THE CURRENT STATE OF GENERATIVE AI

An overview of adoption and opportunities in
Asia/Pacific (including China & Japan)

The next generation of Artificial Intelligence led by Generative AI

Since the launch of ChatGPT on November 30, 2022, the buzz around Generative AI has significantly gained momentum. Though Generative AI is not new, most of the technologies we are seeing today have existed for several years. Generative AI promises to make 2023 the most exciting year in artificial intelligence.

IDC's Chief Research Officer, Meredith Whalen explains that Generative AI, which utilizes unsupervised and semi-supervised algorithms to generate content from previously created content such as text, audio, video, images, and code, is a trigger technology that will usher in a new era of computing – the **Era of AI Everywhere**. This new era will include the journey from narrow AI to widening AI and will completely change our relationship with data and how we extract value from both structured and unstructured data.

This eBook delves into how enterprises in Asia/Pacific (including China & Japan) are embracing generative AI technologies, expected use cases, and how tech vendors can prepare to tap into the market opportunities.
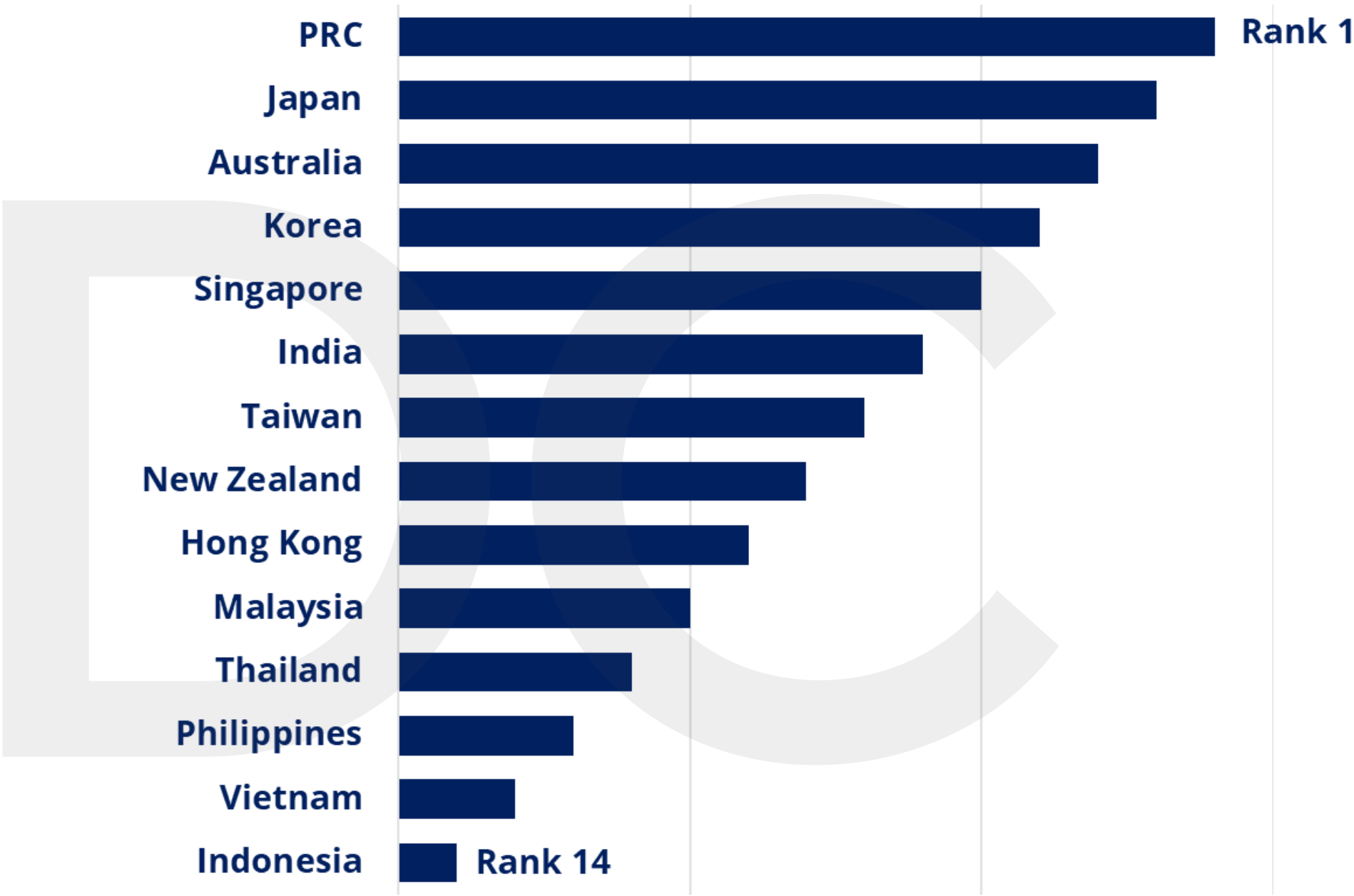
Pervasiveness of AI in Asia/Pacific

