increase in racial and ethnic diversity on U.S. senior executive teams, earnings before interest and taxes (EBIT) increase 0.8 percent.¹⁹ Foreign nationals' unique perspectives, global worldview and inclination for innovation all add up to value generated above and beyond the technical skills they bring to a role.

For every 10 percent increase in racial and ethnic diversity on U.S. senior executive teams, EBIT increases 0.8 percent.

A 2013 Harvard Business Review report showed that companies with diverse leadership were 45 percent more likely to report their market share grew in the last year, and 70 percent were more likely to report they captured a new market.²⁰ The reason for diverse companies' success is closely tied to the kind of out-of-the-box thinking ethnically varied teams spur — and are willing to execute on.

Another benefit of sponsoring foreign nationals for work visas, and later permanent residency (a green card), is retention. According to the VISANOW Immigration Trends 2016 survey, 60 percent of employers have sponsored a foreign national for a green card and, of these, 40 percent say they start the process when the employee has completed one year of service. When the cost of losing employees is so high — particularly for skilled positions like developers — organizations need to take advantage of every retention tool available.

Sponsoring foreign national workers for green cards helps boost retention by demonstrating the company's vested interest in the employee, helping him or her to feel valued. And this encourages the individual to remain loyal to the employer due to the financial and time investment made into his or her future.

60 percent of employers have sponsored a foreign national for a green card.

Soft skills prove valuable

Anecdotally, immigrants often embody traits that help cultivate a positive and productive work environment. Software and staffing solutions provider Wirestorm lends insight into some of the most valuable benefits gained from working with foreign nationals:²¹

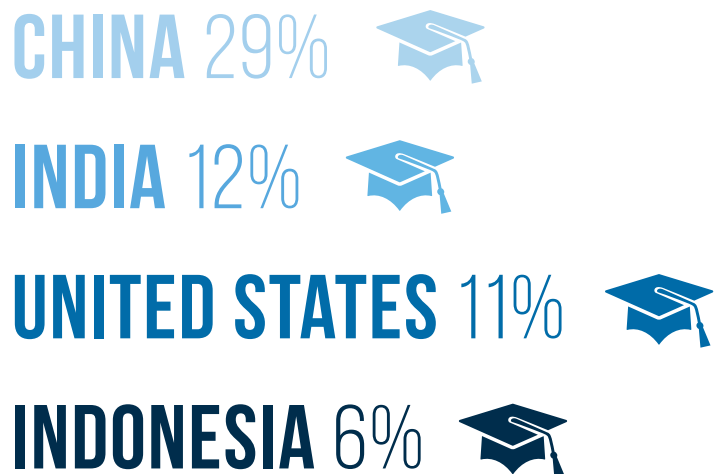
- **Self-sufficiency.** Out of necessity, foreign nationals have to rely on their own smarts and motivation to move from their home country to the United States. In the workplace, this can translate into personal initiative, resourcefulness and independence.
- **Global mindset.** Immigrants are a bridge between two cultures, and can enable new, better-informed thinking about organizations' products, global markets and processes by leveraging their own cultural background and experiences.
- **Risk taking.** Moving to a new country with an unfamiliar culture, and oftentimes language, is a risky move, no matter the potential reward. Immigrants are used to encountering change and tend to be natural risk takers, which often leads to creative problem solving.

Foreign Nationals Are Ready, Willing and Able to Work

When looking for top talent, start at the source: U.S. universities. Undergraduate and graduate programs offer a built-in pipeline for recruiting STEM-oriented foreign national students. In fact, nearly one-quarter

of the billion-dollar startup immigrant founders came to the United States as international students.²² And foreign nationals are at the top of the list when it comes to obtaining Ph.D.s., accounting for a higher share of students in Ph.D. programs earned in the United States than in all other higher education programs combined. Additionally, they accounted for about one-third of doctorate recipients in 2014, and represented about one-half of doctorate recipients in engineering and physical sciences, according to the Migration Policy Institute (MPI).²³

Forecasted percentages of higher education graduates by 2020



International Students in the United States by Field of Study (2014-2015)

FIELD OF STUDY	NUMBER OF STUDENTS	SHARE (%)
BUSINESS/MANAGEMENT	197,000	20.2
ENGINEERING	197,000	20.2
MATH/COMPUTER SCIENCE*	113,000	11.6
SOCIAL SCIENCES	76,000	7.8
PHYSICAL/LIFE SCIENCES*	74,000	7.6
FINE/APPLIED ARTS	57,000	5.8
INTENSIVE ENGLISH	49,000	5.0
HEALTH PROFESSIONS	33,000	3.4
UNDECLARED	24,000	2.5
EDUCATION	18,000	1.8
HUMANITIES	18,000	1.8
OTHER	119,000	12.2
TOTAL	975,000	100.0

