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The People Powering Japan's Startup Ecosystem

Kenji Kushida



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Summary

- Japan's startup ecosystem is now able to attract human capital in ways that were not possible fifteen years ago.
- Employment flexibility is critical to a maturing startup ecosystem, and Japan's startup ecosystem is now enjoying positive feedback loops.
- Japan's startup ecosystem now draws from top universities; large, prestigious companies; government ministries; global, foreign multinational corporations; and the startup ecosystem itself.
- While Japan's lifetime employment system in large companies is alive and well, the rise of new employment logics has grown in parallel with corporate Japan's traditional employment system.
- The rise of foreign firms and the IT industry, along with the declining attractiveness of large companies, has created a new logic of opportunities for top talent.
- Global linkages are still a challenge, and the government should focus on efforts to remove barriers to all global collaborations, especially given the disruption caused by Japan's abrupt border closures in response to the COVID-19 pandemic.

Japan's startup ecosystem is currently able to draw top-tier talent to high-growth startups at a scale that was not possible fifteen years ago. It is now easier than at any point since

the 1950s to attract people to startups from prestigious Japanese firms, elite government ministries, the burgeoning information technology (IT) sector, and foreign financial and IT firms—mostly graduates of Japan’s top universities with promising careers had they remained in their previous positions.

A key constraint of Japan’s startup ecosystem for decades had been the lack of labor market dynamism, with Japan’s top talent locked into lifetime employment arrangements at large firms and with traditional employers. Now, however, a strong positive feedback loop has developed in which greater human capital flows further drive accelerated labor market dynamism. This is fueling Japan’s startup ecosystem as it matures.

The degree to which these human capital flows has developed is often missed by longtime observers both within and outside Japan. This is because multiple logics have developed side by side. If one looks at the large corporations that comprise the core of Japan’s economy, traditional norms of lifetime employment are alive and well. However, right around the corner from large firms—sometimes even in the same building—Japanese startups offer very different employment arrangements, career paths, compensation packages, and overall opportunities.

Two areas of the Japanese startup ecosystem’s human capital flows remain underdeveloped. First, linkages outside Japan are still relatively weak. While several successful Japanese startups have established a presence in Silicon Valley to rapidly globalize their management, and many other startups have a presence in other parts of Asia, human capital flows in Japan’s startup ecosystem remain largely domestic. There are several contributing factors for this, but this is one area where the Japanese government can take concrete measures to reduce friction and build global talent flows.

Second, while the pathway for people leaving large firms and organizations offering lifetime employment arrangements is now well established, a pathway for people with experience in startups to return to large firms or the government has yet to develop. Acquisitions of startups by large firms are relatively rare, and organizations are just beginning to experiment with creating executive career paths for people hired midway through their careers. Traditional companies have begun embracing bringing in top management from elsewhere, but they still tend to rely on people promoted from within the company to be in charge of managing their mainstream business divisions—and it is managers in these roles that must often bridge firms’ existing strengths while pursuing new opportunities for innovation by partnering with startups.

Regardless of these challenges, Japan’s startup ecosystem has entered a new chapter.

Human Capital Flows in Silicon Valley: Extreme Mobility and Global Talent Pool

While not every startup ecosystem should try to emulate all aspects of Silicon Valley, understanding how human capital flows fuel Silicon Valley's startup ecosystem is critical for governments formulating strategies.

Human capital flows in Silicon Valley are characterized by high labor mobility drawing on top talent from around the world. The extremely high levels of labor mobility in Silicon Valley are both an outcome and a driver of dynamism in the startup ecosystem. Cutting-edge companies can attract top talent from large companies, competitors, and other startups. Firms that need to adjust quickly can shed workers or replace the composition of their workforce's skill sets. Flailing companies often lose high-quality talent, hastening their demise and contributing to faster churning of the business ecosystem.

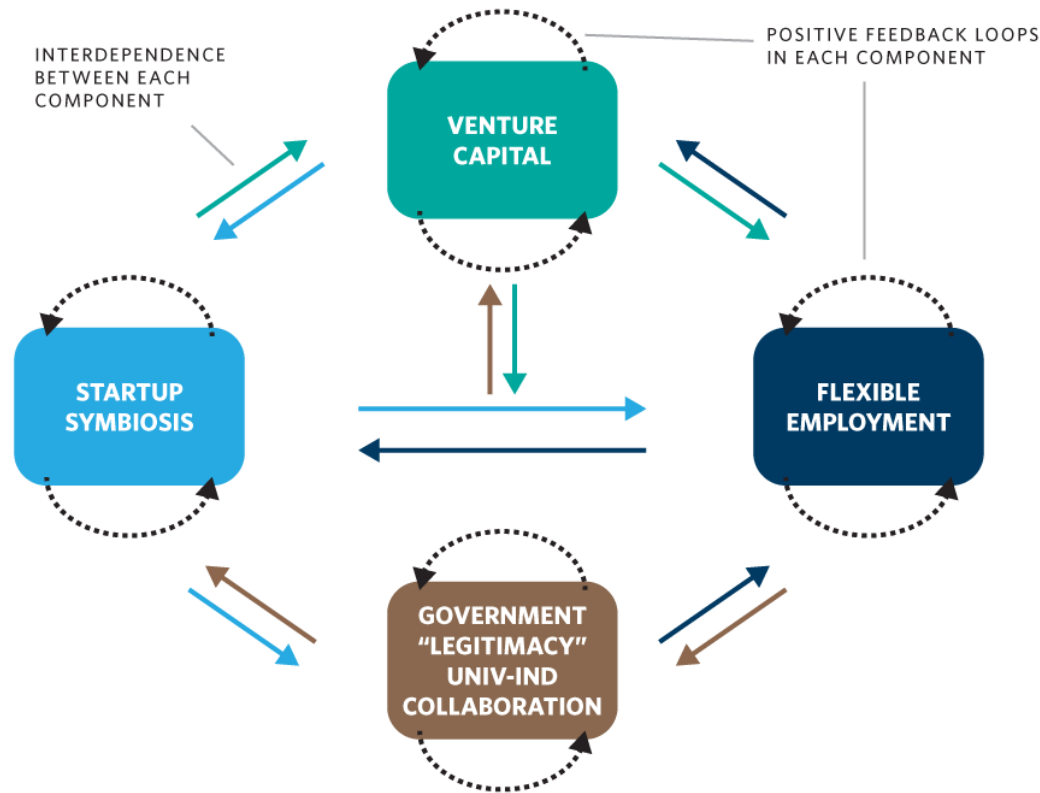
Silicon Valley's level of labor market dynamism was not typical of corporate America's large firms from the 1960s through the 1980s.¹ The norms of extreme employment mobility and the possibilities for attracting top talent grew hand in hand with the startup ecosystem.

