Japan's AI Opportunity.

How AI can support Japan's economic and social revitalisation.

PUBLIC FIRST

Contents.

Executive Summary.

Japan faces a mix of deep-rooted economic challenges. Its shrinking workforce and historic challenges in moving on from export-led growth have suppressed domestic demand. Additionally, regional imbalances within the country mean that economic benefits are overly concentrated in Tokyo.

AI presents an opportunity to reset the Japanese economic model. It can shift Japan towards a more innovative, high-value service-led economy by stimulating demand and investment in domestic sectors like software and digital services. AI can help boost economic productivity in Japan by making workers more productive, helping boost Japan's services sector and spreading economic opportunity across the country.

The AI Opportunity.

AI can catalyse economic growth.

AI provides a once-in-a-generation opportunity to catalyse economic growth by tackling Japan's longstanding labour productivity challenges. In our research, we found that AI could help power the next stage of Japan's growth, boosting the economy by **JPY 53 trillion (USD 350 billion), a 9% increase in Gross Value Added (GVA).**

AI could help power the next stage of Japan's growth, boosting the economy by **JPY 53 trillion (USD 350 billion), a 9% increase in Gross Value Added (GVA)**

GVA +9%

*Gross Value Added (GVA) is Gross Domestic Product (GDP) minus taxes and subsidies.

Powering Japan's Economic Revival.

AI can offset ageing-related labour shortages.

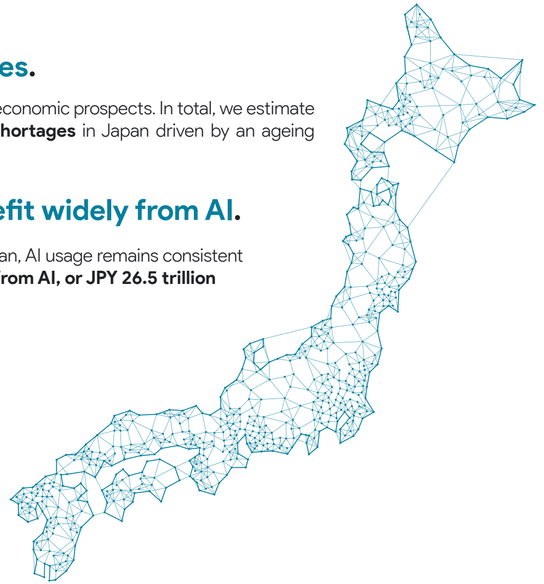
Demographically induced labour shortages have been a blight on Japan's economic prospects. In total, we estimate that the greater use of AI could **help offset 41% of potential labour shortages** in Japan driven by an ageing population.

Regional economies outside Tokyo will benefit widely from AI.

Despite regional economic imbalances between Tokyo and the rest of Japan, AI usage remains consistent across the country. In our modelling, we found that **over half of all gains from AI, or JPY 26.5 trillion (USD 175 billion)** will benefit prefectures outside Tokyo.

AI can increase labour productivity.

With Japan facing the lowest labour productivity in the G7, AI can help Japanese workers increase their outputs and boost their wages. Our modelling suggests that the potential skills gains from AI could **boost average worker productivity by over JPY 220,000 (USD 1,400) a year.** This is equivalent to around an extra month's wages for the average Japanese worker.



AI in Action.

AI could prevent 59% of the costs from cybersecurity threats and fraud.

Once widely deployed, new AI technologies can help Japan combat its recent surge in cyber attacks cost effectively.

AI could help increase productivity in the public sector in Japan by 8%.

AI could create a more transparent, flexible and responsive public sector, freeing up worker time for higher value activities.

AI could help Japan's biotech firms reduce the average time for drug discovery by 40%.

As new pharmaceutical drugs take significantly longer to gain domestic approval, Japanese patients often turn to imported treatments, leaving Japan with a major pharmaceutical import deficit. By integrating AI tools into pharmaceutical R&D, drug discovery time could decrease for Japan's biotech firms.

Maximising the AI Opportunity.

Japan will need to boost confidence across the population and encourage adoption.

At present, AI adoption remains slower among women, older and non-graduate citizens. If we don't work to reverse the gap in worker AI adoption, it could **reduce the overall potential economic benefits from AI by 31%.**

Japanese SMEs will need improved tech infrastructure to accelerate AI adoption.

Wider investment in the digital infrastructure of smaller and older Japanese businesses will be key to unlocking the economic gains from AI. At present, if the worst-performing Japanese small businesses increase their productivity growth, national productivity is expected to **increase by 1.8 percentage points.**

The AI Opportunity.

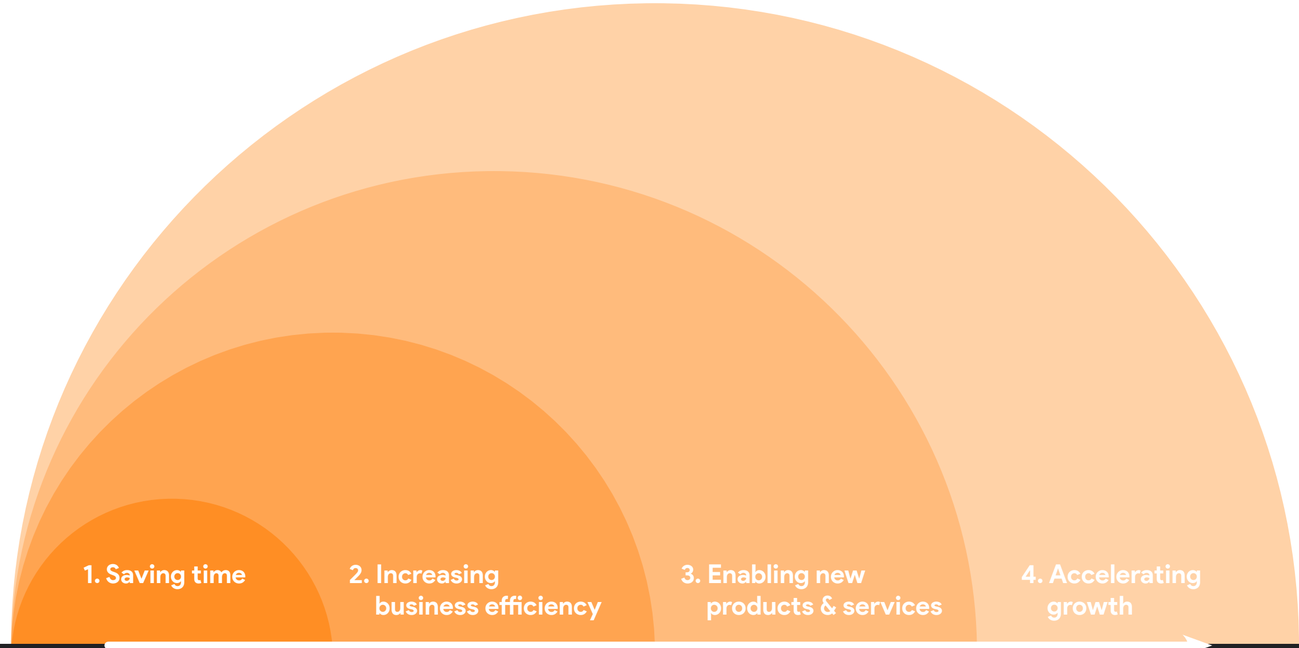
AI is a once-in-a-generation opportunity.

AI is a once-in-a-generation opportunity to catalyse faster economic growth, boost social inclusion and address many of society's most important challenges.[1] In the last few years, we have seen rapid improvements in the capabilities of AI, spurred on by the development of the transformer model architecture by Google researchers in 2017. **In our research, we found that AI could help power the next stage of Japan's growth, boosting the economy by JPY 53 trillion (USD 350 billion), a 9% increase in GVA.**

Japan's long-standing reputation for innovation continues to shape how people view the nation's role on the world stage; a majority of Japanese people want their country to be leading the charge on AI. **68% of Japanese people express pride in the country's global leadership in the tech sector, with 61% saying they believe their country should aim to be an AI superpower.**

*Gross Value Added (GVA) is Gross Domestic Product (GDP) minus taxes and subsidies.

AI's exponential economic impact.



AI can reset the Japanese economic model.

Challenge

Demographic decline and economic stagnation.

A rapidly ageing population has left Japan with major workforce shortages in key industries. Limited human capital availability has also restricted economic growth. Japan sees low labour productivity and creeping inflation, pushing it towards a wage-price spiral where prices rise and there is heightened pressure to increase wages to help workers face rising costs of living, at a time when businesses are also facing surging costs.

Moving away from an export-led economic growth model.

Japan's reliance on price-competitive exports has suppressed domestic demand and wages for the last few decades. This model prioritised manufacturing and exports of tech hardware and held back its transition towards a high-value, innovation-driven services economy.

Small businesses are holding back major productivity gains.

While large businesses have been quicker to adopt digital tools and make significant contributions to national productivity, Japanese SMEs have experienced flat productivity growth in the last decade.[2]

AI Solution

AI can boost economic growth by making labour and capital more productive.

By automating repetitive tasks, AI allows workers to focus on higher value tasks, thereby boosting labour productivity. Through predictive maintenance of assets and optimising expenditure and monitoring, AI can augment capital usage. Such economic growth can mitigate inflationary pressures from labour costs and boost wages for workers, combatting the pressure from increased inflation.

AI can stimulate domestic demand and balance tradebooks.

Widespread AI use in domestic sectors can bolster demand, while investment in AI-facing sectors such as software and intangible tech assets can drastically reduce Japan's productivity gap with countries like the United States.[3] Access to AI translation tools also expands the reach of domestic Japanese content.

AI can reduce the economic gap between SMEs and large businesses.