AI Adoption Amongst APJ Enterprises

Exponential Growth of AI Adoption in APJ as use cases and applications have become more mature.

20% 2019
39% 2020
39% 2021
76% 2022
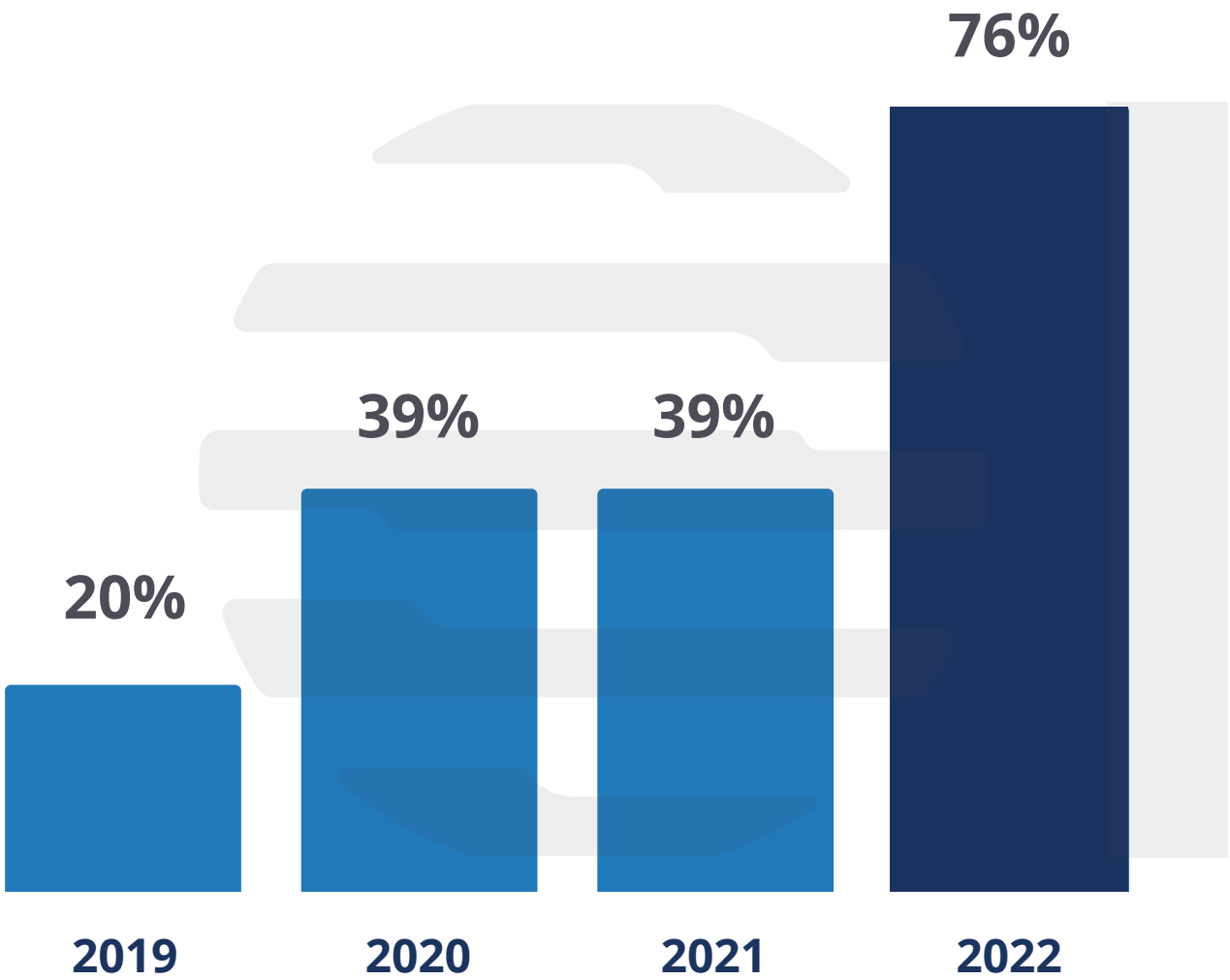
Source: Industry AI Path Survey, IDC, September 2022 , APJ N=470, Source: IDC -
[[FUTURE ENTERPRISE RESILENCY & SPENDING 22 Survey wave 11], N=362