Moreover, Silicon Valley's startup ecosystem draws from global talent, as the universities and high-tech companies located there produce and attract skilled workers and entrepreneurs from around the world. Global interpersonal connections to various places around the world, such as India, Taiwan, and Israel, are important economic linkages underpinning American competitiveness.²

Silicon Valley's high labor mobility and global draw is also complementary to the other components enabling the Silicon Valley model.³ For example, venture capitalists (VCs) can often introduce management talent to startups, drawing from a pool of successful people with previous startup experience. A subsequent paper in this Startup Japan series will further examine human capital in Silicon Valley.⁴

Without dynamic human capital flows, the entire startup ecosystem is constrained; this was the reality for Japan's startup ecosystem until the early 2010s.

Figure 1. Main Startup Ecosystem Components, Interdependence, and Positive Feedback Loops



Source: Kenji Kushida, "Startup Japan: Series Overview," Carnegie Endowment for International Peace, August 9, 2022, <https://carnegieendowment.org/2022/08/09/startup-japan-series-overview-pub-87648>.

Japan’s Long-Term Employment Choking the Startup Ecosystem: Challenges to Attracting Workforce, Building Expertise

Japan’s long-term employment created numerous choke points for the startup ecosystem. A subsequent piece in this series will explain the historical advantages of lifetime employment for Japan’s postwar economic model, but its effect by the 1990s was that Japan’s “best and brightest” were locked into large firms for their entire career, and potential entrepreneurs and the startup workforce had strong disincentives to leave. Lack of a robust mid-career hiring market led to a lack of people with experience in startups, making it all the more difficult to build highly capable startup workforces. Founding companies and joining startups was, therefore, far riskier than in Silicon Valley, especially since there was no easy way back into good employment arrangements if a startup failed.

Reflecting this risky reality, Japan's social norms reinforced the startup ecosystem's status as outside the established elite employment path. Startups founded in the 1990s that have grown into large corporations, such as Rakuten and DeNA, experienced severe headwinds attempting to recruit employees. Both companies' founders and early executives have often stated both publicly and privately that a common hurdle for employee recruitment was the recruit's parents and spouses. Parents of their new recruits would occasionally show up at the companies' offices to demand that their children's provisional employment agreements be withdrawn; they were often convinced that their offspring had been bamboozled by charismatic leaders. In their minds, the best choice for their children was to find employment at a stable large firm that would take care of the entire extended family in the long term. In their view, new, unfamiliar firms offering not-well-understood IT products were not only low prestige, but unlikely to provide stable long-term employment. Traditional long-term employment also entrenched old-fashioned gender roles, since the men were expected to work long hours and be transferred to any part of Japan—or anywhere in the world—on short notice for a few years, even if they had to leave their families behind. Women were often expected to leave their white collar jobs when having children, since such long working hours and sudden job location transfers were not tenable while they were considered responsible for maintaining the household and overseeing the education of children. This informal understanding of traditional gender roles placed women outside the bargain of long-term employment security in exchange for the company's ability to deploy them anywhere flexibly. Given that the entire employment logic at large firms was predicated on women leaving the workforce at a certain point and becoming dependent on their husbands' incomes, the whole long-term employment practice was long another strong disincentive for high performing men from leaving traditional large firms, while women struggled to attain upper management positions to gain experience.

With little job mobility among the elite workforce, the headhunting and recruiting industry was small, and the lack of a market for corporate executives meant that startups had difficulty getting people with expertise running businesses, especially those with elite backgrounds.

The Emergence of Multiple Employment Logics in the 1990s

Beginning in the late 1990s, Japan's norms of lifetime employment began to weaken. Large firms slowly reduced employment levels, releasing pools of workers into the labor market as they offered early retirements, severance incentives, and reduced new graduate hiring—given the difficulty of layoffs in Japan. Certain parts of the financial sector experienced a more dramatic change with a major influx of foreign firms from the late 1990s onward and the collapse of several venerable, elite Japanese firms that led to the sudden unemployment

of people who had expected lifelong jobs.⁵ New employment logistics arose as the sector adjusted. Foreign firms rapidly grabbed up many of the experienced employees but did not hesitate to shed them later. Part of the internet-enabled IT industry's growth was driven by new firms, and in both finance and the IT industry, substantial labor mobility became the norm. These factors, combined with regulatory shifts designed to enable adjustment by large firms, in addition to new regulations explicitly aimed at the startup ecosystem, created a far more favorable human capital environment for the startup ecosystem by the 2010s.

Japan's New Human Capital Dynamics in the Startup Ecosystem

Japan's startup ecosystem by the late 2010s faced a far more favorable environment than it had for several decades up until then. Entrepreneurs increasingly came from large, prestigious firms. Startups' executives were increasingly drawn from traditional Japanese firms, professional service firms, and foreign firms. Startups began offering higher pay than traditional large Japanese firms. Government officials from elite ministries began joining startups—and not at the traditional post-retirement private sector posts that large firms tended to offer. Startup alumni groups began to form, with many becoming serial entrepreneurs. The rising labor market dynamics opened new business opportunities for headhunting and recruiting firms, many of which were startups themselves.

Entrepreneurs from Top Universities

By the early 2010s, the founders of successful startups were overwhelmingly from top universities. Table 1 lists the universities from which founders of the top fifteen startups that received the most funding in each of the years from 2015 to 2020 received their undergraduate or graduate degree. (The universities of Tokyo, Keio, and Waseda are Japan's top-ranked universities, and they produced the largest number of founders.)