By allowing Japanese SMEs to create more output with fewer labour and capital inputs, AI can help bridge the economic divide between Japanese SMEs and large conglomerates. This will likely help regions outside Tokyo the most, where the majority of struggling SMEs are located.

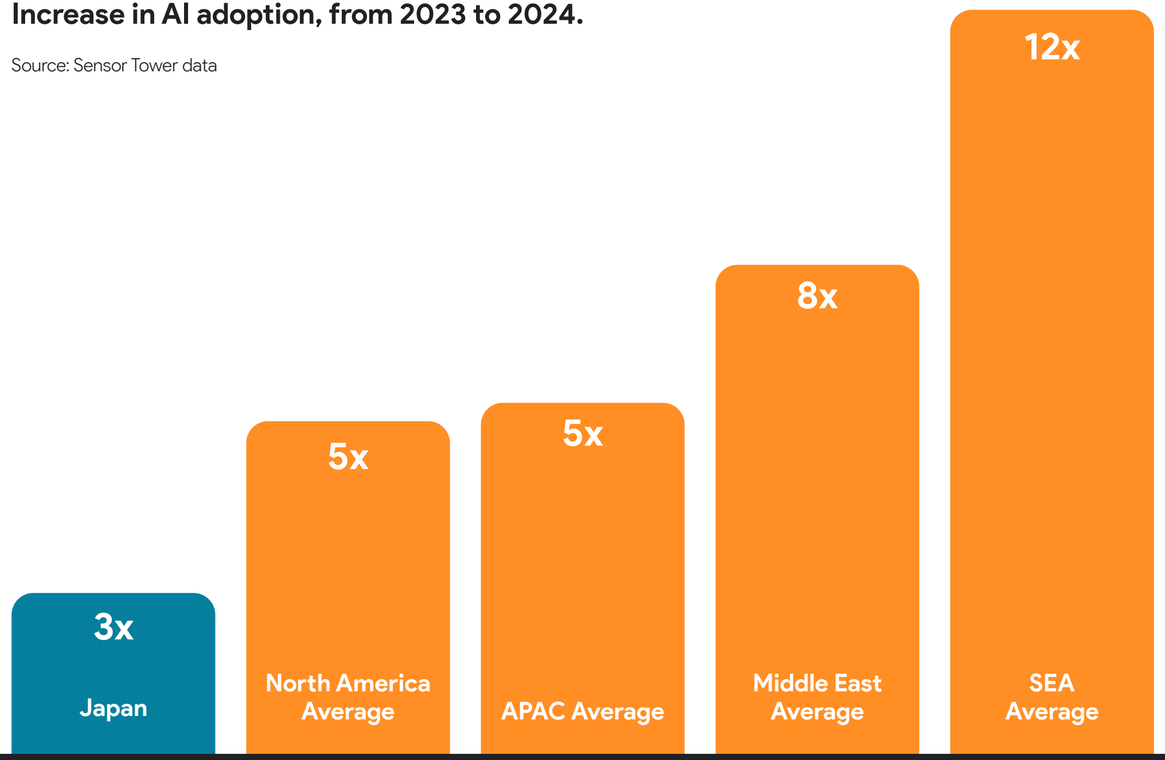
AI is gradually being adopted in Japan.

Japan is still in its early stages of AI adoption. Though usage increased by **162%** between 2023 and 2024, overall adoption remains behind global averages.[4] The country's slower pace of adoption is characterised by caution, with a consensus-driven business culture and a preference for established systems over rapid diffusion of new technology.

As it stands, just **27%** of people in Japan - rising to **35%** of those under 35 - said that they were using a gen AI tool weekly in their work lives. This compares to 66% of those in the Asia-Pacific region and 75% of those under 35.

Increase in AI adoption, from 2023 to 2024.

Source: Sensor Tower data



How are people using AI in Japan?

“When researching something, using AI makes it easier to find the answer, speeds up your thinking, and removes the hassle of researching.”

Female, 50, Chubu

“It handles English translations and other tasks for me, which has increased my work efficiency.”

Male, 30-45, Chubu

“It’s useful when cooking. If you ask it “What can I make with the ingredients I have now?”, it will give you multiple recipes.”

Male, 50-55, Chubu

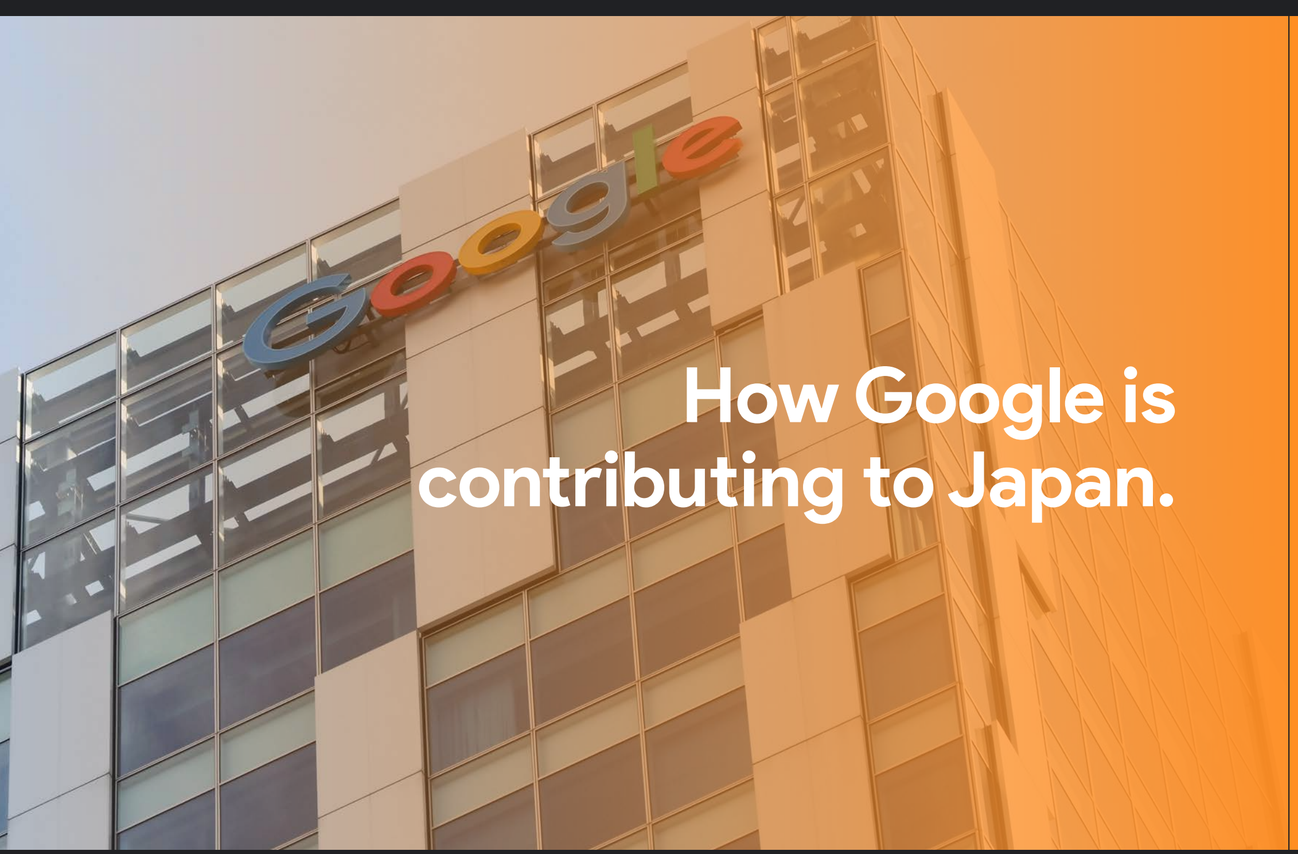
“The answers are fast and well-organised, saving you time.”

Male, 35-45, Kanto

“I was able to draw on information outside of my own experience, which gave me a new perspective.”

Female, 65+, Kinki/Kansai

Responses to question: Can you think of any ways you would use AI in your [personal/work] life?
Responses are edited for grammar and spelling, but otherwise unchanged.
All responses taken from a Public First survey of Japanese adults.