Ranking of countries based on AI Platforms Spend in APJ in 2022

PRC — Rank 1
Japan
Australia
Korea
Singapore
India
Taiwan
New Zealand
Hong Kong
Malaysia
Thailand
Philippines
Vietnam
Indonesia — Rank 14

Source: IDC Worldwide Semiannual Software Tracker, May 2023

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Top 5 Emerging Analytics and AI Trends in Asia/Pacific

1. GenAI surges ahead

About two-thirds of organizations in Asia/Pacific are either exploring potential use cases or have gone ahead with investments in generative AI technologies in 2023.

2. Multimodal AI

By 2026, 30% of AI models will incorporate multiple modalities of data to improve learning effectiveness.

3. Ascent of LLM

By 2026, massive (>1 trillion parameter) foundation models (for natural language processing [NLP], AI-generated images, etc.) will become standard industry utilities provided only by the largest vendors.

4. AI and NLP Powered BI

By 2025, broad use of AI-infused analytics will lead 33% of A2000 to connect data intelligence, decision ops, and data literacy initiatives.

5. Augmented Analytics

By 2025, to promote data-informed decision-making, 50% of A2000 (from 33% in 2022) will embed analytics in enterprise or productivity apps

What is Generative AI?

IDC defines generative AI as a branch of computer science that involves unsupervised and semi-supervised algorithms that enable computers to create new content using previously created content, such as text, audio, video, images, and code in response to short prompts.
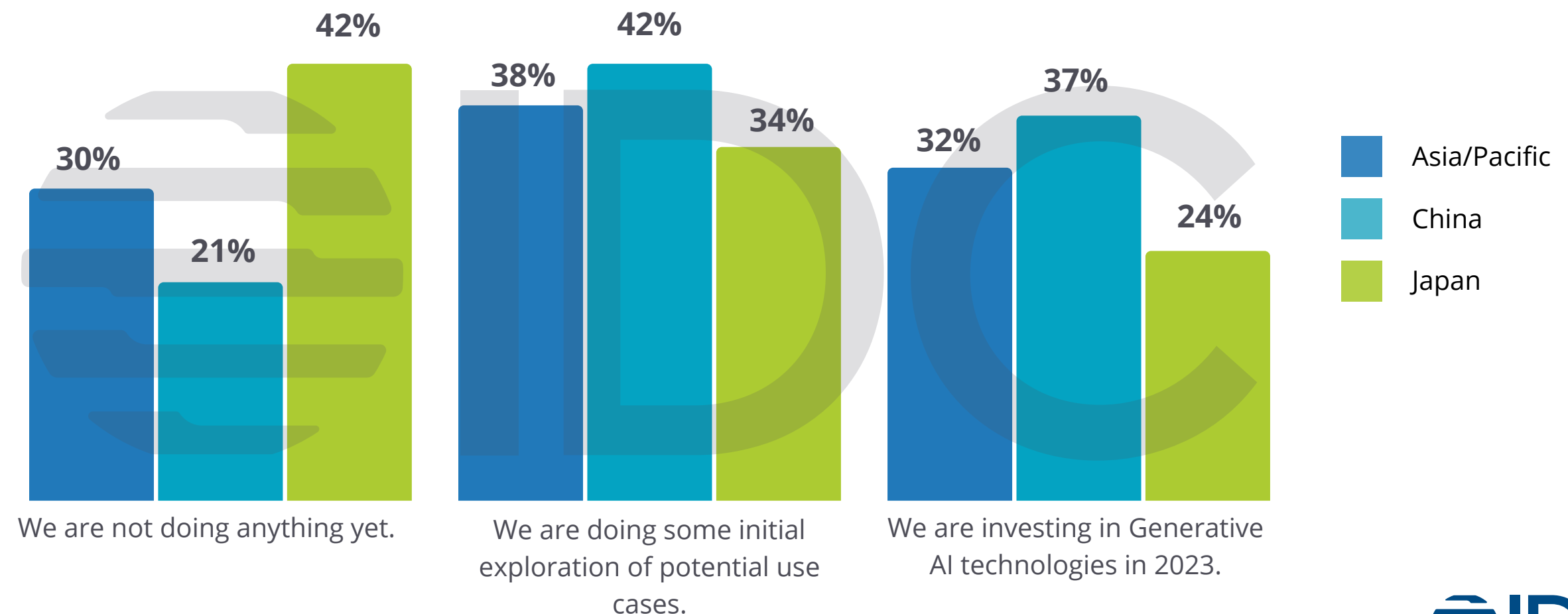
Examples of generative AI include:

- Open AI's GPT-3 (large language model [LLM]), DALL-E 2 (image model), and Whisper (speech recognition model)
- Midjourney (image model)
- Stability.ai's Stable Diffusion (image model)
- Google's PaLM and LaMDA (Language Model for Dialogue Application) (large language models)
- Meta's NLLB (large language model), Make-a-Video (video model), and data2vec (multimodal)
- Microsoft's DeepNet (large language model) and MetaLM (multimodal)
- NASA and IBM working together to create foundation models based on NASA's data sets —including geospatial data

Learn more about how to use generative AI to boost your business.

What's the current approach for Asia/Pacific organizations to Generative AI?

APJ is ahead in the investment priority of GenerativeAI. Two-thirds of organizations in Asia/Pacific are either exploring potential use cases or have gone ahead with investments in GenerativeAI technologies in 2023. Japan is keen but at a slower pace due to its stricter data privacy/protection regulations.
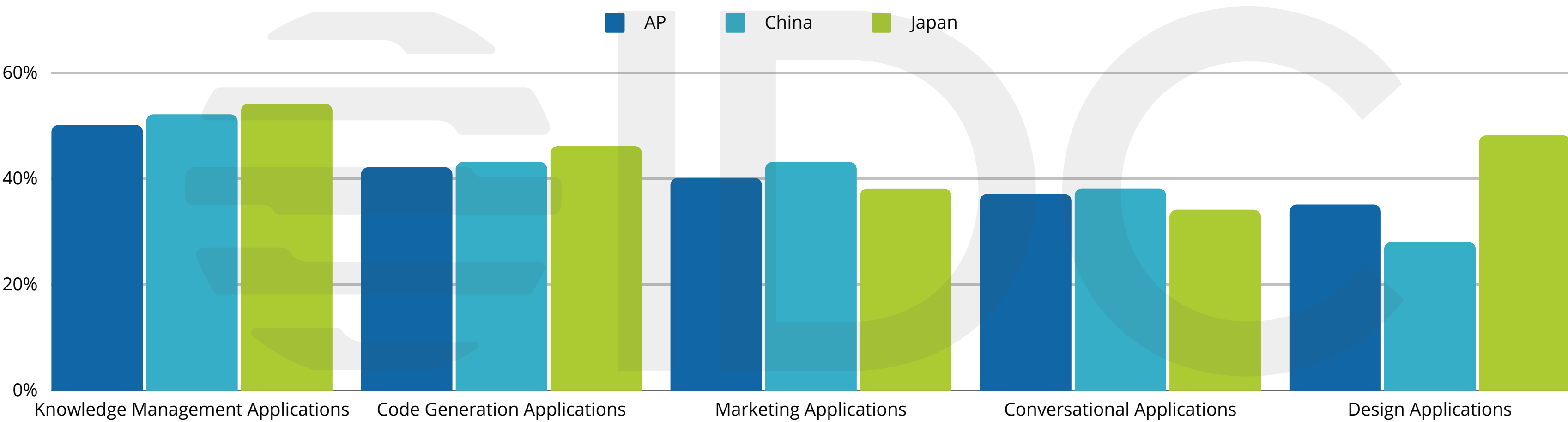
These digital-first enterprises are looking to apply generative AI as a key lever to elevate enterprise intelligence and drive efficiencies across functions such as marketing, sales, customer care, research & development, design, manufacturing, supply chain, and finance.