This was a contrast to a previous generation of startups from the late 1990s when the internet first opened up new opportunities, but before Japan's startup ecosystem had entered its current state of maturity. Typifying the previous stereotype of IT startup founders was Kumagai Masatoshi, founder of **GMO Internet Group**, one of the early successful firms offering internet domain names and web hosting services. Kumagai had dropped out of high school to work for his father's pachinko store in relatively rural Nagano Prefecture, coming to Tokyo when his store succeeded.⁶ Kumagai had little to lose and much to prove as he fought his way to create a successful business. By mid-2019, GMO Internet Group had about 6,000 employees and 111 group companies (nine publicly listed); it had just over half of the

Table 1: Universities That Graduated Founders of Top-Funded Japanese Startups (2015-2020)

University	Number of Startup Founders	University	Number of Startup Founders
University of Tokyo	10	Nagoya Institute of Technology	1
Keio University	7	Tokyo Metropolitan University	1
Waseda University	4	Kansai University	1
Yokohama National University	2	Kyoto University	1
Tokyo Institute of Technology	2	University of Bristol	1
Hitotsubashi University	1	Imperial College London	1
Harvard University	1	Stanford University	1
Columbia University	1	Ritsumeikan University	1
University of Delaware	1	Northwestern University	1
Massachusetts Institute of Technology	1	Nihon University	1
Purdue University	1	Senshu University	1
Tufts University	1	Niigata University	1
Gifu Pharmaceutical University	1	Pomona College	1
Kobe University	1	Korea University	1
Georgia Institute of Technology	1	No college (high school graduate)	1

Source: Japan Venture Research (2015), “Japan Startup Finance” reports from 2018–2022, Initial Enterprise, and PitchBook

Note: This includes founders from the ten top-funded startups in Japan from 2015 to 2020. The data include all universities (undergraduate/graduate) from which a founder graduated. For example, JapanTaxi CEO Kawanabe Ichiro graduated from Keio University and Northwestern University.

domestic cloud server hosting market, with its various subsidiaries engaged in internet- and finance-related areas.

Fujita Susumu, who created **CyberAgent**, is another notable entrepreneur from the previous era of early internet startups whose background was less extreme than Kumagai’s high school dropout background. Fujita attended Aoyama Gakuin University, a respected elite university, and got the idea of starting his own company as he worked part-time at an online advertising agency. His first job out of college was at a small temp agency where he worked in sales for a couple years before going out on his own. CyberAgent expanded into a variety of internet-related areas beginning with advertising, which drove much of its revenue. It was an early Japanese market player offering services such as a blog platform, online games, and video content. In 2000, it listed on Japan’s main small market capitalization index, the Tokyo Stock Exchange’s (TSE’s) Mothers Index, and rose to the TSE’s First Section in 2014. Its sales in 2001 were ¥6.3 billion, growing to sales of just over ¥400 billion and profits of ¥30 billion in 2018.⁷

Startup Founders Drawing From Prestigious Large Firms

Many founders of Japan’s most successful startups between 1999 and 2016 had experience at prestigious large firms that typically only recruit from top universities. Almost all these firms offered lifetime employment—these founders were top talent who left Japan’s prevailing mainstream corporate employment logic.

Table 2 shows the first employer of chief executive officers (CEOs) of startups listed on the TSE’s Mothers Index between 1999 and 2016. The largest number of CEOs founded companies right out of college, but the rest joined traditional large companies ranging from human resources (HR) firm Recruit, actively fostering human capital, to consulting firm Accenture, telecommunications group NTT, financial sector giants Mitsubishi Tokyo UFJ Bank, Nomura Securities, and IBM Japan (whose presence in Japan dates from the prewar period, then again from 1950).

Table 2: First Jobs Held by Startup CEOs (1999–2016)

First Employer	Number of CEOs	First Employer	Number of CEOs
Founded company out of college	36	Itochu Corporation	5
Recruit	14	NEC	4
Accenture	10	Mitsubishi Corporation	4
NTT	8	Shinsei Bank	4
Mitsubishi Tokyo UFJ Bank	7	SMBC Nikko Securities	4
Nomura Securities	7	Fujitsu	4
IBM Japan	6	Mizuho Financial Group	3
Sony	5	Mitsui & Co.	3
SoftBank	5	Sekisui House	3
Panasonic	5	Sojitz Corporation	3

Source: Tokyo Stock Exchange data compiled by IBER-Kotosaka.⁸

Note: Data includes CEOs from companies that listed on TSE’s Mothers Index from 1999 to 2016.

Table 3 lists the immediate previous employer of the CEO when the company was listed on the TSE’s Mothers Index.

Table 3: Previous Employment of Startup CEOs (2016)

Previous Employer	Number of CEOs	Previous Employer	Number of CEO
Recruit	20	GMO Group	5
Accenture	10	NEC	5
IBM Japan	10	SMBC Nikko Securities	5
NTT	8	Itochu Corporation	5
Sony	8	Sojitz Corporation	5
Mitsubishi Tokyo UFJ Bank	8	SCSK Corporation	4
SoftBank	7	LCE Holdings	4
Panasonic	7	Sega Group	4
Nomura Securities	7	Drecom	4
CyberAgent	6	Shinsei Bank	4
Boston Consulting Group	6	HP Japan	4
McKinsey & Company	6	Fujitsu	4
Mitsubishi Corporation	6		

Note: Data includes CEOs from companies that listed on TSE's Mothers Index from 1999 to 2016.

Source: Iber-Kotosaka, “東証マザーズ市場における上場時のCEOのキャリアデータ” [CEO Career Data at the Time of Listing on the Tokyo Stock Exchange Mothers Index], February 25, 2017, <http://iber.sfc.keio.ac.jp/?p=9564>.

Executive Officers from Traditional Elite Firms

More data from this period reveals Japan's top talent was no longer as “locked in” to lifetime employment arrangements at large firms. Table 4 shows the previous employment of all executive directors at the 483 companies that listed on the TSE's Mothers Index between 1999 and 2016. Unlike the list of startup CEOs, the prominence of accounting firms and financial institutions suggests that executives brought professional skills along with them to startups. The strong presence of trading companies and electronics firms is also noteworthy. With just a few domestic exceptions, such as the relatively new SoftBank and several foreign firms, these employers were traditional, highly respected Japanese companies. A pathway for Japan's top talent to fuel startups was clearly underway.