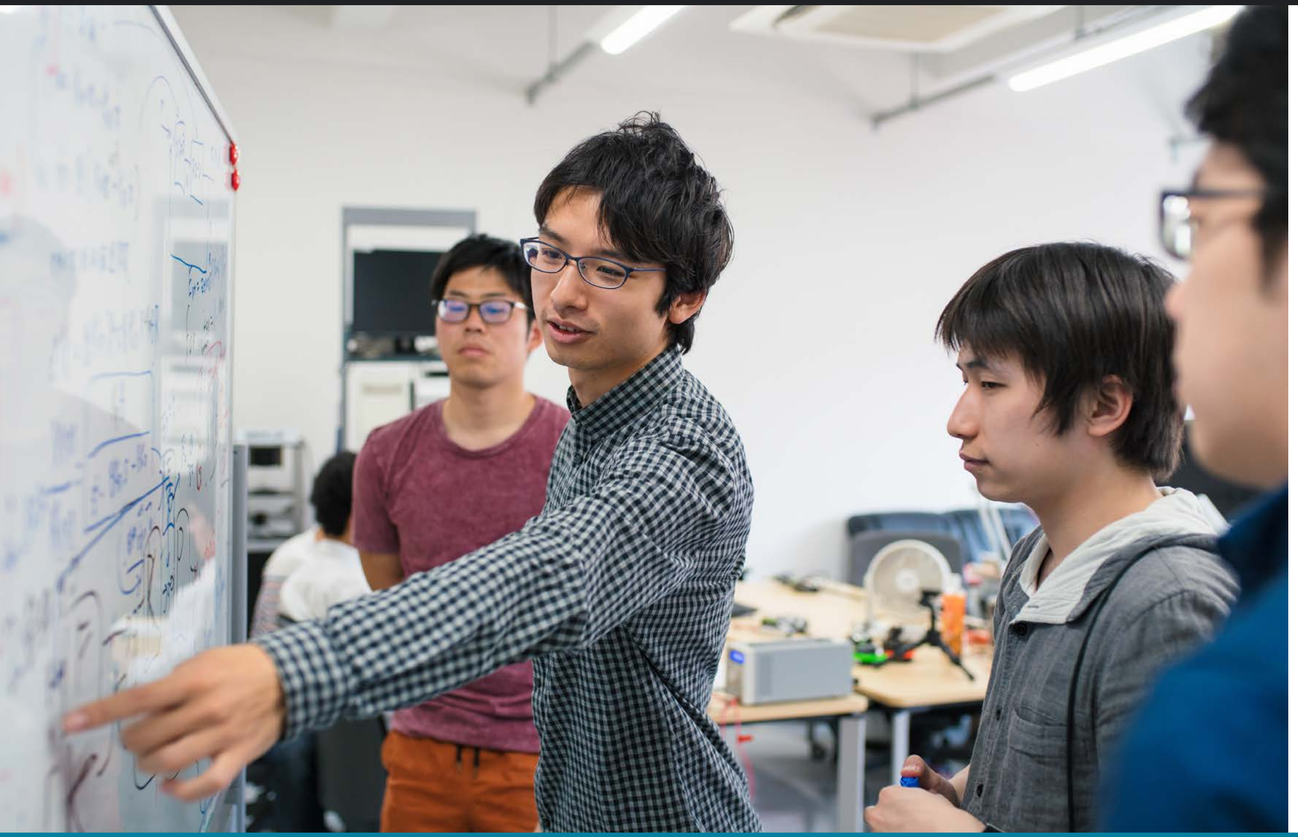
How Google is contributing to Japan.

For over a decade, Google has been investing in AI to advance its mission to organise the world's information and make it universally accessible and useful. From key language understanding techniques, to the Transformer architecture underlying today's generative AI revolution, Google researchers have been behind a significant number of defining AI breakthroughs.

Today, Google is expanding access to AI for billions in Asia Pacific through products like Maps, Search, Android, Gemini and NotebookLM, while helping businesses be more productive and connect with new customers.

This value adds up. In 2024, Google Search, Google Maps, Google Play, Google Drive, and YouTube helped provide **JPY 18 trillion (USD 120 billion) of additional consumer benefits in Japan.** This is equivalent to a monthly benefit of **JPY 16,000 (USD 110)** for the average online adult, which is the result of easier access to information, increased productivity and a variety of entertainment and enrichment benefits.

Google acts as a crucial economic catalyst: connecting businesses with customers worldwide, enhancing business productivity and giving Japanese creators and developers new platforms through which they can reach the world. In 2024, Google Search, Google Ads, Google AdSense, Google Play, and Google Cloud helped provide **JPY 8.1 trillion (USD 53 billion)** of economic activity for businesses.



Powering Japan's Economic Revival.

AI can enhance productivity and wages for Japanese workers.

Economic output per worker in Japan has remained at the same levels as in 2010.[5] Japan has the lowest labour productivity of all G7 countries. This has led to stubborn stagnation, marked by low economic growth corresponding with creeping inflation.[6] [7]

AI offers a significant opportunity to reverse over a decade of lagging productivity, by automating repetitive tasks and freeing up worker time to pursue higher value activities.[8] [9]

According to our analysis, today's AI technologies are likely to significantly augment around **48% of workers**, boosting their productivity. In contrast, we found **21%** of today's workers are at risk of displacement from AI, indicating a need for upskilling - an area in which AI could also support.[10]

We have already seen AI's potential to boost the skills base of workers: helping them catch up with the performance of the best workers in their environments and being more productive at work.

2 hours

On average, we estimate that AI could save the average worker **2 hours in administrative tasks a week.**

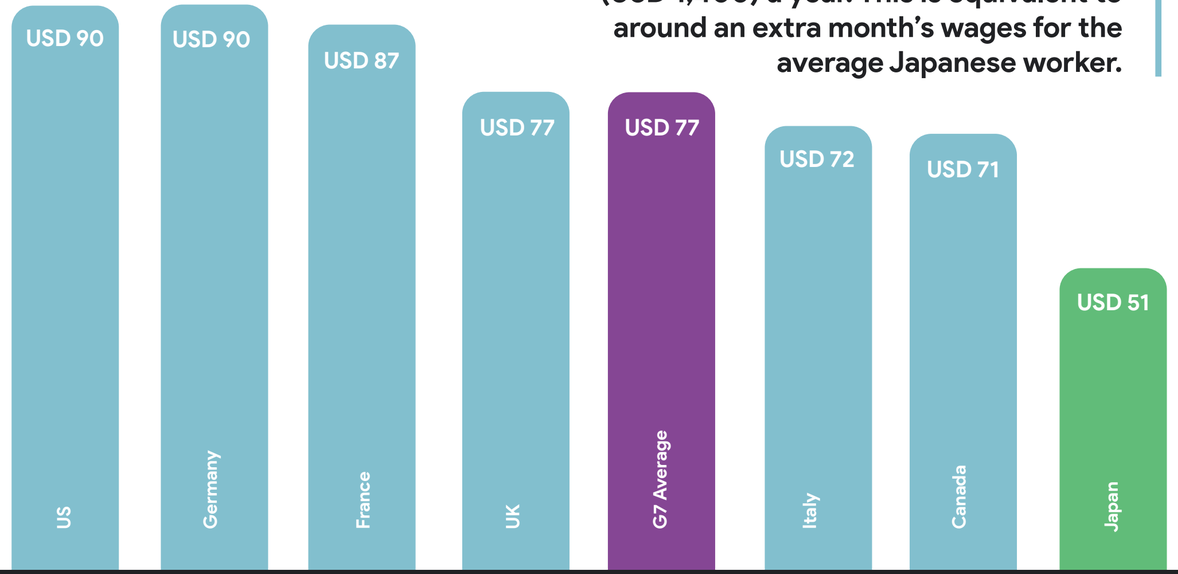
9%

By boosting productivity and allowing workers to focus on higher value tasks, AI raises the value of hours worked and creates potential **wage increases of 9%.**

Japan has the lowest labour productivity in the G7.

Source: OECD

GDP per hour worked, USD current prices 2022, Purchasing Power Parity (PPP)



In our modelling, we found that the potential skills gains from AI could boost average worker productivity by over

JPY 220,000

(USD 1,400) a year. This is equivalent to around an extra month's wages for the average Japanese worker.

AI can offset ageing related labour shortages.

Japan has the oldest population in the world. While the population of those aged under 64 has fallen between 1996 and 2020, the population of over-65s has increased by 89% in the same period.[11]

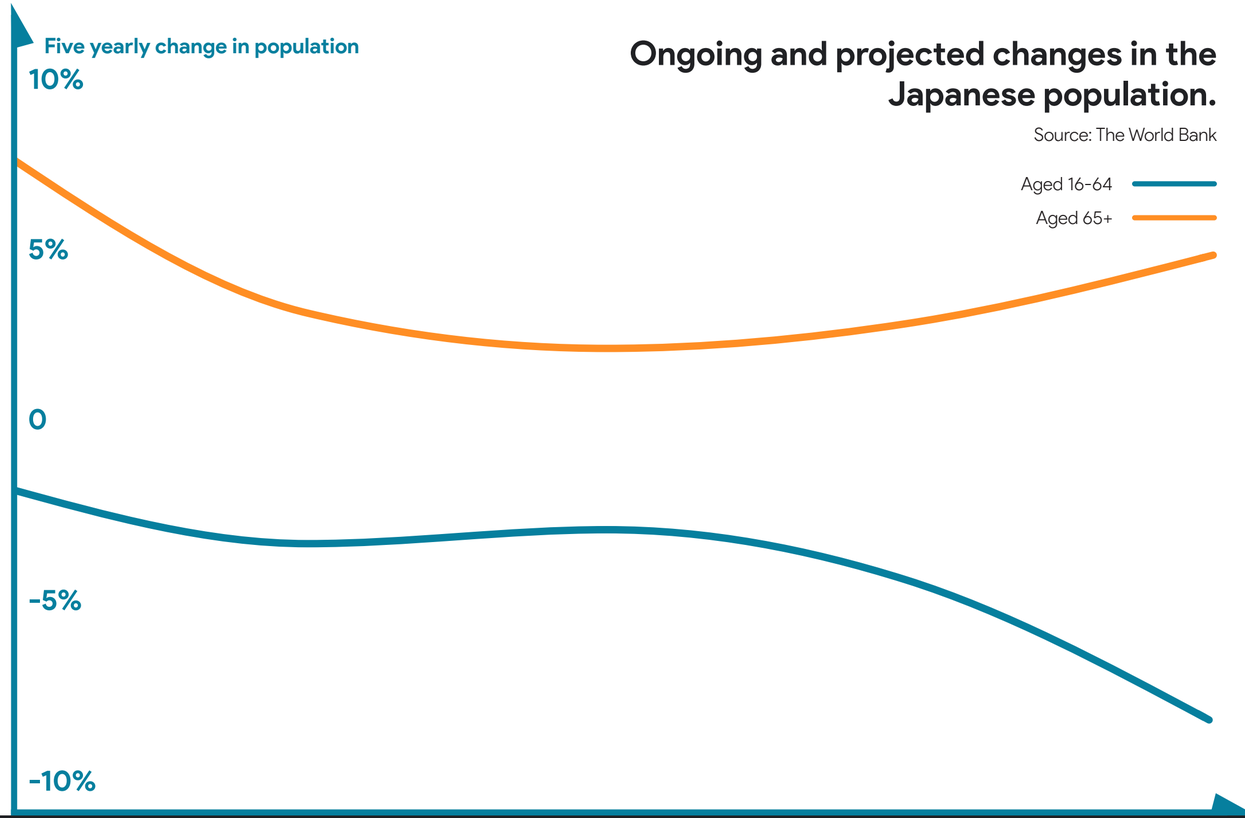
Rapid demographic decline has left Japan with a steadily shrinking workforce. The working age population is projected to fall by 18% by 2040, leaving a shortage of 11 million workers. Labour shortages are then likely to be largest in key economic and social sectors such as construction, transport and caregiving.[12]

AI offers a much needed solution. By automating tasks in sectors where labour is scarce, AI can help maintain production levels despite an ageing workforce. By enhancing existing capabilities, AI can also increase the output per worker, helping even a smaller workforce be more productive. **In total, we estimate that the greater use of AI could help offset 41% of potential labour shortages in Japan driven by an ageing population.**

The University of Tokyo partnership with Google highlights how AI can be used to better guide workers to industries facing labour shortages.

