UNLOCKING JAPAN'S AI POTENTIAL 2025

AI uptake in Japan is outpacing the internet revolution

Halfway through the decade, Japan is at a pivotal moment in its digital transformation journey, with artificial intelligence (AI) adoption accelerating at an unprecedented pace. The number of firms regularly using AI in Japan is **43%**, up from **33%** a year ago. This is a year-on-year growth rate of **30%**. This growth rate surpasses the uptake of the internet in Japan in the early 2000s – which peaked at a growth rate of **29%**.

The adoption of AI has resulted in great returns for businesses across Japan:

50% of businesses that have adopted AI report increased revenue, at an average **22%** increase.

79% of those who have adopted AI have already experienced productivity gains. These productivity gains are coming from a wide range of sources, especially through data analysis and reporting (**61%**), and the automation of routine tasks (**50%**).

Three-quarters (**75%**) of those who have adopted AI say that the technology will increase their growth in the next year, and **75%** also expect cost savings thanks to AI, at an average of **35%**.

These figures underscore that AI is delivering tangible, measurable benefits for Japanese businesses today.

The Japanese government recognises the opportunity AI affords and has, in early 2025, announced its intention to position Japan as "the most AI-friendly country in the world". This national vision includes adopting a pro-innovation, growth-oriented regulatory approach that supports AI research and development while safeguarding responsible use and citizens' rights. Rather than enforcing stringent regulations, the government is proposing a model of collaborative governance, aiming to engage industry, academia, and the public to foster a trusted, forward-looking AI ecosystem.

The research provides a comprehensive analysis of Japan's AI adoption, highlighting both its strengths and areas for further development. Findings reveal that Japan is emerging as a key innovation hub, with startups playing a pivotal role in AI integration.

To fully unlock AI's potential, Japan must address challenges and ensure that AI adoption moves beyond surface-level implementation to drive real, long-term impact across industries.

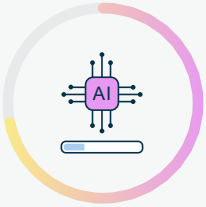
Key findings from this study:

- The adoption of AI in Japan is rapidly accelerating, with over **360,000** businesses in Japan having adopted AI last year – or one business on average embracing the technology every two minutes.
- Over 1.5 million businesses are now using AI in Japan, or **43%** of all businesses.
- Currently, **68%** of Japanese businesses have a dedicated AI budget, and businesses indicate that their investment in AI has increased by an average of **23%** in the last year.
- Startups are on the cutting edge of AI innovation; **84%** have now adopted AI, and **36%** are leveraging AI to develop new AI-driven products or services.
- Despite strong momentum, there are various barriers to adoption in place, such as the lack of skilled personnel (**39%**), and the perceived upfront costs of implementation (**37%**).
- Businesses currently indicate they are allocating **22%** of their tech spend on compliance, and **47%** expect this figure to increase over the next three years.
- Those that do adopt AI are seeing clear benefits. **50%** of Japanese businesses report an increase in revenue thanks to AI adoption, at an average increase of **22%** - attesting to the true power of AI in businesses' competitiveness.

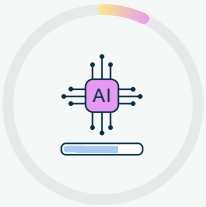
AI adoption is high, but AI use remains to be converted into long-term strategies

Celebrating adoption numbers alone masks a deeper challenge. While AI adoption is increasingly widespread around Japan, many are not harnessing AI for its more advanced purposes. Just over a tenth (**13%**) of businesses are harnessing AI for transformative purposes throughout operations, where the true potential of AI to drive innovation, productivity, and competitive advantage can be fully realised.

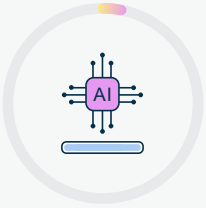
Looking deeper into how businesses are implementing AI — from initial experimentation to full transformation, many businesses remain at the most basic level of AI adoption:



Stage 1 - Exploring AI:
72% of businesses are still in the exploratory phase, primarily using off-the-shelf AI solutions from external providers. At this stage, companies typically deploy basic AI use cases, such as chatbots or scheduling assistants (**45%**) and generating written language (**45%**).