Table 4: Previous Employers of Company Directors of Startups (1999–2016)

Company	Industry	Number of Directors
KPMG Azsa	Accounting	81
Mizuho Financial Group	Finance	80
Recruit Group	Recruiting	80
Deloitte Touche Tohmatsu	Accounting	78
Mitsubishi UFJ Financial Group	Finance	68
NTT Group	Telecommunications	64
Nomura Holdings	Securities	64
Sony Group	Electronics	56
Ernst & Young ShinNihon	Accounting	56
SoftBank	IT	55
Mitsui Sumitomo Financial Group	Finance	52
Misuzu Audit Corporation	Accounting	49
IBM	IT	45
Mitsubishi Corporation	Trading	44
Accenture	Consulting	42
SCSK	IT	40
Mitsubishi UFJ Morgan Stanley Securities	Securities	40
Itochu Corporation	Trading	40
NEC Group	IT	39
SMBC Nikko Securities	Securities	36
JAFCO	Venture capital	31
Sojitz	Trading	31
Daiwa Securities.	Securities	31
Panasonic	Electronics	29
Shinsei Bank	Finance	29
Toshiba	Electronics	29
Resona Holdings	Finance	28
Fujitsu	IT	26
Goldman Sachs	Finance	25
Mitsui & Co.	Trading	25

Note: Data includes directors from companies that listed on TSE's Mothers Index from 1999 to 2016.

Source: Masahiro Kotosaka and Masayasu Matsui, “変貌するベンチャー経営人材: 東証マザーズ上場の役員構成の概観からHenbo Suru Bencha Keiei Jinzai: Tosho Mazazu Joujouji No Yakuin Kousei No Gaikann Kara” [The Transforming Startup Management Human Capital: From Observations about Officers at the Time of Listing on Tokyo Stock Exchange Mothers], in ベンチャー白書2017 [Venture Business White Paper 2017], Venture Enterprise Center 2017. <https://vec.base.ec/items/15472493>

Labor Market Fluidity within the IT Sector and Startups

As Japan's startup ecosystem began to mature, new IT startups started to draw talent from other IT firms and startups. Table 5 shows how people with experience in previous cohorts of startups joined newer ones.

Table 5: Startup Executives with Previous Experience at IT Startups (1999–2016)

Company	Number of Executives
CyberAgent	19
Digital Garage	16
Rakuten	16
United	15
Hikari Tsushin	14
DeNA	11
Zappallas	10
Persol Career (formerly Intelligence)	9
Opt	9
Cybird	9
Kakaku.com	8
Gaiax	7
Gree	7
Netprice	7
Drecom	6
Google Japan	5

Note: Data includes executives from companies that listed on TSE's Mothers Index from 1999 to 2016.

Source: Kotosaka and Matsui, "変貌する経営人材" [The Transforming Startup Management Human Capital].

Startup Spotlights: Cases Illustrating Employment Pathways

Some concrete examples of notable startups are useful for illustrating the new dynamics of human capital mobility in Japan's startup ecosystem, as well as the choices available to top university graduates who used to be funneled into large organizations' lifetime employment arrangements.

Top University to Large, Elite Japanese Firm to Entrepreneur

Yosuke Tsuji, who founded Money Forward in 2012, joined Sony after graduating from Kyoto University. He had hoped to be assigned to a global business area or somewhere exciting related to the internet or creating new products. To his dismay, however, Tsuji was assigned to the accounting division—far from a glamorous position. There he found himself spending a great amount of time doing manual data entry. After three years, he had the opportunity to be seconded to Monex, a new securities company that was jointly funded by Sony and an entrepreneur, Matsumoto Oki.

Tsuji eventually transferred completely to Monex from Sony. A few years later, after obtaining his MBA from the Wharton School as part of the first cohort of Monex's study abroad program, he founded Money Forward with Toshio Taki. Taki, a Keio University graduate, was getting his MBA from Stanford University, where he was sent by Nomura Securities, at the same time as Tsuji was at Wharton.

Tsuji's experience highlights some significant ties between the traditional and emerging new logic of Japan's startup ecosystem. He joined a traditional company, Sony, and pursued a very traditional career path. However, he was seconded to a startup, a typical practice for large Japanese firms who will "loan" their lifetime employees to subsidiaries or companies with close relations. This experience launched him into a new logic of Japan where elite, sharp, driven people were working to rapidly grow the startup.

Top University to Foreign Financial Firm to Entrepreneur

Monex, which Tsuji joined when it was a company of forty people and grew rapidly during his time there to several hundred people, is a notable startup in its own right. The rise of Monex illustrates how significant shifts in the financial sector opened up by foreign firms led to new opportunities for potential entrepreneurs in Japan in the era preceding the maturation of the VC industry and startup ecosystem. Monex was founded by Matsumoto Oki in 1999.⁹ Matsumoto had joined Salomon Brothers upon graduating from Tokyo University, then moved to Goldman Sachs, where he rose quickly to become its youngest general

partner worldwide at the time when he was thirty years old.¹⁰ Seeing an opportunity for a new, internet-based securities firm focused on individuals, Matsumoto proposed the idea to Goldman Sachs. However, the firm was not interested, so he left in 1998 at age thirty-five to found Monex with Sony as his major investor.¹¹ Matsumoto drew talent from various financial institutions, such as Long-Term Credit Bank of Japan, Goldman Sachs, Nippon Wealth Limited, and others. Monex grew rapidly and was one of the first companies to list on the newly created TSE's Mothers Index in 2000.

Matsumoto's success highlights the new logic of Japan's financial industry. His stellar career at Goldman Sachs in Tokyo enabled him to rise quickly while young and also provided him with substantial private wealth that he could use to found a company. His career and financial cushion were almost impossible for employees in traditional lifetime employment arrangements with low salaries while young and strict seniority wages.

Several other startups also have former foreign financial institution employees as their founders. For example, **bitFlyer**, Japan's most popular cryptocurrency exchange, was founded in 2014 by Yuzo Kano, who had worked at Goldman Sachs.¹² Similarly, **Visits Technologies**, a company using artificial intelligence (AI) to analyze human behavior for use in corporate HR, was founded by Matsumoto Masaru, who had also been at Goldman Sachs.¹³

Top University to Foreign Consulting Firm to Entrepreneur

Raksul Inc., founded in 2009 by Matsumoto Yasukane, began by offering an online printing service that matched customers all over Japan to small to medium-sized printing firms with underutilized capacity. By doing this, Raksul was able to offer far lower prices for printing. Matsumoto, a Keio University graduate, thought of the service while working as a consultant at what was at the time A.T. Kearney upon discovering vast inefficiencies and high prices in the printing business.¹⁴ He founded his company at age twenty-four, offering printing service price comparisons for businesses—a surprising gap that nobody had filled at the time. As the company grew and developed its own service connecting local printing businesses to a common consumer-facing platform, he struggled to manage the young team, and many left. In his late twenties, Matsumoto decided he needed a more experienced executive management team and found people who were older than him—though in their mid-thirties—to join the company. Nagami Yo, who became chief financial officer, was a senior vice president from Carlyle, and Fukushima Kozo, who became chief operating officer, was a principal at Boston Consulting Group.