Ongoing and projected changes in the Japanese population.

Source: The World Bank



Google and the University of Tokyo are using AI to solve Japan's critical workforce challenges.

In June 2024, Google announced a ground-breaking partnership with the University of Tokyo to tackle the challenges of Japan's ageing population head-on. Launched from the Matsuo-Iwasawa Laboratory, this partnership is deploying generative AI solutions across all 47 Japanese prefectures with one primary goal: to bolster the existing job market and workforce for the good of all Japanese citizens.[13]

This work has already begun in Osaka, a prefecture with a rapidly declining working age population. For job-seekers, the technology identifies unexplored career paths and aptitudes, suggesting step-by-step routes for graduates to find the jobs they desire.

For businesses, AI can generate effective hiring materials for a cheaper and more effective hiring process, and identify promising candidates based on the profiles of current employees. This ability to match people and jobs can combat regional labour shortages and unlock new potential in the workforce, with initial projects underway in eight prefectures: Osaka, Hiroshima, Oita, Miyagi, Aichi, Tochigi, Kanagawa, and Kagoshima. By focusing on key sectors such as employment, health, welfare, and sustainability, this collaboration aims to establish a national blueprint for economic and social resilience.

AI can grow regional economies outside Tokyo.

Tokyo is currently home to over 20% of Japan's economic output, accounting for JPY 110 trillion (USD 720 billion), larger than the GDP of countries like Singapore and Thailand.[14] The Japanese economy is highly reliant on Tokyo, as prefectures outside struggle with outward migration of workers and fewer agglomeration benefits.[15] Prefectures outside Tokyo are also more reliant on agriculture and manufacturing, while Tokyo enjoys a more diversified economy rich in services.[16]

Despite regional economic imbalances between Tokyo and the rest of Japan, AI usage remains consistent across the country. There is little to no difference between current and projected usage between Tokyo and the rest of the country.

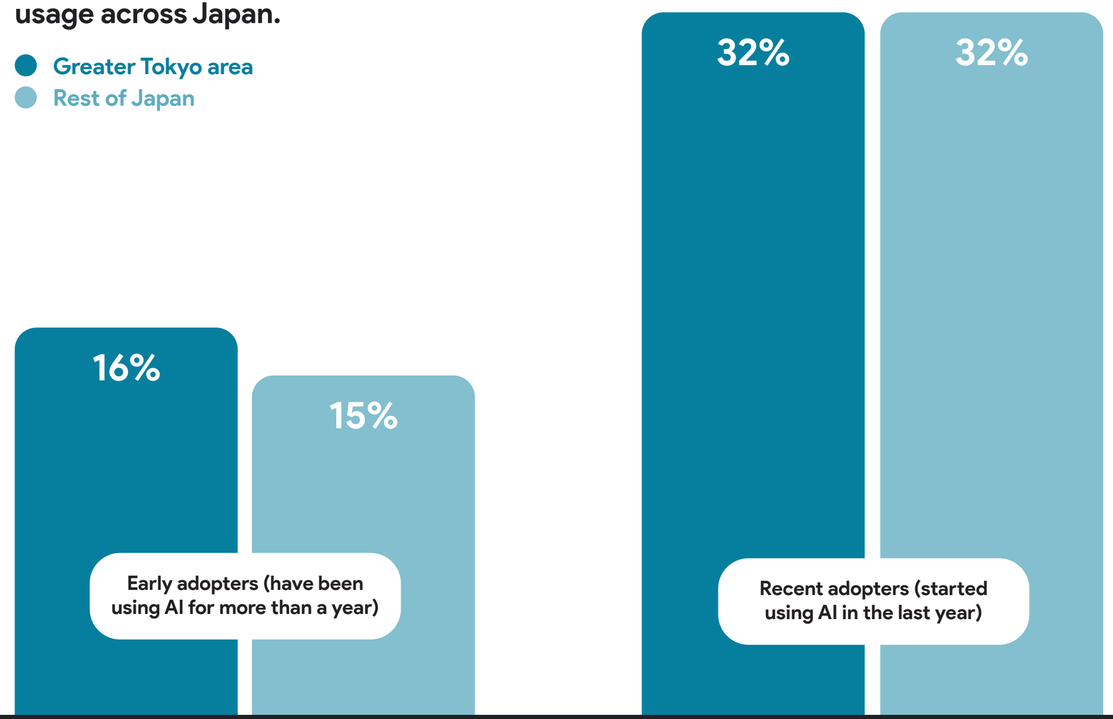
As AI augments Japan's manufacturing and agriculture capabilities, this could help to reset the productivity balance outside of Tokyo.

In our modelling, we found that

over half of all gains from AI

will benefit prefectures outside Tokyo.

Minimal differences in AI usage across Japan.



AI in Action.

AI will keep Japan at the forefront of digital health solutions.

Japanese healthcare is one of the most advanced systems globally. Residents enjoy near 100% (98.3%) universal healthcare coverage and this provides clear results: Japan records one of the longest average life expectancies in the world.[17] [18] Meanwhile, Japan's advanced telehealth solutions have contributed to the growth of digital medicine, particularly during the 2020 pandemic.[19]

The healthcare system is integrating AI into their everyday functioning. Researchers at the Cancer Institute Hospital in Tokyo have developed AI models for gastric cancer detection that outperform human endoscopists, achieving up to 98.6% sensitivity for large tumours.[20] In Kyoto University Hospital, AI is summarising doctors' notes and discharge summaries with a 92% accuracy rate, significantly reducing paperwork for medical professionals.[21]

The public also support AI use in triage and diagnosis, especially when combined with human reviews.

59%

of people say they would support the greater use of initial AI triage and diagnosis. This increases to

61%

who would support AI in this case if it was reviewed by a human doctor.

Google's Project VOICE is using AI to support inclusive communication.

Project VOICE (Valuing Our Individual Communication Expression) is a Google research initiative aimed at improving communication for people with speech and motor impairments, such as ALS (Amyotrophic Lateral Sclerosis) or SMA (Spinal Muscular Atrophy), by helping them express themselves more easily and naturally with the power of AI.[22]

Built on Google's Gemini model, Project VOICE uses predictive text technology to suggest likely next words or phrases based on the user's input and context. By allowing users to select from these suggested options, it enables messages to be conveyed with significantly fewer steps than before, supporting smoother, real-time conversations. The system adapts to each user's interests and communication style, offering personalised suggestions. It also supports a range of input methods, including eye-tracking and switch controls, to meet different accessibility needs.

While still evolving, Project VOICE is already making it easier for users to express themselves and stay connected to the people around them, and is aiming to set a new standard for inclusive communication technologies. In June 2025, Project VOICE was open-sourced allowing developers worldwide to freely integrate the system into their own products and services.

AI will speed up drug discovery.

Japan remains highly reliant on cutting-edge drugs developed abroad. One of the key drivers of this reliance has been a historical "drug lag" - the time between a drug's global approval and its availability in Japan. When new therapies take significantly longer to gain domestic approval, Japanese patients and providers often turn to imported treatments already available in global markets.[23] This has contributed to a persistent trade deficit in pharmaceuticals, with imports exceeding exports by over JPY 3 trillion (USD 19.7 billion).

The country has taken steps to reduce this lag: while the average delay was 4.5 years between 2008–11, it narrowed to 1.8 years by 2016–19.

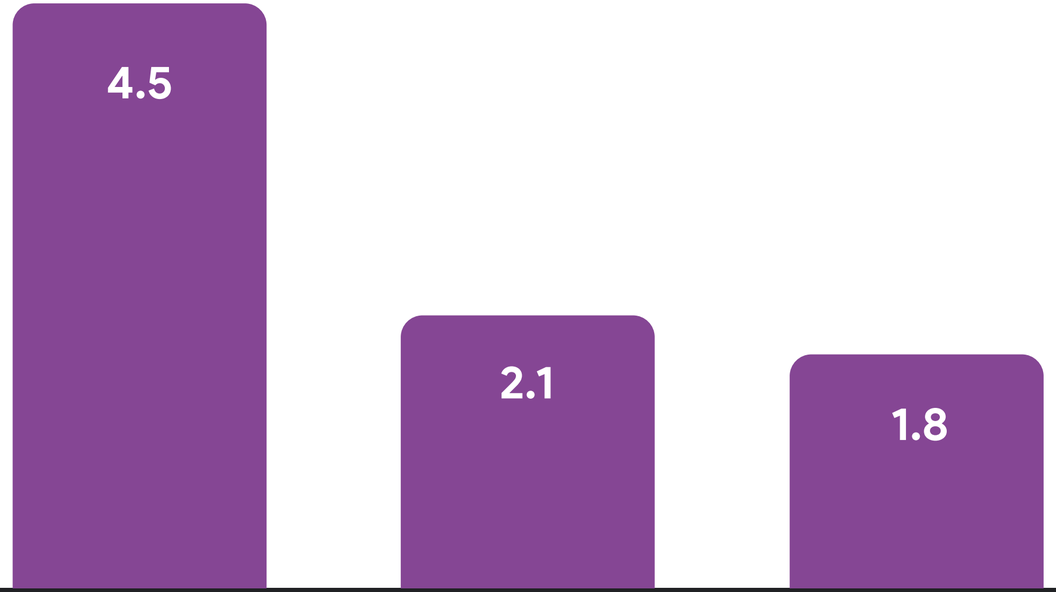
AI could make domestic drug discovery easier and faster - further reducing the country's reliance on international solutions. New AI driven simulation tools such as Google DeepMind's AlphaFold make it possible to digitally simulate how different molecules interact with each other. This can cut the time to discover new lead candidates, in some cases from years to weeks or even days.