Note: *Subject is considered a STEM field. Source: MPI



45% of H-1B holders have a
BACHELOR'S DEGREE

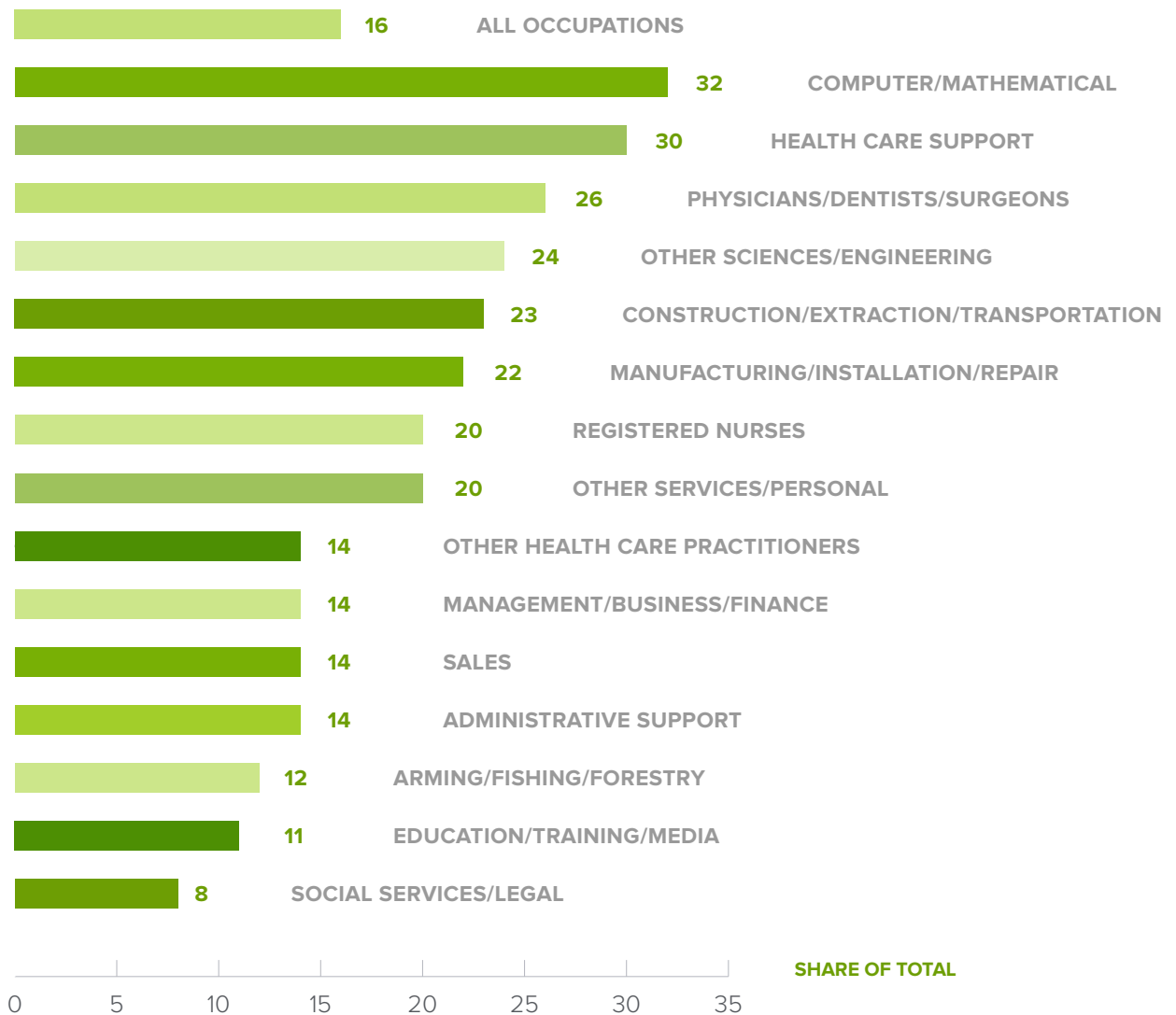


43% of H-1B holders have a
MASTER'S DEGREE

MPI's data also shows that more college-educated immigrants are younger and more likely to be of prime working age than their U.S. counterparts. In fact, 37 percent of college-educated immigrants are younger than 40, compared to 32 percent of U.S. citizens.

Overall, foreign national workers tend to be highly educated, especially those on H-1B visas: 45 percent have a bachelor's degree and 43 percent have a master's degree.

Immigrants make up the following percentages of employed college-educated workers:



Source: MPI tabulation of data from the U.S. Census Bureau 2014 American Community Survey.

But perhaps most compelling is that the number of immigrant students is rapidly increasing. Enrollment of international students in U.S. colleges has more than doubled from 408,000 in 1990-1991 (representing 3 percent overall) to 975,000 in 2014-2015 (representing 5 percent overall), according to MPI. Following the

trend, this growth is likely to continue and is consistent with the increased pool of H-1B petitions that flood the U.S. Citizenship and Immigration Services office every year. For organizations, this means the available pipeline of foreign talent at U.S. universities is on an upward trajectory.

Overcome the Skills Gap Now With Foreign Talent

Each day at work, foreign nationals bring their education, passion and unique perspective to U.S. companies. In return, organizations are experiencing innovation, higher productivity and a globally competitive edge. As the skills gap persists, foreign national workers will be the only immediate answer to a sustainable talent pipeline.

It's time for organizations to start thinking strategically about what immigrant workers can do for their workforce now — and in the future.



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ABOUT VISANOW

VISANOW is a global immigration services provider integrating the best of both people and technology. The company offers a transparent and streamlined way to navigate the tedious and confusing visa application process. Its patented online platform provides fast response times, easy access to case information and comprehensive customer support — helping customers save time, money and stress. The company has prepared cases for tens of thousands of business and individual visa applications, with a 95%+ VISANOW-retained attorney case approval rate.*

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