Japanese High-Tech Firm to Entrepreneur: Corporate Retrenchment Releasing Human Capital

The retreat of Japanese firms from interesting and stimulating product areas also provided the impetus for some employees to leave and found their own companies. Nakazawa Yuko,

who founded **UPQ**, a consumer electronics startup, had initially worked for Casio designing mobile phones. Casio's mobile phones were attractive and well-designed sturdy products that looked like their popular sports watch, G-Shock. However, Casio withdrew from mobile handsets in 2013. Nakazawa was in her late twenties when Casio's mobile phone handset decision was made in 2012 and she left that year to form her own startup focused on well-designed consumer electronics products with manufacturing outsourced to China. UPQ made headlines shortly after its creation in 2015 by introducing twenty-four aesthetically well-designed products in its first two months, including smartphones, speakers, a glass keyboard, a backpack with a built-in battery for charging devices, and a chair. UPQ followed up with a foldable battery-operated bicycle, computer monitor, and other products. Nakazawa gave numerous media interviews detailing her frequent trips to Shenzhen, China, to work with suppliers, and UPQ's products were featured prominently in major Japanese electronics retail chains' flagship stores in Tokyo. The company was aided in production know-how by another Japanese hardware startup firm, **Cerevo**, which had been founded by a former Panasonic employee in 2011. UPQ was purchased by Cerevo in 2021 and disappeared, but the entrepreneurial story of UPQ reveals the possibilities available to people who would have otherwise likely remained in large companies.

Japan's Traditional High-Tech Firms as Engineering Talent Pools

The story of Cerevo reveals how Japanese startups can also attract engineers who were previously locked into traditional large Japanese companies. Cerevo built hardware products to provide internet functionality in the early years of the Internet of Things paradigm. Its founder, Iwasa Takuma, left Panasonic and successfully drew engineers from almost all the major Japanese consumer electronics companies, such as Sony, Sharp, Panasonic, and NEC.¹⁵ He found that employees at these large companies were naturally driven to his vision, along with the opportunities that a startup could provide engineers to shape products—a contrast to their highly specialized and niche roles in large, established firms. Iwasa was later recruited back to Panasonic to establish a subsidiary making internet-connected devices. It remains unusual for somebody who left the company to return, and Iwasa's career trajectory reveals the new dynamics of human capital fluidity that corporate Japan is beginning to adopt.

Top University to Entrepreneur: Mergers and Acquisitions to CEO to VC

As Japanese companies increasingly embrace working with startups and even buying them, new career paths—familiar in Silicon Valley but hitherto almost unheard of in Japan—are becoming possible. For example, Asakura Yusuke, a University of Tokyo graduate, started his own company, then worked for McKinsey, and then moved back to the company he had started, **Naked Technologies**. The company provided middleware for Japanese internet-enabled mobile phones in an era predating Apple and Android smartphones. Naked Technologies was purchased by social networking service provider Mixi. Asakura was

quickly promoted to CEO of Mixi as the company suffered a downward spiral. He successfully turned around Mixi in a year and a half and then left to start his next venture while still in his early thirties. After spending two years in Silicon Valley as a visiting researcher at Stanford University, Asakura returned to Japan to cofound a company advising and mentoring Japanese startups. In 2019, the company, **Significant Inc.**, raised a ¥20 billion VC fund.

Silicon Valley Firm Experiences Enabling Entrepreneurs

Silicon Valley firms with offices in Japan are a new source of entrepreneurs and Japanese startup ecosystem players. In 2010, **Wantedly**, introduced more fully below, was founded by Naka Akiko, a Kyoto University graduate who had worked at Goldman Sachs, followed by Facebook. At the time, Facebook's Japan operations had only six people, so it felt like a startup and starting her own company was not such a radical departure. Wantedly listed on the TSE's Mothers Index in 2017.

Sasaki Daisuke, the cofounder of **Freee**, a fintech firm that provides financial tools, an easy-to-use accounting system for smaller-scale companies, was previously employed at Google Japan. He founded Freee in 2012 after realizing that small to medium-sized firms were underserved by enterprise-grade accounting software, which was too expensive or cumbersome. His cofounder, Yokoji Ryu, had worked at Sony. Freee was able to enlist 1,600 banks early on to integrate into its service, allowing the banks' customers easy access to Freee's service. Sasaki's interpersonal networks while a Google Japan employee—he traveled frequently to Google's Silicon Valley headquarters—led to an introduction to Silicon Valley VC firm DCM, which became a lead investor in Freee.

Foreign Financial Firms as Startup CFO Talent Pool

Foreign financial firms provide a talent pool for chief financial officer (CFO) positions in Japan's startup ecosystem. Japan's economic newspaper, the *Nihon Keizai Shimbun*, deemed it newsworthy to run a story listing prominent startup CFOs from foreign firms in 2018 (see Table 6). Many startups on the list underwent initial public offerings (IPOs) between 2016 and 2018, and the CFOs brought experience and interpersonal networks from their previous careers in finance. This career path was increasingly common for successful startups, but novel enough for *Nihon Keizai Shimbun* editors to consider it worth a story. The prominent media exposure undoubtedly enhanced the legitimacy of these CFOs' career paths, as well as that of the startup firms.

Table 6: Prominent Startup CFOs from Foreign Financial Firms (as of 2018)

Name	Foreign Firm	Startup Joined	Year Joined	IPO
Asahara Daisuke	Goldman Sachs	Heroz (AI development)	2013	IPO 2018
Kanesaka Naoki	Goldman Sachs	Money Forward (accounting app)	2014	IPO 2018
Mori Aki	Goldman Sachs	Renova (renewable energy)	2015	IPO 2016
Nagasawa Kei	Goldman Sachs	Mercari (flea market app)	2015	IPO 2018
Kanemitsu Midori	Goldman Sachs	bitFlyer (bitcoin exchange)	2016	
Uriu Hidetoshi	Goldman Sachs	Visasq (sport consulting)	2018	
Koyama Tatsuro	UBS Securities	Pocket Menu (restaurant reservation service)	2015	
Kawahara Ryo	JP Morgan Securities	Medley, Inc. (telemedicine)	2016	
Hirose Gaku	Deutsche Bank	TriFort (app development)	2014	
Nagami Yo	Carlyle Group	Raksul Inc. (printing, distribution service)	2014	IPO 2018

Source: “外資金融出身、刺激求めてスタートアップに転職続々 資金調達・組織作り、経験生かす” [Increasing numbers of people from foreign financial firms joining startups: utilizing their experience to assist fundraising and strengthening organizations], Nikkei, May 21, 2018, <https://www.nikkei.com/article/DGKKZO30670350Y8A510C1FFR000/>.