By integrating AI tools into pharmaceutical R&D, Japan's biotech firms could reduce the average time for drug discovery by

40%

Average delay between drug availability on global market and availability in Japan (years).

Source: The Pharmaceuticals and Medical Devices Agency (PMDA)



Medical researchers are partnering with Google to accelerate drug discovery.

Chugai Pharmaceutical, one of the world's leading digital innovators for medical research and development, has partnered with Google to accelerate drug discovery and advance biomedical research. At the heart of this collaboration is AlphaFold, the groundbreaking AI system developed by Google DeepMind that predicts protein structures with remarkable accuracy. Building on this breakthrough, Chugai is developing a scalable, cloud-based version of AlphaFold2 capable of modelling thousands of proteins each day. This will enable scientists to simulate how antibodies interact with disease targets, potentially reducing the typical 10–15-year timeline for developing new drugs.[24]

Additionally, Chugai is creating a unified cloud infrastructure to support AI-driven research across the organisation. Leveraging Google Cloud services such as BigQuery and Cloud Run, the platform will empower teams to process large datasets, build internal tools, and deploy machine learning models at scale. Together, these initiatives are central to medical researchers' digital strategy and their long-term vision to deliver faster, more impactful healthcare breakthroughs.

AI can make the public sector even more efficient.

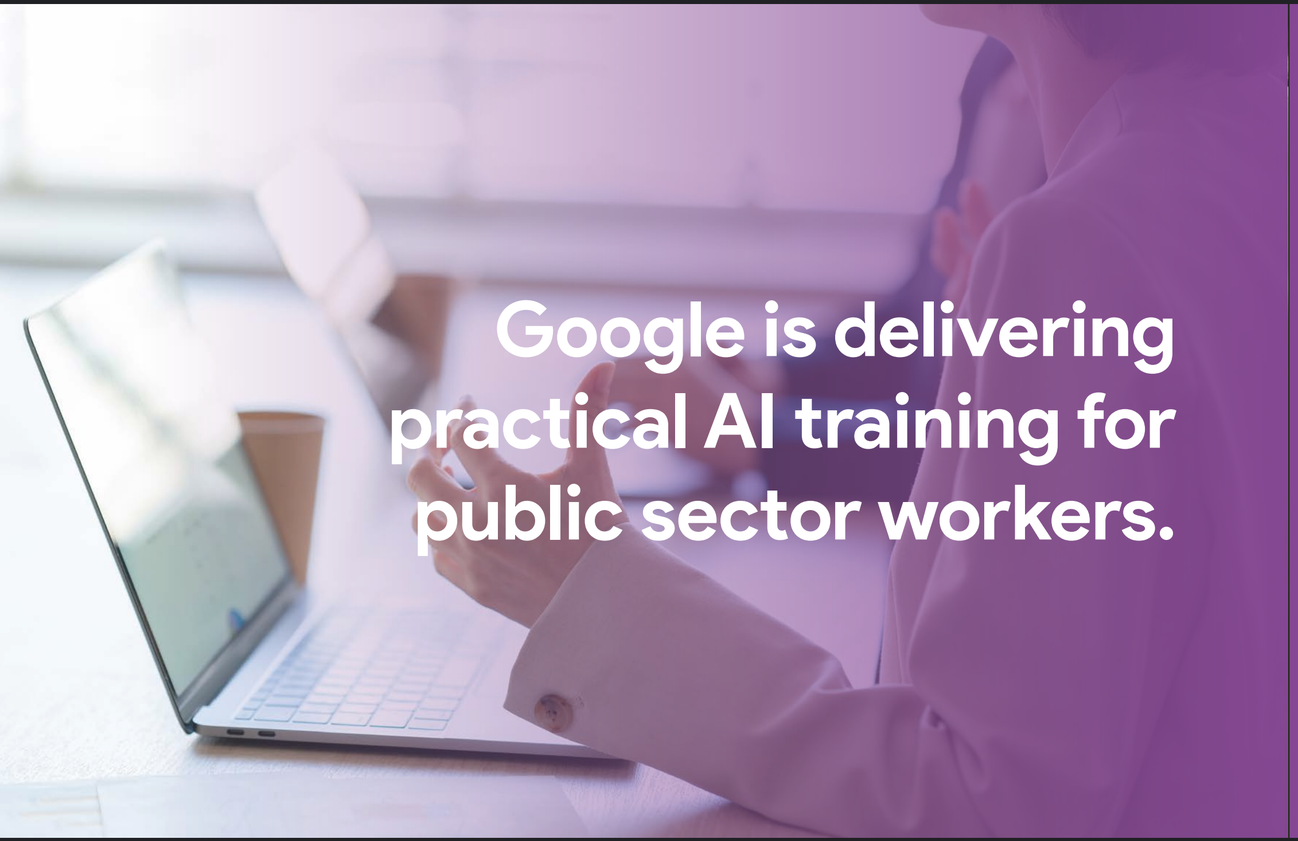
The public sector, while employing just 5% of the Japanese workforce, is responsible for 21% of value added to the economy.[25] [26] It is among the top 3% most effective governments globally.[27]

Yet there is still room to further improve in the Japanese public sector efficiency. Despite its strong international rankings, analogue technology is still widely used and may be holding back further productivity gains in the public sector. 80% of Information and Communication Technology (ICT) investment in Japan goes towards maintaining legacy technology, which several intergovernmental procedures still rely on.[28] [29]

Making the right investments in AI infrastructure could create a more transparent, flexible and responsive public sector, where repetitive tasks are automated, freeing up worker time for higher value activities.

In total, we estimate that AI could help increase productivity in the public sector in Japan by

8%



Google is delivering practical AI training for public sector workers.

Realising the full potential of AI will require parallel investment in human capital. To this end, Google has introduced the "Local Growth Package," a comprehensive program designed to empower Japan's public sector.[30]

This package is built on two pillars, one of which is a suite of targeted human resource development programs. Key among these is the "AI Connect Academy," which provides practical, hands-on training for public sector professionals such as local government and central ministry staff. It uses real-world case studies to demonstrate how AI tools can be applied to municipal services and policy challenges.

Complementary initiatives, including the "Gemini Academy" for educators and specialised AI and cybersecurity training for SMEs and startups, are designed to cultivate a robust and skilled talent base across the nation.

AI can help Japanese creators go global.

Japan's creative economy is the third largest in the world, valued at **JPY 13.1 trillion (USD 86 billion)** in 2022. It accounts for 10% of the global creative economy, nearly the size of all other markets combined except for the US and China.[31]

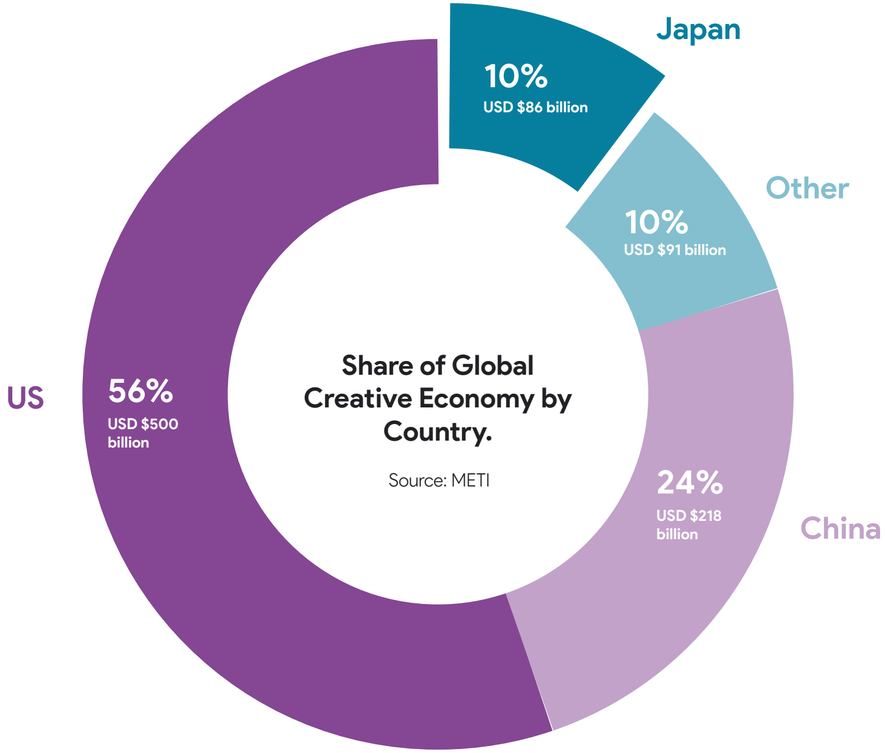
The sector has recently been permeating international markets too. The anime industry for example grew by 14% between 2022 and 2023, with international revenue surpassing domestic revenue only for the second consecutive year.[32]

AI can expand market access for Japan's creative industries. Less than 2% of the world population speaks Japanese,[33] and AI tools can help non-Japanese speakers access Japanese content.