Stage 2 - Integrating AI:
A smaller share, **7%** of Japanese businesses, have advanced to the intermediate stage of AI integration. These companies are moving beyond isolated applications and integrating AI across various business functions, resulting in efficiency improvements and more innovative approaches to customer experience.

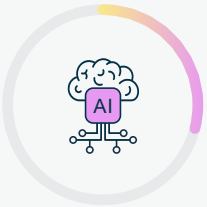


Stage 3 - Transforming with AI:
13% of Japanese companies have reached the most transformative stage, where they are using AI for its most advanced purposes. These organisations are combining multiple AI tools or models for complex tasks (**7%**), and creating custom AI systems (**5%**), which is transforming their operations comprehensively. Only **11%** of Japanese businesses have a formal and comprehensive AI strategy, and a further **4%** go on to say they have fully integrated AI.

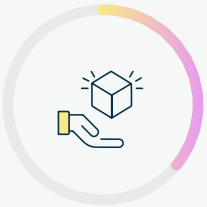
The challenge ahead is not just broader adoption, but deeper integration and more advanced usage of AI technologies.

Japanese startups are pioneering transformative innovation

Startups[1] aren't just using AI – they're building entirely new products and business models around it that would have been impossible just years ago. **84%** of startups say they are leveraging AI in some way throughout their business, and Japan's startups are emerging as global leaders.



29% are harnessing AI's most advanced use cases, and a further **17%** have AI at the core of their business proposition.



36% of startups are developing new AI-driven products and services.

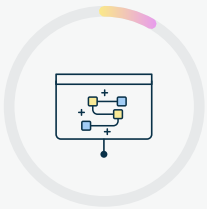
Looking ahead, **68%** of startups believe AI will fundamentally transform their industry within the next five years. However, despite this optimism, many startups still face significant systemic challenges. Only **33%** of startups feel Japan offers a startup-friendly business environment, pointing to a gap between their potential to innovate and the support they feel they have.

To maintain momentum and compete on a global scale, Japan must foster a more supportive startup ecosystem. Half of startups (**50%**) cite greater access to venture capital and funding as essential for growth, while one-third (**33%**) highlight the need for harmonised, clear regulation and simplified compliance processes. Addressing these barriers is critical to unlocking the full potential of Japanese startups.

Ultimately, the success of Japan's innovation economy can be driven by empowering these fast-moving startups as contributors to domestic growth and as key players in the global race for AI leadership.

Larger businesses are less likely to be using AI to innovate, risking a two-tier economy

Large businesses'[2] adoption of AI is very strong at **68%**, but their adoption is shallower and focused on incremental gains such as driving efficiencies, rather than innovation. This risks a two-tier economy, where startups are surging ahead with AI integration and adoption.



Only **8%** of large enterprises have a comprehensive AI strategy.

A further **11%** are delivering a new AI-driven product or service by harnessing AI's deeper potential, less than a third of the proportion of startups (**36%**).

Japanese large enterprises say they are facing many barriers, including a lack of skilled personnel (**42%**), which is the number one reason preventing large enterprises in Japan from adopting or expanding their use of AI technologies.

If not addressed, this 'two-tier' AI economy – with tech-driven startups outpacing larger enterprises in AI innovation - could shape Japan's economic future for decades.

Moving beyond basic AI use for businesses of all sizes is key to unlocking the full benefits of AI for Japan's economy and society. The potential economic impact is significant; in 2023, cloud and cloud-enabled AI contributed US$28.8 billion to Japan's GDP[3]. Research further estimates that across the Asia-Pacific region, cloud and cloud-enabled AI together could contribute up to US$2.9 trillion, with $203 billion coming from AI alone[4].