Higher Pay at Startups vis-à-vis Large Firms

By 2018, the startup ecosystem began offering higher up-front salaries than major Japanese companies. These higher salaries were not limited to new university graduates to whom the long-term employment arrangements paid low wages but were also offered to mid-career hires.

A study by recruiting company JAC Recruitment found a 40 percent increase in salary levels offered by startups to employees from large firms between 2012 and 2019.¹⁶ The average annual salary for startups (defined as firms less than a decade old, excluding foreign firms) was ¥5.14 million in 2012, rising to ¥7.21 million by February 2019, with the latter salary level exceeding that of large firms. Tokyo Shoko Research found the average annual salary of listed firms in March 2018 was ¥6.2 million, with a reversal of the previous trend of people moving from large firms to startups usually taking a pay cut. The higher salaries at startups accelerated the flow of people coming from large firms. BizReach, another recruiting firm, reported a two-and-a-half-fold increase in the number of people leaving large firms to join IT startups from 2017 to 2019.¹⁷

Until the startup ecosystem matured to a certain degree, with the VC industry growing to provide ample funding, startups tended to be unable to afford to offer employees higher salaries in addition to stock options.

Mid-Career Government Officials as Talent Pool

The Japanese government's elite bureaucrats also increasingly became a source of talent for startups. These hires were not simply the traditional post-retirement posts for bureaucrats, known as “amakudari”—generally used for senior bureaucrats' connections and access in addition to domain knowledge.¹⁸

In the maturing startup ecosystem, not only did mid-career bureaucrats who still had promising careers within their ministries leave to join startups, but some became founders. Many joined consulting firms as a first step out of government.

For example, Takahashi Daiju, an executive director and president of the Hong Kong and Shanghai branches of **Oisix Ra Daichi**, which sells organic produce and delivers meal kits, had spent nine years in the Ministry of Foreign Affairs, receiving master's degree from Stanford University during his time as a diplomat. He joined McKinsey, but after the 2011 Tohoku earthquake, he took a leave of absence to found a service connecting local agricultural producers to consumers through an online marketplace before joining Oisix. Oisix had been founded in 2000 by Kohei Takashima, who attended graduate school at the University of Tokyo and also worked at McKinsey. The company listed on the TSE's Mothers Index in 2013.

Similarly, Kuwahara Tomotaka left the Ministry of Economy, Trade and Industry (METI) after twenty years in 2018 to join **Origami**, a mobile cash platform founded in 2012. He had earned a master's degree from the University of California San Diego and had spent a few years seconded to the Japanese consulate in San Francisco. His last posting was as a director in the Japan Economic Revitalization Bureau of the Cabinet Office. Origami was purchased by Mercari in 2019.

Ogata Masayuki, who joined the Ministry of Internal Affairs and Telecommunications out of the University of Tokyo in 2001, took the opportunity to study abroad while in government, earning a law degree from Stanford University and spending a year at UC Berkeley. While posted in Hong Kong, he spent evenings earning a business degree from Hong Kong University of Science and Technology before leaving the ministry to join consulting firm Accenture in 2012. In 2016, he joined Freee and became its chief operating officer.

Inoue Tomotaka, who joined METI in 2000 after graduating from the University of Tokyo, earned a master's degree from the Harvard Kennedy School of Public Policy while in government, and was posted to the Japanese consulate in San Francisco as a consul in 2016. He left the ministry upon his return to Japan at around age forty to join **VISITS Technologies**, an HR technology startup. The company had been founded in 2014 by Masaru Matsumoto, who obtained a graduate degree from the University of Tokyo where he studied financial engineering. Matsumoto joined Goldman Sachs; moved to another foreign financial firm, UBS; and started his own hedge fund before founding VISITS Technologies.

A more senior startup hire was Kanda Mitsunori, a successful career bureaucrat who joined the Bank of Japan in 1994 after graduating from the University of Tokyo and earning a master's degree from Yale. He spearheaded numerous fintech initiatives and joined **Money Forward** in 2017.

In these cases, time spent abroad through several government programs enabling bureaucrats to live abroad and attend prestigious global universities may have been an important springboard for them. The officials cultivated broader interpersonal networks, global sensibilities, and a broader perspective on what they could achieve. While a narrowminded bureaucratic concern may be that some participants in these programs end up leaving government several years after returning to Japan, it would be a mistake to abolish such programs in an attempt to retain talent—these people may have eventually left anyway, but their global networks and experiences gained in universities abroad end up helping Japan in its next phase of development.

Agri Info Design, which provides an Android smartphone application that uses GPS to enable farmers to move their tractors in straight lines in the field for seeding and applying fertilizer, was founded in 2014 by Hamada Yasuyuki, who had been a senior researcher at the National Agriculture and Bio-oriented Research Organization. He started his career as a researcher in the Ministry of Agriculture, Forestry and Fisheries. The app, which provides an extremely low-cost solution for developing countries and farmers who cannot pay the high fees of existing automated tractor services, won several startup pitch contests, including the Infinity Ventures Summit 2015, and the New Economy Summit 2016.

Matsuda Naoko served in the METI for eighteen years before leaving in 2018 to found **bestat**, an AI company specializing in providing applied deep learning to a variety of areas. Matsuda had spent a year at Columbia University in 2005, the same year that Matsuo Yutaka, a notable computer scientist specializing in AI from the University of Tokyo spent a year at Stanford. Matsuo's research lab later became well known for producing a large number of startups (details will follow in a subsequent paper in this Startup Japan series). Matsuda had earned a PhD in engineering at the University of Tokyo in 2014 while working for the METI and helping with Matsuo's lab.

While comprehensive data on government officials moving to startups does not exist yet, these abovementioned examples illustrate the new dynamics of elite level human capital flows developing in Japan's startup ecosystem.