Generative AI translation tools could help creators from Japan reach another

2.7 billion

people globally.



AI will reduce the costs of cyber fraud.

Japan has been experiencing a surge in cyber fraud in recent years. As of February 2024, an average of more than 1,000 weekly cyberattacks were recorded.[34] This includes financial fraud, information theft, and ransomware attacks. In 2023, one of Japan's most critical cyber attacks breached Tokyo's defense networks, revealing major gaps in Japan's attack preparedness policies.[35] The National Cybersecurity Index ranks Japan as having weaker preparedness than countries like Korea, India, and Singapore.[36]

AI-powered tools can proactively monitor and flag emerging digital security threats. AI can analyse global threat intelligence data to identify trends and potential risks before they become active threats. It can also act as a safety net for phishing and similar attacks and automate threat responses, reducing any potential damage.

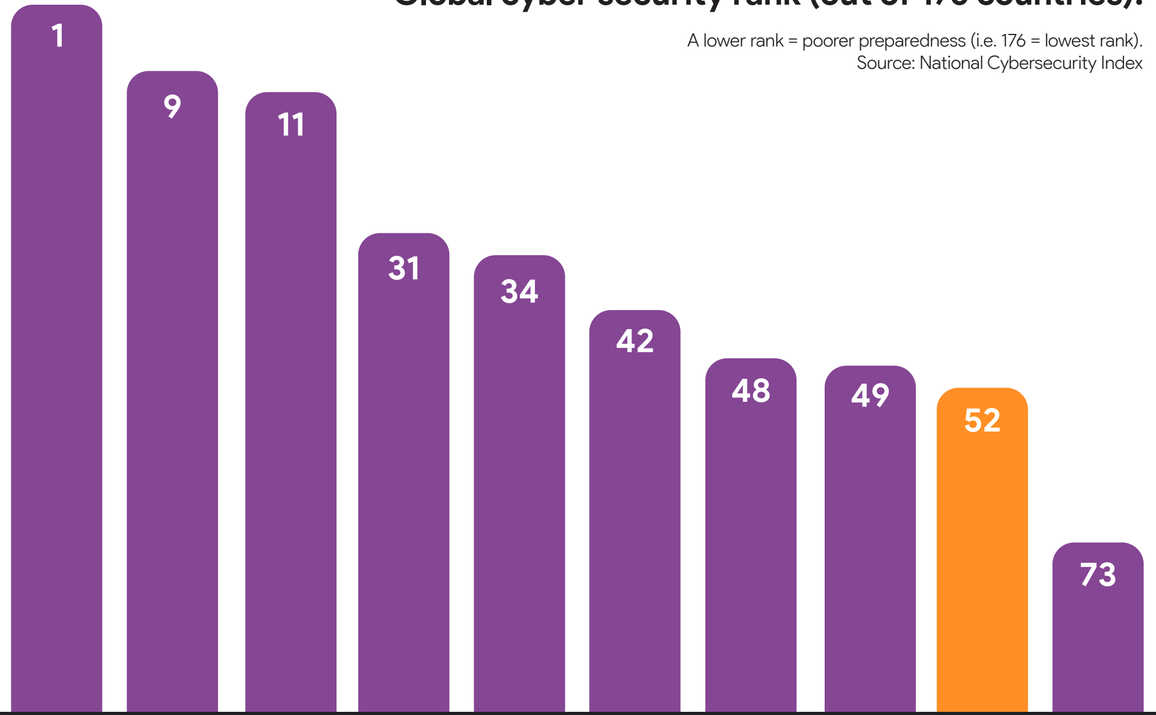
Once widely deployed, we estimate that AI could prevent

59%

of the costs from cybersecurity threats and fraud.

Global cyber security rank (out of 176 countries).

A lower rank = poorer preparedness (i.e. 176 = lowest rank).
Source: National Cybersecurity Index



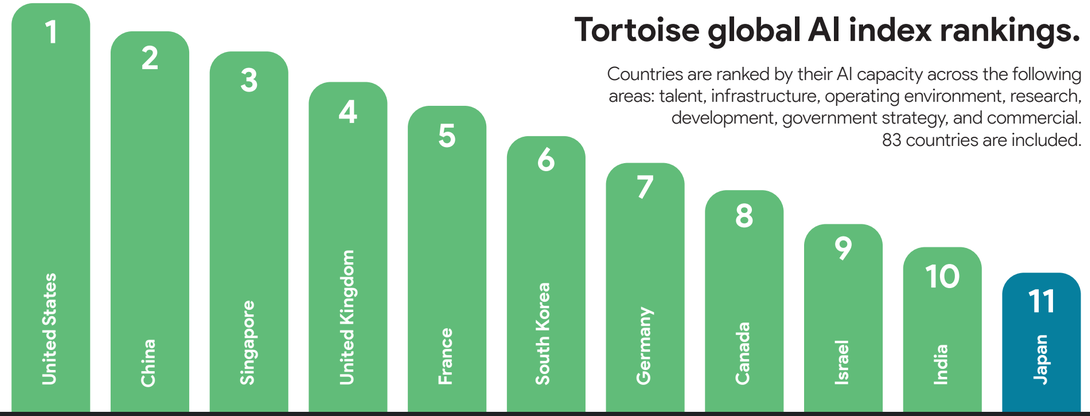
Maximising the Opportunity.

Japan has substantial AI potential.

According to the Tortoise Global AI Index, Japan ranks **11th out of 83** countries on potential for AI. On infrastructure for AI, which measures the capacity and scale of computational resources needed, it performs particularly well, ranking among the top 5 countries globally.[37] For example, Japan's National Institute of Advanced Industrial Science (AIST) built the world's first large-scale Open AI supercomputer for publicly accessible infrastructure for AI research.[38] However, to fully unlock the AI opportunity, Japan will need to accelerate AI adoption across the population.

Tortoise global AI index rankings.

Countries are ranked by their AI capacity across the following areas: talent, infrastructure, operating environment, research, development, government strategy, and commercial. 83 countries are included.



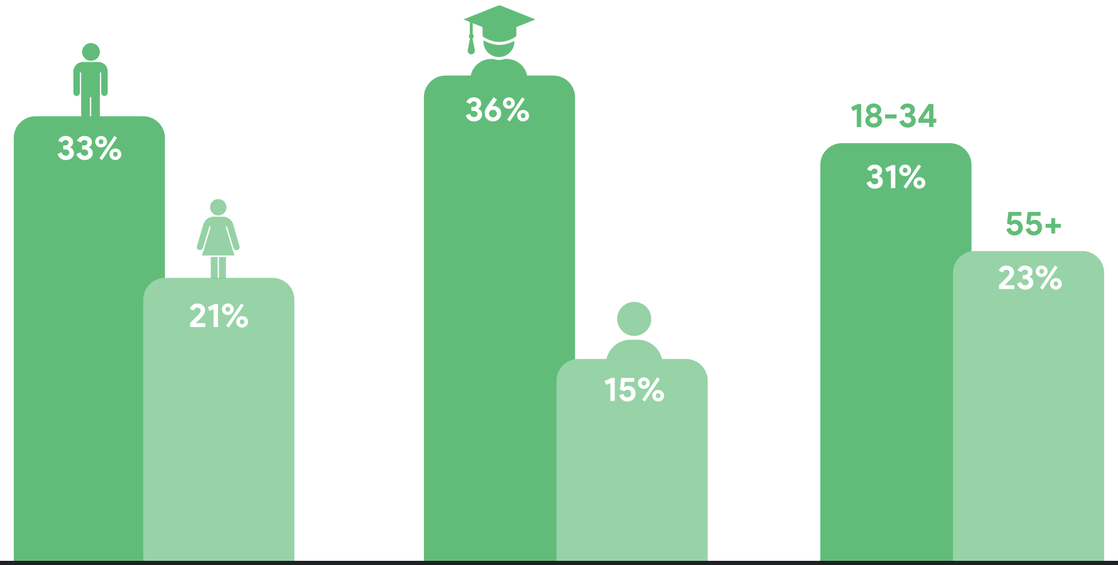
Ensure women, older and non-graduate citizens are not left behind.

Realising the full benefits of AI will require all parts of Japanese society to participate in the AI economy. As it stands, older Japanese workers and those without a university degree are less likely to be digitally engaged. While 98% of those aged 20-64 use the internet, the same share is just 61% for those aged 65 and above.[39]

This is similarly true of AI adoption patterns. **In our polling, we found that the majority of current AI use was led by early adopters that are proactively experimenting with AI tools. However, usage was significantly lower among women, older workers and those without a university degree.**

If we don't work to reverse the gap in worker AI adoption, it could **reduce the overall potential economic benefits from AI by 31%.**

Share of the Japanese population reporting at least weekly usage of AI.



Give the public greater confidence in Generative AI tools.

The Japanese public are more likely to use AI tools if they are perceived as trustworthy and reliable. Given a cultural preference for lower risk and higher trust, all successful technologies that have been widely deployed in Japan have pursued a high trust and transparency approach. Over half **(53%)** of the public said they were worried about an increasing amount of misinformation online as a result of AI, the leading concern around increased AI use by a large margin.

69%

believe there should be controls on the use of generative AI to ensure it is not used in a misleading way.

