

Anatomy of adaptive leaders in APAC

Navigating emerging technologies
in economic uncertainty



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Sponsor foreword

The Future is Open - Red Hat's values are founded in the Open Source principles and this report represents our commitment to continue to live by those principles in an ever changing world. By commissioning this report to Economist Impact we hope to share with the global community the insights and perspectives we currently see across the rapidly evolving technology landscape in Asia Pacific.

We see this report as a contribution to the collective vision and hope that it supports directing positive investment and decision making for companies operating in the Asia Pacific market. The diversity within the region translates to a variety of perspectives and challenges that need to be addressed. These include:

- Business challenges such as budgetary pressures and R&D investment,
- Technological challenges such as integrating data analytics, cloud and artificial intelligence/machine learning (AI/ML) technologies, and
- People challenges such as building the right skills and talent for the future

The future role of Artificial Intelligence (AI) within Asia Pacific was the most surprising take away I found from the analysis. The rate of development and the use case possibilities will have a monumental impact on productivity that cannot be underestimated. Distribution of AI resources to the

4.3 billion people residing in Asia Pacific will definitely be a game changer. However, as this report shows this is still early in the technology lifecycle. There is a lack of understanding of the impact and the talent required to deliver to the promise of AI.

Navigating the technical, cultural, and financial barriers can also be challenging and the implications of the investments and decisions can have far reaching effects. Red Hat's Open Source principles and technology seek to instil transparency and trust associated with the technological shifts. We see open collaboration as the key to bringing new ideas and creative solutions to the most difficult problems. As the largest open source company in the world, we believe using an open development model helps create more stable, secure, and innovative technologies. At Red Hat, we've spent over three decades working closely with our partner ecosystem and collaborating openly with our customers and engaging with open source communities on diverse projects to protect open source licenses so that we can continue to develop software that pushes the boundaries of technological ability.

I hope this report gives everyone a better understanding of what's happening now in Asia Pacific. Allowing our customers, partners and community to shape what's coming next so that they unlock the world's potential.

Christopher Warren

Chief of Staff and Head of
Business Strategy APJ, Red Hat

About the report

This report, developed by Economist Impact and supported by Red Hat and Intel, explores the impact of current macroeconomic climate and emerging technology trends on business strategy and operations in APAC. It examines to what extent business leaders are harnessing emerging technologies to navigate this disruptive

landscape and what factors promote or constrain technology adoption. It also assesses the leadership approaches and traits business executives consider crucial to weather the disruption while maintaining a focus on growth and resilience. In summary, the report conducts an inquiry into the following three areas:

1.

How are economic disruption and emerging technologies impacting firms and how are business leaders managing the risk and opportunities?

2.

How well do business leaders understand the role of emerging technologies in their business and what strategies are they employing to implement them?

3.

How are business leaders able to maintain open ways of working and minimise complexity in order to do more for less during a period of economic shortage and technological disruption? What character traits have been critical, and how are they fostering innovation in challenging environments?

The research methodology leverages The Economist Intelligence Unit's forecasts of key macroeconomic indicators for building the outlook for macroeconomic risks and opportunities in each of the focal geographies.

It also draws fresh inputs from a survey of 375 business leaders across ASEAN (focusing on Indonesia, Malaysia and Singapore), Australia, Greater China (China, Hong Kong and Taiwan), India and North Asia (Japan and South Korea). The respondent sample comprised C-suite executives in both technical roles (eg, chief technology officer, chief information officer and chief digital officer) and non-technical roles (eg, CEO, chief operations officer, chief strategy officer and chief financial officer). The industries covered varied, with a minimum of 40 each from financial services, the public sector, manufacturing, and telecommunications/media/entertainment.¹

An interview programme with five business leaders from financial services, telecom, e-commerce and utility companies was conducted to supplement the research findings and ground the insights in real-world experience.

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Finally, Economist Impact would like to thank the following interviewees for their time and insights (listed alphabetically by surname):

- **Austin R. Bryan**, chief digital officer, CLP Holdings Limited
- **Sunil Gopinath**, CEO, Rakuten India
- **Roel Louwhoff**, chief transformation, technology and operations officer, Standard Chartered Bank
- **Jimmy Ng**, group head of operations, DBS
- **Rob Sewell**, chief information officer, NBN Co Australia

Executive summary

The business landscape in the Asia-Pacific (APAC) region is briskly evolving as several macroeconomic, technological and geopolitical headwinds compete for the attention of business leadership teams. Amid such complexity, leaders have their work cut out for them: navigating the disruption while steering their companies towards growth. This report unpacks the impact

of the current disruptive climate on firms across a range of industries and APAC geographies with a particular focus on macroeconomic and technological risks. It also explores trends in the adoption of emerging technologies in these firms and reveals how business leaders are redefining leadership to convert risks into opportunities. The key findings of this report are highlighted below.