The Rise of Startup Alumni Entrepreneur Networks

As Japan's startup ecosystem matured, a growing number of employees from early generations of successful IT startups moved on to become entrepreneurs themselves. For example, Rakuten and DeNA have their own analogues to Silicon Valley's "PayPal Mafia"—the group of early PayPal founders and members founding and funding various successful firms. The

Japanese startup community has begun referring to some of these networks as “Rakuten Mafia” or “DeNA Mafia.”

Tsuda Masayasu (Zentai), who joined Rakuten in its infancy in 1998 and later built Rakuten Travel, left the company in 2003 to establish online travel booking and review site 4travel.jp. The company was sold to Kakaku.com for \$11 million in 2004.

Masao Ito, a Waseda University graduate and early employee of Rakuten who joined in 1999, had founded a job search startup for college students, Minshu, as a side project. He incorporated Minshu in 2002 and left Rakuten to run the company full time but returned to Rakuten when it acquired Minshu in 2004. Three years later, he left again to attend graduate school before founding a big data analysis startup, **UserLocal**. The company went public in 2017 on the TSE’s Mothers Index, moving to the TSE’s First Section in 2019.

The founder of **Gree**, one of Japan’s early successful social networking service firms, Tanaka Yoshikazu, started at Rakuten in 2000 and launched the Rakuten Blog service. Yamada Shintaro, the founder of Japan’s first unicorn company **Mercari**, also had Rakuten ties, having joined the company in 1999 as an intern. Yamada founded **Unoh**, a gaming and digital content company, in 2002, selling it to Silicon Valley firm Zynga in 2010. Three years later, he founded Mercari. Mercari’s former chief marketing officer, Murata Masayuki, was also a Rakuten alum and entrepreneur himself, having founded social commerce platform and later, programming school, Kiramex in 2009, which was sold to United for \$5 million in 2016.

Wada Shuichi, who joined Rakuten in 2005, left the company to establish life-hack website **nanapi**, which was acquired by the telecom giant KDDI in 2014 for an undisclosed amount, speculated to be between ¥4 billion and ¥7.7 billion.¹⁹ Wada left KDDI in 2018 and became a technical consultant for several startups before becoming chief technology officer at manga community service site **Alu**. He is also known for his angel investments in other early startups.

Ozawa Takao joined Rakuten when it acquired his company, **Bizseek**, a used goods e-commerce site, in 2001, just over two years after it was founded in 1999. Ozawa was in charge of building Rakuten’s professional baseball business, and he left in 2007, becoming an angel investor and consultant. In 2011, Ozawa co-founded another company, **Crococ**, which utilized Facebook’s user data platform to plan and market various services. The company was sold to Yahoo! Japan in 2012 for \$10 million, after which he stayed on at Yahoo as an executive officer while becoming an even more prominent angel investor.

The “DeNA Mafia” includes people such as Akimoto Rina (joined 2013), who founded **Vivid Garden** (2016), which connects agricultural producers directly to consumers via an online service;²⁰ Nishimura Keisei (joined 2004), who founded **Donuts** (2007), which provides various web-based services, including games and cloud management services; Akagawa Shunichi (joined 2006), founder of Mirrativ (2018), which provides a livestreaming

platform;²¹ Genki Shiota (joined 2008), who founded **Akatsuki** (2010), which creates mainly mobile gaming apps and was listed on the TSE's Mothers Index in 2016 and the TSE's First Section in 2017; Suzuka Ryugo (joined 2008), who founded **RightMap** (2014), which provides services for HR development and to support hiring; Fukuda Yosuke (joined 2009), who founded **Yoyo Holdings** (2012), offering platforms for advertising and micro influencer marketing mainly in Southeast Asia; Iwasaki Yuka (joined 2012), who founded **YouTrust** (2017), a recruitment service whose outreach is limited to second-degree connections; and Maeda Yuji (joined 2013), who founded **Showroom** (2015), a livestreaming platform and virtual reality live performance platform.

Interpersonal networks within the startup community are getting stronger as the ecosystem matures. Koizumi Fumiaki, CEO of Mercari, for example, served on several boards of other startups that have now successfully gone public.²² Originally at Daiwa Securities, where he worked on the IPOs of startups such as DeNA and Mixi, Koizumi left to join Mixi, becoming an executive there by age twenty-seven. He wound up as chief technology officer but left when he was thirty-two. For the next couple of years, he helped firms in their very early stages, including Akatsuki, a gaming company founded in 2010 and listed on the TSE's Mothers Index in 2016; Raksul (IPO in 2018), introduced above, and others. He met with Yamada, Mercari's founder, and joined the firm soon thereafter in 2013 when the company's head count was still not much more than ten people.

Human Capital Flow Accelerators as Startup Opportunities

Japan's evolving logic in the labor market also opened opportunities for startups to offer services to accelerate labor market flexibility. The success of these startups further enabled labor market fluidity, aiding the startup ecosystem—a positive feedback loop. Japan's job placement industry was initially targeted at temporary contract workers since most of the employment liquidity was limited to that segment of employment. The industry expanded into mid-career job placement as market demand grew. The large job placement firms, Pasona and Recruit, for example, expanded their practices into white-collar placement. New services to enable freelance workers to connect to employers arose, as well as specialized services targeted at specific groups, such as professional women who left the workforce to bear and raise children.

Wantedly, which combines aspects of a social networking service with recruiting, was founded by Akiko Naka in 2010. During her career at Goldman Sachs followed by Facebook Japan, Naka realized that a large portion of younger workers were interested in finding fulfillment from their jobs rather than simply making a good salary. Driven by this insight, Wantedly makes a point of not allowing employers to post salaries, but instead appealing to workers' potential passion for the job. Wantedly rode the wave of mid-career hiring and labor dynamism in IT firms, quickly becoming adopted by over 1,000 companies and 10 million users. Large companies' personnel recruiting budgets easily covered Wantedly's fees, so the company became profitable early on without receiving VC

investment. It listed on the TSE's Mothers Index in 2017. By 2018, it had 30,000 registered companies and around 2.4 million paying monthly users.²³ In order to strengthen its social network capabilities, Wantedly released a product, "Wantedly People," in 2016, a business card management app that collects scanned images of business cards using AI image recognition to automate the input of data with high accuracy, gaining 3 million users of the free service.