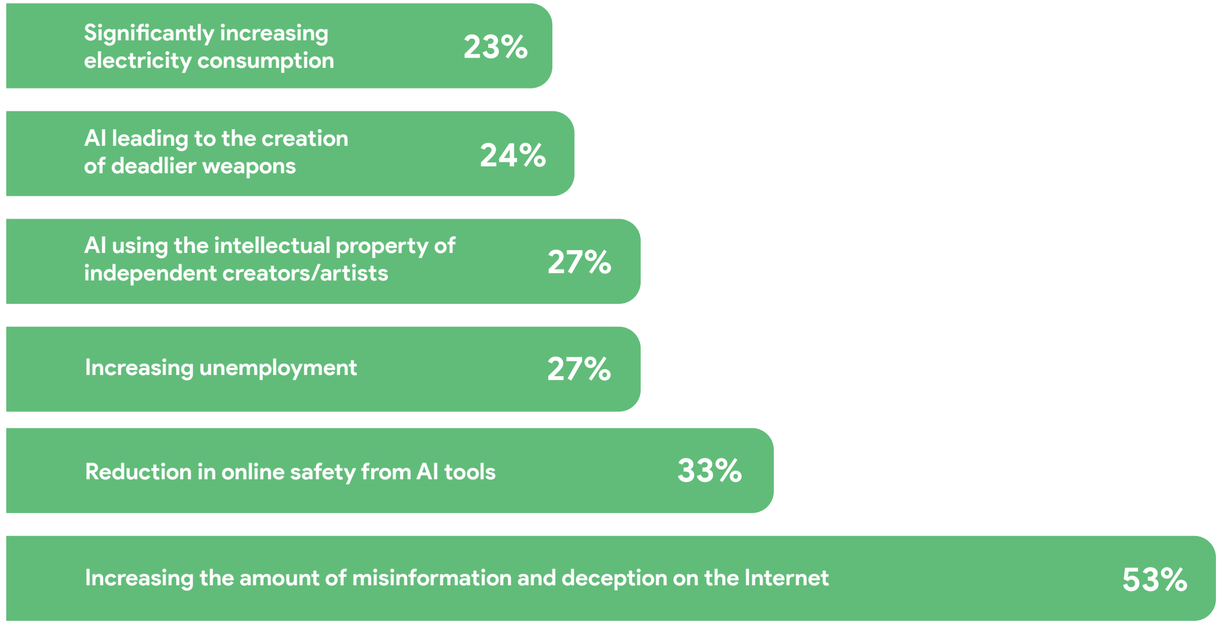
72%

feel that we should ensure there are protections for content creators to ensure they are not harmed by generative AI.

75%

agree that while new tools like generative AI can be powerful, they need to be developed in a responsible way.

Concerns around increased use of AI.



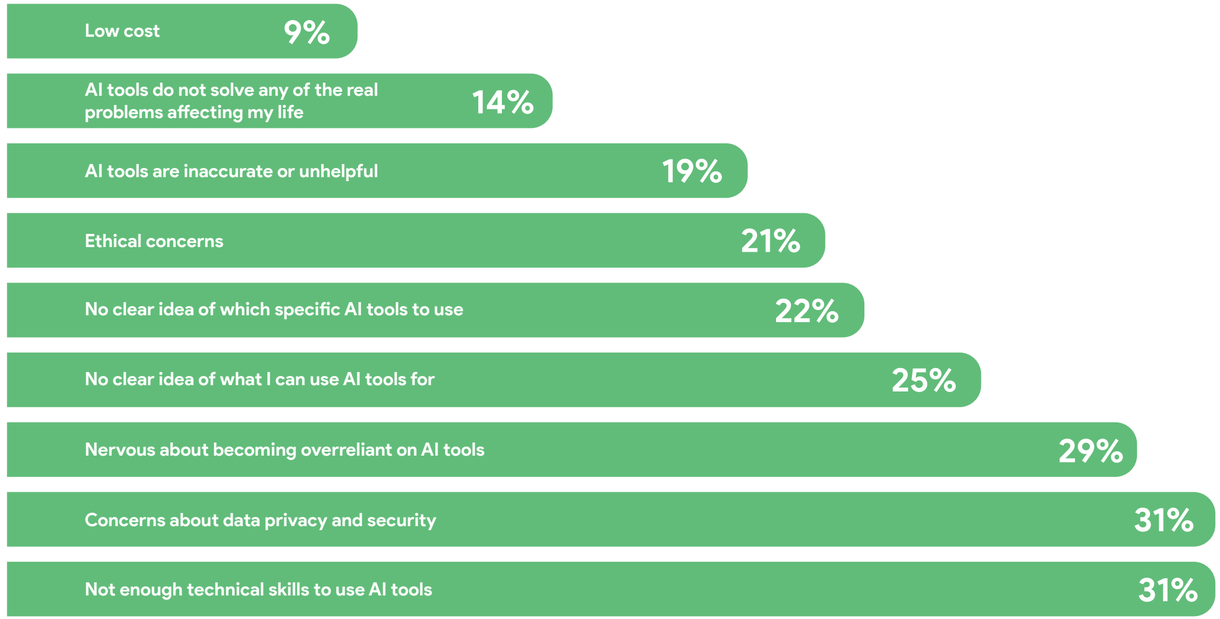
Support the Japanese population to upskill.

Nearly a third of adults felt that they did not have enough technical skills to use AI tools **(31%)**. This indicates a clear need to support Japanese citizens to learn more about the rapidly evolving AI tools and services available to them.

Without this investment in skills, Japan risks missing out on the productivity gains that underpin its AI opportunity. Closing this gap is critical to realising the projected JPY 53 trillion (USD 350 billion) boost to the economy outlined above, especially in sectors facing workforce shortages and the broader challenges they bring.

Fortunately, there is a palpable interest to learn new AI skills among Japanese workers. **49%** of workers in Japan said they would be interested in skills training to help them to better take advantage of AI. **60%** of workers say they are interested in how AI can help them with their job specifically.

The main barriers preventing Japanese online adults from expanding their use of generative AI in their personal life.



Google is equipping Japan's students and entrepreneurs with essential AI skills.

Google is opening doors to Japan's AI future through two innovative programmes designed to build confidence and expertise for the next generation of workers and entrepreneurs. The newly-expanded Gemini Academy offers university students in the Asia-Pacific a practical five-part journey into AI fundamentals, covering everything from basic terminology to advanced topics like effective prompt writing and recognising bias and hallucinations. Available through Grow with Google and Japan Reskilling Consortium (led by Google), the curriculum gives students hands-on experience with real-world applications, preparing them to use AI responsibly and creatively in both studies and future careers.

Google is also supporting Japan's long-standing tradition of entrepreneurial leadership through the launch of the Aichi Startup School in Nagoya. This program of 900 aspiring business founders and students offers expert-led workshops on startup essentials and how to make best use of cutting-edge Google technologies.[40] Those completing five or more sessions receive official certification and Google Cloud credits, which can be used to pay for computing services to develop their future ventures. Moreover, Google's new AI Academy is backing innovative startups across the Asia-Pacific region with personalised mentorship and up to JPY 53 million (USD 350,000) in Cloud credits[41]. Through these complementary approaches, Google is helping Japan build both the skills and businesses needed to lead an AI-powered future.

Formal qualification programmes like 'Google Prompting Essentials' and 'Google AI essentials' are also available to everyone looking to upskill and be better prepared for the AI economy. Prompting Essentials is a short, self-paced course designed to teach a five-step framework for writing effective prompts, enabling users to get the most out of any AI tool. The Google AI Essentials programme, on the other hand, is a foundational course that introduces learners to basic AI concepts, its capabilities and limitations, and how to use it responsibly to boost productivity in various tasks. Google, as the lead organiser of the Japan Reskilling Consortium, has a track record of offering scholarships for both programmes through the consortium.

Improve tech infrastructure among Japanese SMEs to accelerate AI usage.

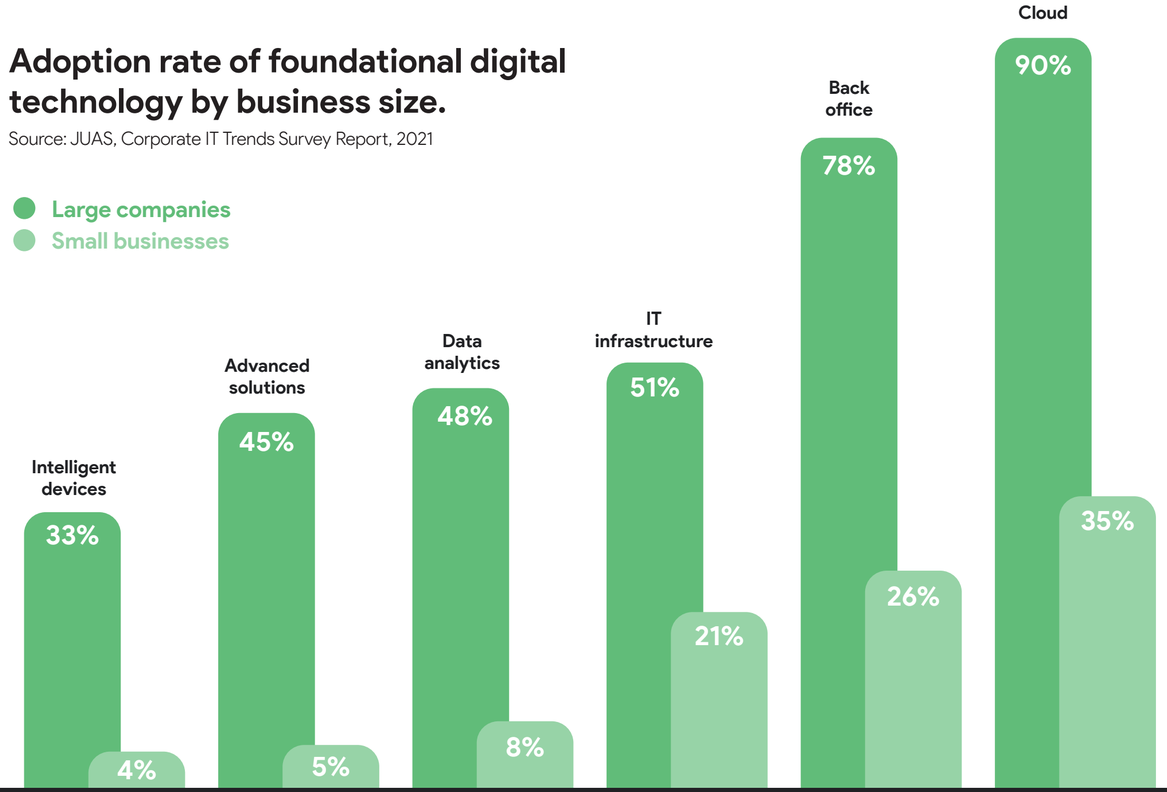
Realising the benefits of AI will also need continued investment in connectivity and data centre infrastructure to support demand. While Japan already has advanced tech manufacturing capabilities, its businesses and public sector bodies will need greater investment in foundational infrastructure to become a global AI leader.