Risks abound

APAC firms are under stress as they are confronted with a diverse range of risks. Leading disruptions include shortages in skilled labour, supply chain disruptions including tech supply chains, cybersecurity attacks and increasingly fragmented regulations around trade and ESG. Malaysia and Singapore have been particularly affected by supply chain disruptions, whereas skilled labour shortages are relatively acute in Japan, Australia and South Korea, and in the wholesale, natural resources, and services sectors.

Headwinds are impacting business metrics, but also creating opportunities

Profit margins and technology investments emerged as the top business metrics where companies in APAC expect to see the greatest impact of macroeconomic and technological headwinds. For example, 7 out of 10 business leaders expect economic headwinds to have an impact on their companies' net profit margins. On the other hand, 6 out of 10 leaders expect technological disruption to provide a boost to their tech investments.

Most businesses are being de-risked using a multipronged strategy

Leading strategies deployed by APAC companies include creating forecasts for business performance under adverse and optimistic scenarios and putting in place measures to cut operational costs. Since supply chain disruptions are one of the main pathways by which geopolitical dynamics are influencing business activity, building resilience in supply chains is another strategy businesses are adopting to de-risk. This includes diverting supply chains for greater stability, nearshoring and a shift from just-in-time to just-in-case manufacturing models. On the other hand, the strategies being least adopted include pursuing inorganic growth channels (such as through mergers and joint ventures) and investing in R&D.

Among emerging technologies, cloud computing has widespread uptake

Most APAC companies are making progress in integrating emerging technologies in their business. Nearly 70% of APAC executives confirm their companies have fully adopted cloud computing including private cloud, public cloud, hybrid cloud and multi-cloud. Adoption is led by companies in transportation, retail and insurance, and in large companies with over 5,000 employees. Among those that have not yet adopted cloud technology, unwillingness to undertake the capital investment needed for cloud technology was reported as a key barrier. Early-stage adoption is also evident among APAC companies for AI, generative AI and data platforms. Companies find that adopting these technologies has increased competitiveness, productivity and efficiency. Web3 and quantum computing have the least uptake.

Companies show openness to new ways of working

APAC companies are making robust progress in enhancing their digital ecosystems to get the most out of these emerging technologies. This includes establishing data science capabilities such as Machine Learning Operations, establishing digital sovereignty and adopting open source principles and technologies—with energy, utilities, media, banking, healthcare and insurance companies in Singapore leading the latter trend. Companies have also made sizable progress in modern applications development. On the other hand, APAC companies' progress in making IT sustainable is relatively low.

Despite progress in tech adoption, constraints remain

High capital investments are a key challenge to investing in new technology, while some business leaders are concerned that investing in certain new technologies may court job redundancies—especially in case of generative AI. A deficit in skilled labour is another constraint. The region's labour markets have not kept pace with changing industry demand owing to the rapid evolution of new and emerging technologies.

Ongoing complexities have brought the role of business leaders into sharp focus

Agile yet humane leadership is critical during crises. Two traits that leaders regard as highly important for successfully navigating disruption are collaboration, trust and open ways of working (both within and outside of the organisation), and agility in thinking and decision-making. Further, defining and reviewing the company's vision and strategic priorities, and then effectively communicating them, is considered the most effective approach to fostering an innovative culture by APAC executives.



Introduction

Even as global economic headwinds and geopolitical disruptions complicate recovery efforts in a post-covid world, Asia-Pacific (APAC) remains a bright spot. In a landscape otherwise marked by monetary tightening and decelerated economic growth, the International Monetary Fund expects the region's GDP to grow by 4.6% in 2023 (up from 3.8% in 2022). This is fuelled by hopeful prospects for China's post-pandemic recovery and anticipated growth in India and Indonesia.²