Businesses are clear about what it will take to go further and faster with AI

To strengthen Japan's competitiveness and ensure that businesses of all sizes can harness AI's full potential, key challenges pinpointed by businesses must be addressed:

Skills:

Businesses across Japan are saying, "We have the technology, we have the vision, but we can't find the people to make it happen." **39%** of businesses identify skills as a barrier to AI adoption and integration. AI literacy is expected to be required in **37%** of businesses going into the future, and only **25%** of businesses feel prepared with their current skillset. As a result of the skills gap, businesses say they would be willing to offer a salary increase to candidates with sufficient digital skills, on average by a **30%** increase.

- Large enterprises, in particular, cite a lack of necessary digital skills as a barrier to AI adoption. These skills are crucial for successful implementation.
- Only **8%** of citizens say that they have undergone AI skills training in the last year.
- **64%** of businesses view that AI skills will be important to their industry in the next five years.

Funding:

68% of businesses cite government support, including tax incentives or grants, as important to encourage their decision to adopt AI.

- Meanwhile, startups say access to venture capital (**50%**) is critical to their ability to scale.

Regulation:

Navigating AI regulations can feel like solving a puzzle where the pieces keep changing. Only **14%** of Japanese businesses say they understand the debate around the proposed AI Act and could explain how the legislation would operate.

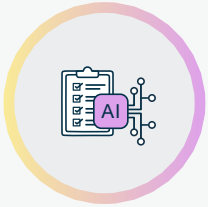
- **34%** of businesses indicate that regulatory uncertainty around new technology has negatively affected their business decisions.
- Businesses estimate that they spend **22%** of their tech on compliance-related costs. More clarity around regulations is critical. **47%** expect this figure to increase in the next 3 years.

Unlocking Japan's AI future

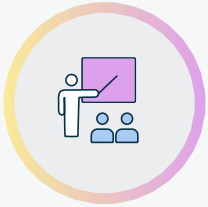
Japan can position itself as a global AI innovator by addressing these challenges head-on, through pro-innovation regulation, targeted investment, and public-sector leadership,. The opportunity is clear. AWS is encouraging Japanese policymakers and industry leaders to take steps to unlock the full potential of AI across both fast-paced start-ups and larger enterprises:

Boost digital skills training and initiatives

A workforce with the necessary digital skills is a key driver of AI-led innovation and growth, yet **39%** of Japanese businesses identify the skills gap as a challenge, more than any other barrier. A further **64%** of businesses see AI skills as crucial to their industry, yet only **25%** feel prepared with their workforce's current level of digital skills. Of the **45%** of businesses that seek external providers for AI expertise, such as independent software providers (ISVs), **25%** specifically look for support with upskilling their staff.



The Digital Agency should expand and strengthen the skills commitment within its 2024 Priority Plan for the Advancement of a Digital Society and build industry-specific digital skills programmes while encouraging re-skilling programmes mid-career.



AWS is committed to helping address the digital skills gap. Since 2017, AWS has trained more than 700,000 people in Japan on cloud skills. We are also committed to providing two million people with free AI skills training by 2025 to improve access to AI skills, and achieved this goal a year ahead of time.

Create a clear picture for Japan's pro-growth regulation

To solidify its position as a global leader in AI-driven innovation, Japan must articulate a clear, predictable, and innovation-friendly regulatory framework that fosters business confidence while safeguarding clear standards.

Currently, awareness around regulatory developments is limited, only **14%** of businesses are aware of and understand the ongoing debate surrounding the proposed AI Act. At the same time, one-third (**33%**) of startups identify harmonised, international regulation as a critical enabler of AI adoption, underlining the need for clearer communication and alignment.

Japan should maintain its low-cost compliance model to maintain momentum behind AI. Businesses currently benefit from a relatively low level of expenses on compliance costs on technologies, spending **22%** of their tech spend on compliance, compared to **40%** in Europe. However, concerns about increased compliance costs are the number one anxiety of businesses concerned about the impact of new regulations.

Therefore, ensuring that AI regulation is predictable and innovation-friendly, delivering on the government's proposal, while maintaining Japan's relatively low-cost compliance model, will be critical to strengthening Japan's position as a global leader in AI-driven growth.