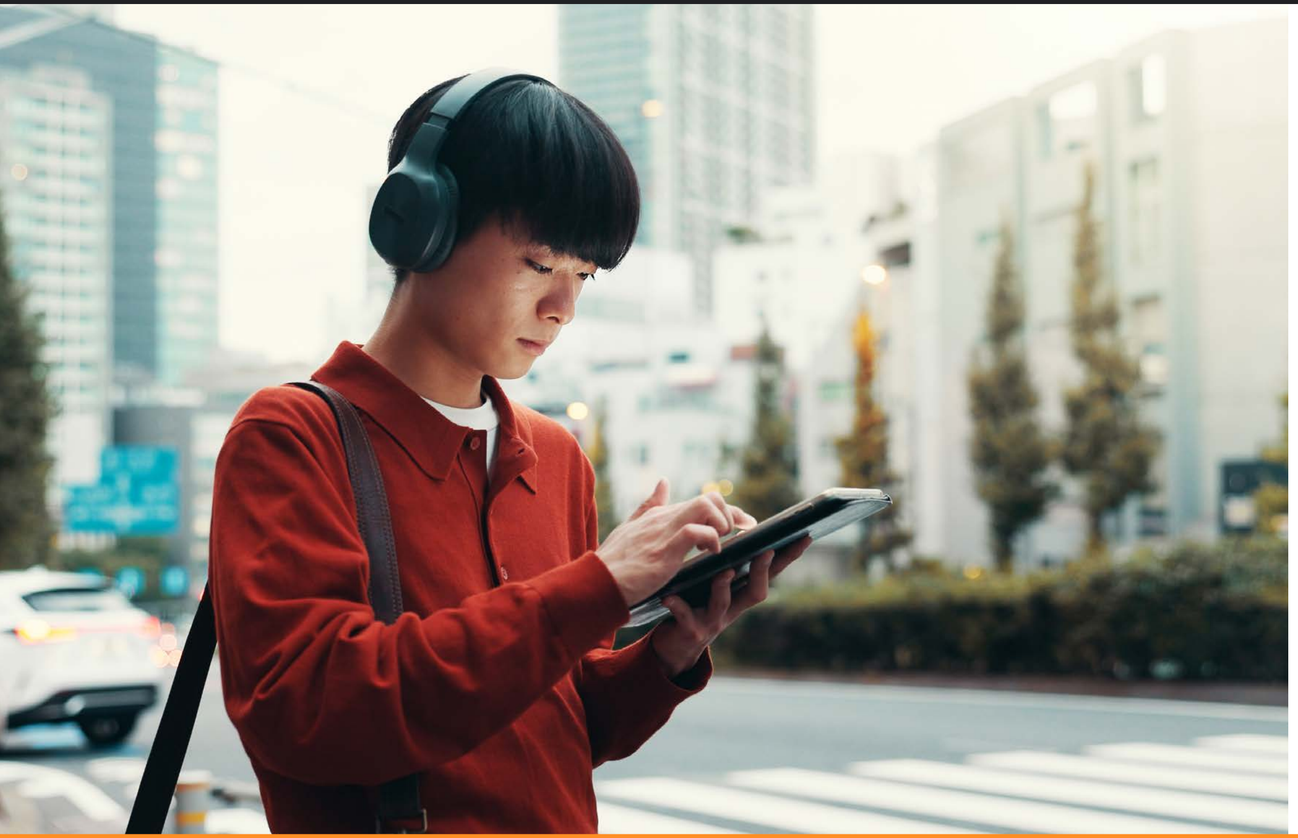
To realise the potential of AI, Japanese SMEs in particular will need greater investment in foundational digital infrastructure that supports greater and smoother adoption of AI.[42] Older and smaller businesses lack sufficient 'intangible capital' investment - like in software systems and emerging technologies. This acts as a drag on productivity - with estimates suggesting that overall national productivity levels could be 1.8 percentage points higher if the worst-performing SMEs could boost their productivity growth.[43]

Wider investment in AI technologies - and particularly cloud-based tools - will be essential to achieving the economic growth offered by AI.

Adoption rate of foundational digital technology by business size.

Source: JUAS, Corporate IT Trends Survey Report, 2021





About the Research.

In this paper, we used a range of different methods to quantify the economic and social potential of AI for Japan:

- We created a new set of economic models, exploring the potential of AI for labour productivity and business efficiency across the economy.
- We ran new representative polling of 1,025 online adults in Japan. Fieldwork for this study took place between 14th February - 27th February 2025. Results quoted here are weighted by age group, gender, region, and education level to nationally representative proportions. While we undertook our best efforts to make the sample as representative as possible with extensive attention checks and neutral question design, all polling is subject to the potential for response bias and our sample does not include non-online adults.

You can access our detailed methodology here.

You can access our appendix of unused datapoints here.

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Endnotes.

1 AI is a set of technologies that enable computers to perform a variety of advanced functions. These include the ability to reason, learn, and act in such a way that would normally require human intelligence. This might include understanding and translating spoken and written language, analysing data, making recommendations and more.

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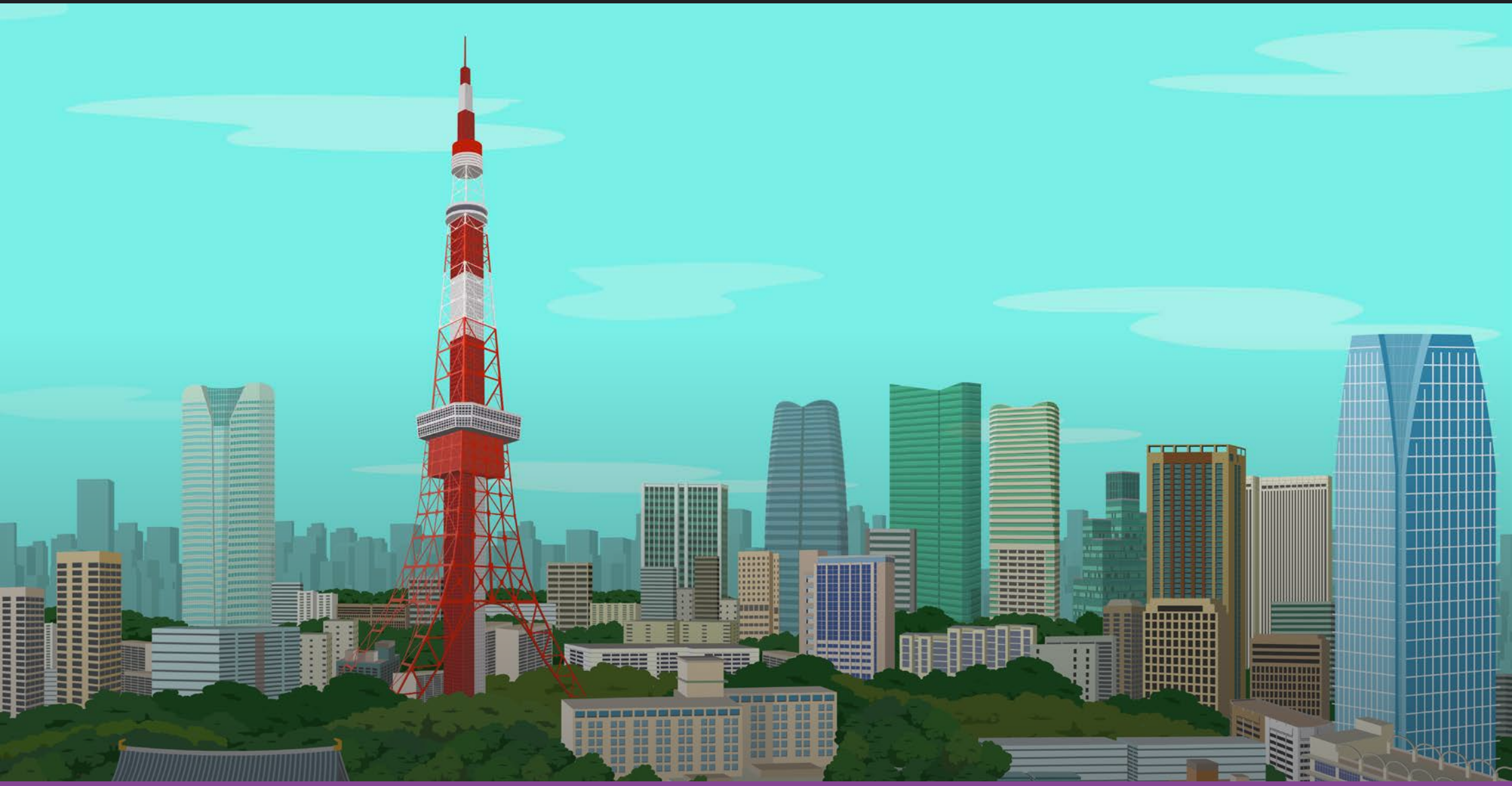

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