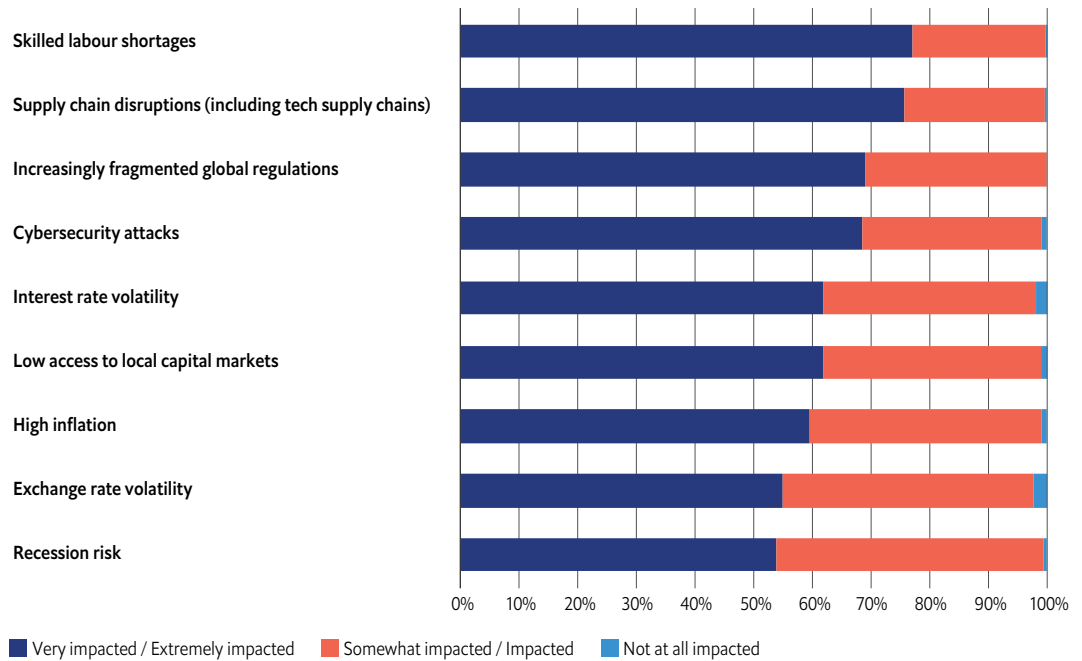
Challenges remain, however, as the economic slowdown in the US and the EU translates to cooling demand for goods from APAC's export-reliant economies. Operating against this backdrop of economic risk and opportunity, companies are still recovering from the inflation and supply chain shocks triggered by the pandemic and the Russia–Ukraine war. While APAC economies are expected to continue seeing strong growth relative to economies elsewhere, businesses are under growing pressure to generate profits in an environment where costs remain high.

The survey of senior business leaders in APAC conducted by Economist Impact indicates that recent economic difficulties have had a considerable impact on businesses. In addition to macroeconomic risks such as interest rate volatility (62% of respondents were either very or extremely impacted by this factor), high inflation (60%) and the risk of recession (54%), businesses continue to be heavily impacted by other risks such as skilled labour shortages (77%), supply chain disruptions (76%) and cyber attacks (69%).

These risks are also impacting some industries and markets more than others. While interest rate volatility has affected the banking and insurance sector the most (91% of businesses reported being very or extremely impacted), inflation was reported as a greater risk for retail (86%) and healthcare companies (83%). Similarly, the risk of recession is seen as a major headwind in the services sector (87% report being very or extremely impacted by this risk). Skilled labour shortages are relatively acute in Japan (87%), Australia (84%) and South Korea (81%), as well as in the wholesale, natural resources and services sectors.

Figure 1: Businesses in APAC face varied macroeconomic risks

Extent to which each of the various macroeconomic and technological risks is impacting businesses