We are not doing anything yet.
- Asia/Pacific: 30%
- China: 21%
- Japan: 42%

We are doing some initial exploration of potential use cases.
- Asia/Pacific: 38%
- China: 42%
- Japan: 34%

We are investing in Generative AI technologies in 2023.
- Asia/Pacific: 32%
- China: 37%
- Japan: 24%

Legend:
- Asia/Pacific
- China
- Japan

Source: IDC Future Enterprise Resiliency Spending Survey, Wave 2, March 2023, N=512, APJ: 362, China: 100, Japan: 50

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Generative AI Use Cases

What Generative AI use cases do you anticipate having the most promise for your organization?

Knowledge management is the foremost use case for generative AI in Asia/Pacific, including Japan and China. Knowledge management is leveraged for access and search across large repositories of information of different types of images, documents, voice, and other formats across an enterprise.

Source: IDC Future Enterprise Resiliency Spending Survey, Wave 2, March 2023, N=512, APJ: 362, China: 100, Japan: 50

Generative AI Key Issues

Generative AI has tremendous potential for enterprises, but it's essential to recognize its current limitations and challenges. To responsibly adopt this technology, organizations must establish appropriate guardrails. Although AI ethics have been a significant topic in recent years, the ethical implications of generative AI are still relatively new and require further exploration.

Accuracy

Generative AI can be inaccurate as pre-trained language models like ChatGPT have limitations like outdated training data. Additionally, recent advancements in language models have led to more persuasive and eloquent speech, which can lead to inaccurate information. Therefore, it's crucial for individuals and organizations to independently assess the truthfulness and accuracy of information generated by generative AI tools.

Misuse

Generative AI could produce misleading, harmful, or misappropriated content and could be used for unethical business practices, such as manipulating online reviews for marketing purposes or mass-creating thousands of accounts with false identities.

Data Security and Privacy

The power of generative AI in creating authentic-looking but fake images raises concerns about identity theft, fraud, and counterfeiting. Moreover, industries with strict regulations may encounter data privacy problems when dealing with the collection of personal information.

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"Generative AI has the potential to reimagine the organizational landscape in a completely new way. However, the inherent complexities and risks around implementing the same needs to be carefully assessed."

Deepika Giri, Head of Research, Big Data & AI, IDC Asia/Pacific including Japan

Generative AI Regulations – An APAC View

Regulatory bodies are under pressure to address issues around data privacy and security, IP rights, and the potential misuse of AI-generated content.

Country	Regulations
China	New draft regulations are geared towards preventing further developments in AI technology that go against stipulated mandates and constraints. Security Assessment of GAI appln. To ensure compliance to PIPL.
India	Will not regulate growth of AI because AI is perceived as an enabler of the digital economy. The government believes stringent laws at this stage would lead to stifling of innovation and research
Japan	Will develop regulations with the goal to maximize positive impact on society rather than stamping out risks. Will set up a council to promote AI technology and keep up with global interest in the subject.
Korea	Will announce guidelines instead of mandates to tackle contentious use of AI technologies, including generative AI.
Australia	Does not have AI-specific legislation yet, falls back to existing law to handle issues related to AI technology. Accepts public submissions for suggestions to new guidelines that will enable and facilitate responsible use of AI.

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Most companies are just at the start of their journey with generative AI. While this technology is very promising, many businesses are prioritizing understanding how it works and what potential use cases could be applied to their organizations.

If you are interested to find out more about how to integrate generative AI into your business we can help.

IDC has developed a range of solutions to help you plan, market, and sell around the expanding Generative AI market:

- Analyst-made content to jumpstart your lead generation and validation efforts
- A wealth of published data and research in the area that means the most to your company
- Access to a diverse set of IDC expert analysts and their advice
- Access to CXO Advisor sessions

To learn more about how IDC can help support your conversations around Generative AI contact us today!

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