Modernise public sector technology

As Japan accelerates its AI-driven digital transformation, modernising public sector technology must be a top priority. Citizens increasingly expect faster, smarter, and more accessible digital public services, particularly in healthcare and social security, which are consistently ranked as the most important areas for improvement. Nearly three-quarters (**72%**) of citizens say that it is important that the government invest in improving its digital services, and just under a third (**30%**) of citizens say that the rate of change in the government delivering new or improved digital services is "too slow", while **36%** say the rate of change is "about right".

Using public procurement can stimulate AI adoption among the private sector, as **52%** of businesses say they are more likely to adopt AI if the government leads.

Public sector adoption additionally boosts public trust in new technologies, as **39%** of citizens say that they view AI more positively when the public sector adopts the technology, while only 8% indicate they feel more negatively toward the technology.

Boosting the efforts of Japan's Digital Agency is key to driving AI uptake across industries and sectors, and acts as a visible, high-impact demonstration of innovation, trust, and government responsiveness. It will set the standard for private sector engagement, build citizen confidence, and help ensure that digital transformation benefits all corners of society.

Japanese businesses that have embraced AI are already seeing significant benefits, from increased productivity to revenue growth. With adoption accelerating, AI is poised to be a key driver of Japan's digital transformation and economic competitiveness. However, to fully capitalise on this momentum, businesses must move beyond experimentation and integrate AI strategically. By addressing key barriers such as the skills gap and regulatory uncertainty, Japan can unlock AI's full potential and solidify its place as a leader in the AI-driven economy.

Appendix

Methodology

The fieldwork for this study was undertaken by Strand Partners' research team for Amazon Web Services. The fieldwork was undertaken between 22nd March and 3rd April 2025. This research has followed the guidance set forth by the UK Market Research Society and ESOMAR. For the purposes of this study, business leaders are defined as founders, CEOs, or members of the C-suite in organisations.

'Citizens' are nationally representative members of the public based on the latest available census.

For inquiries regarding our methodology, please direct your questions to: polling@strandpartners.com.

In Japan:

- We conducted a survey of 1,000 nationally representative members of the public, ensuring representation based on age, gender, and region.
- We additionally surveyed 1,000 businesses, ensuring representation by their business size, sector, and region.

Sampling:

Our sampling process used a mix of online panels that are recognised for their validity and reliability. These panels are carefully curated to ensure diverse representation across various demographics. For the business leaders, the panels are selected with a consideration for organisational size, sector, and position within the company. Our objective with the sampling strategy is to achieve an optimal mix that mirrors the actual distribution of our target populations in the respective markets.

Weighting Techniques:

Post-data collection, we applied iterative proportional weight to correct any discrepancies or over-representations in the sample.

Survey:

This study was designed with the objective of delving deep into the digital landscape:

- Usage Patterns: This survey gauges the evolving patterns of digital technology usage. We are particularly interested in examining the adoption and implementation levels of technologies, focusing on cloud computing and artificial intelligence.
- Perceptions and Attitudes: The survey seeks to unearth the prevailing perceptions and attitudes toward digital technologies, understanding the perceived benefits, challenges, and potential ramifications of both present and emerging tech solutions.
- Barriers and Opportunities: The survey scrutinises the predicted challenges and potential avenues that both businesses and individuals anticipate on their digital trajectory. This involves pinpointing challenges, from skill deficits to regulatory complications, and recognising opportunities for growth, innovation, and market development.
- 'Size of the Prize': The survey shed light on the economic repercussions and growth prospects linked with digital transformation. By elucidating the 'size of the prize', we aspire to stress the importance of digital transformation and foster further investments and technology adoption.

References

1. A startup is a business founded in the last two years which provides a new product/service or innovation and is aiming for rapid growth in terms of employees and turnover.
2. A large enterprise (or business) is a business with 500 or more employees, founded 10 years ago or more
3. Research by AWS and Telecom Advisory Services found that cloud-enabled AI accounted for $28 billion to GDP in Japan in 2023. By 2030, Japan's AI adoption is expected to add nearly $203 billion in GDP. Source: https://www.teleadvs.com/economic-impact-of-cloud-computing-and-artificial-intelligence-in-asia-pacific/
4. Ibid.