BizReach started in 2009 as Japan's first "direct recruiting" firm focused on mid-career managers and employees with specialized skill sets.²⁴ It created a matching platform, where potential employees could list their resumes and employers could browse them and contact them directly. BizReach founder Minami Soichiro is a graduate of Tufts University with experience at Morgan Stanley Japan and then a role in newly founded baseball team Rakuten Eagles, Japan's first new baseball team in fifty years. From his own experience when trying to search for new jobs through headhunting firms, he saw lots of room for improvement: he had met twenty-seven recruiters who promised to find good fits for his skills and interests, but was given twenty-seven completely different choices that went against what he had conveyed. He realized that the business had little transparency and relied on commissions from prospective employers and a portion of the salary from the employee who took a job. BizReach, inspired by the norms of e-commerce that brought sellers and buyers together directly, would take fees from potential employees to post their resumes. BizReach raised an early round of funding from JAFCO, and later YJ Capital (an investment subsidiary of Yahoo! Japan), Salesforce Ventures, Dentsu Digital, Rakuten, and others. By mid-2020, the company had over 1,300 employees, sales of ¥25.8 billion, operating profits of ¥2.19 billion, and it underwent an IPO in 2021.²⁵

As more large Japanese firms allow workers to hold second jobs (something that had been explicitly prohibited by many companies until recently), opportunities for new firms to offer matching services have grown as well. For example, CrowdLinks, a service provided by **CrowdWorks**, a company founded in 2011 with a variety of web-based services and listed on the TSE's Mothers Index in 2014, is largely focused on secondary jobs.

Lancers is a crowdsourcing platform for freelance work founded by Akiyoshi Yosuke in 2008. While in college, Akiyoshi found that he had difficulty finding freelance work, and upon joining internet service provider Nifty after he graduated, he discovered that the company had difficulty finding effective freelancers to work on projects. Seeing space for improvement, he founded his company before crowdsourcing was popular in Japan. Lancers grew quickly using a model in which clients paid Lancers, with payment to freelancers released only after the job was completed. Akiyoshi self-funded the firm, and revenue financed its growth until he raised ¥300 million in 2013 from GMO Venture Partners and Globis Capital Partners.²⁶ By 2016, Lancers recorded ¥2.1 billion in sales, and it estimated that Japan's freelancer market was just over 11 million people and growing. By 2018, Lancers reported that it had placed over 2 million freelancer jobs (presumed to include repeats). In 2018, it raised ¥1 billion from Persol Holdings, a job placement company, and Shinsei Bank.²⁷

Lancers also expanded to offer an array of services to freelancers previously only available to full-time workers, including accounting; legal support; education; health care; coworking spaces in locations such as Shibuya, Tokyo's major financial and commercial center; day care services; and meetup events. Its relationship with Shinsei Bank led to a credit card being issued to freelancers; Japanese financial institutions had previously almost never issued credit cards to freelancers, making it more difficult to operate as a freelancer.²⁸ In December 2019, Lancers listed on the TSE's Mothers Index.

Waris is a notable freelance matching startup explicitly targeting an underutilized but highly capable and skilled workforce: professional women, especially “high-skilled mothers” who left their jobs to raise children. Waris was cofounded by Yonekura Fumika, who worked for companies including Boston Consulting Group and Recruit; Tanaka Miwa, employed previously by a publishing arm of Nikkei; and Kawa Kyoko, previously at Recruit. They founded the company in 2013, and by late 2015, they had around 800 client companies and 2,500 women registered. By mid-2019, they had 1,800 client companies and 13,000 women registered.

Foreign Top Talent: A Missing Ingredient to Fuel Japan's Startup Ecosystem

A major component of Silicon Valley's human capital, high-skilled immigrants, has not been a part of Japan's maturing startup ecosystem. Japan's postwar economic model was largely closed to immigrants. When labor shortages led to a mild relaxing of restrictions on immigration, particularly in the mid-1980s, it was mostly limited to unskilled workers needed to work on assembly lines and in construction.

More recently, in the 2000s, as labor shortages affected areas such as health care and elder care, limited special visa programs were implemented to bring in temporary skilled workers for a few years at a time, but the scale remained small. Some policies to assist foreign entrepreneurs form companies in Japan have been promulgated, but Japan's startup ecosystem remains largely domestic at its core.

That being said, many of the larger startups, such as SmartNews and Mercari, have significant levels of non-Japanese employees, with branches in Silicon Valley. Others, such as Wantedly and Raksul, introduced above, have expanded into other parts of Asia, with offices in Singapore and India, respectively. Biotechnology startup Spiber's workforce was around 10 percent non-Japanese in 2018. A limited number of startups have foreign cofounders, such as **Mujin**, which provides AI software for industrial robotics. Mujin Cofounder and CEO Rosen Diankov, who was born in Bulgaria and raised in the United States, has a PhD in computer science from Carnegie Mellon University.

Earlier startups, such as Rakuten, which grew into large companies, took drastic measures to globalize their workforces. In 2010, when Rakuten had approximately 10,000 employees, its founder and CEO, Mikitani Hiroshi, announced that the company would switch to English as its official language. After a two-year period of adjustment in which the company would pay for English lessons, employees who could not pass standardized exams with a certain score would be asked to leave. This was seen as radical and reckless at the time, and many employees, including some executives, left the company. However, five years after shifting the company's language to English, a survey found approximately 90 percent of employees had attained the target test scores, and an academic study of over 600 employees around the world found that Rakuten had actually succeeded in spreading its core corporate values, many of them Japanese, around its subsidiaries outside Japan as well.²⁹ The IT development team was able to quickly embrace large numbers of foreign employees, and Rakuten embarked on an aggressive strategy of acquiring companies around the world and investing in Silicon Valley startups such as Lyft and Dropbox. Mikitani later credited the embracing of English as the primary language as an important enabler of the company's subsequent success.

A subsequent paper in the Startup Japan series will focus on specific government policies that have shaped Japan's startup ecosystem, along with recommendations for the government to further accelerate growth of the ecosystem. Reducing the restrictions on foreign high-skilled employees and entrepreneurs from working in Japan is a necessary concrete step to globalize Japan's startup workforce. Credible commitments against a future sudden restriction on the entry of non-Japanese, as was done when the COVID-19 pandemic hit in 2020, followed by an abrupt near complete closing of borders, as occurred in late 2021, must also be made. Externally, the Japanese government should also negotiate with countries such as the United States to enable work visas that allow Japanese to work overseas for certain periods of time more easily than current arrangements allow.

About the Author

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