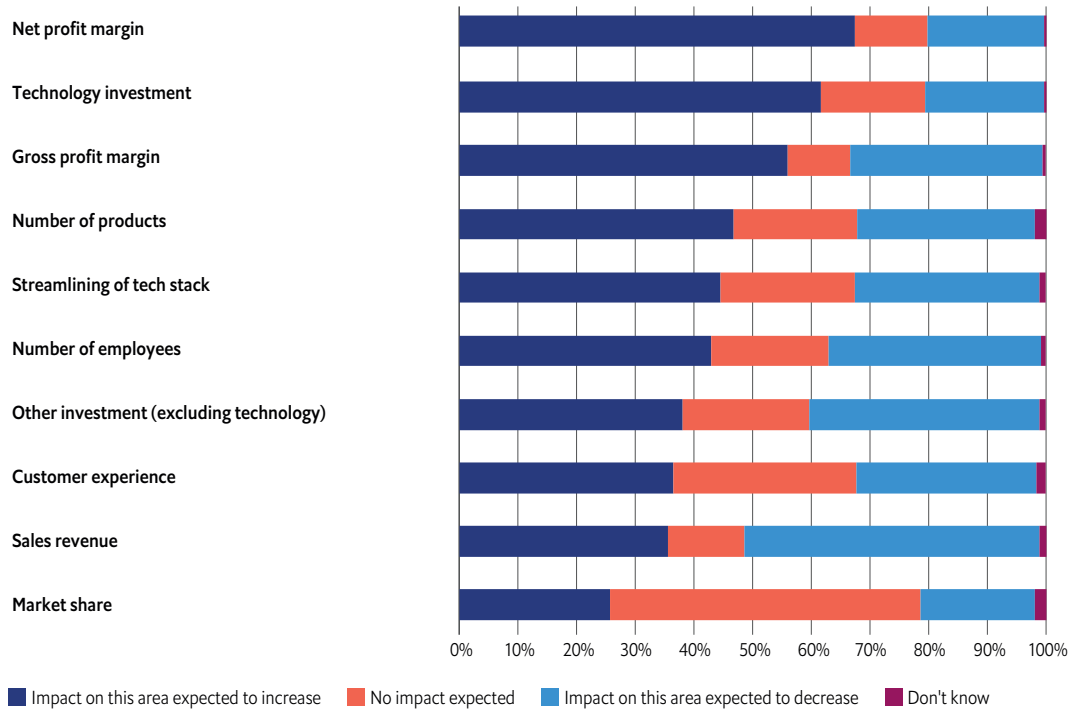


Source: Economist Impact Survey of Business Leaders in APAC, 2023

These risks are likely to directly affect businesses' bottom lines over the next 12 months: 72% of executives expect an increased impact on their net profit margins, with larger companies more likely to see their profits hampered compared with smaller ones (by headcount). More than half of all executives (53%) expect economic headwinds to impact technology investment; however, this impact does not vary by company size. Over half (55%) foresee decreased impact on sales revenue, reflecting some optimism that private consumption could rebound, as inflation is expected to moderate over the coming year.³

The region's risk outlook is not shaped by macroeconomic trends alone. New and emerging technologies such as data analytics, cloud computing, artificial intelligence (AI) and generative AI are transforming business operations, increasing productivity and efficiency⁴ while introducing complexity and risk.⁵ In addition, technology supply chain disruptions are reshaping business dynamics in the region.⁶ More than three in five (62%) business leaders expect technology investments to be increasingly impacted by technological headwinds, while 68% expect reduced profits as they bear higher expenses in the coming year.

Figure 2: Technological disruption will impact the appetite for technology investment in APAC
 Executives' expectations regarding the impact of technological headwinds on their key business metrics over the next 12 months



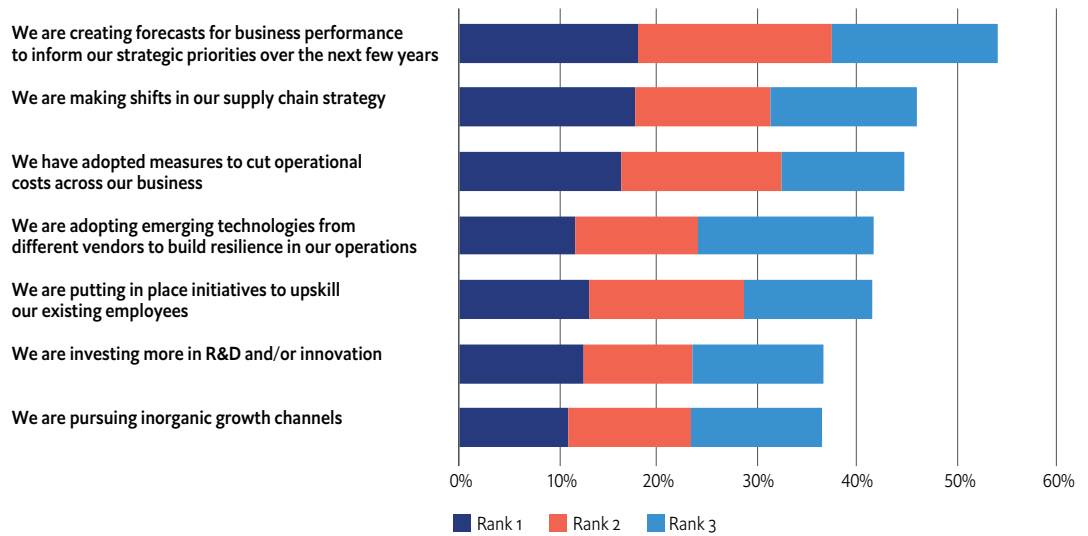
Source: Economist Impact Survey of Business Leaders in APAC, 2023

Given prevailing economic and technological disruption, executives in APAC are adopting a multipronged approach to de-risk their businesses. Leading strategies include creating forecasts for business performance under adverse and optimistic scenarios (54% of survey respondents ranked this among their top three strategies), making shifts in their supply chain strategy (46%) and putting in place measures to cut operational costs (45%). Strategic shifts to supply chain operations include identifying new markets to procure from, nearshoring, or moving from a just-in-time to just-in-case strategy.

On the other hand, in APAC, only 37% of companies currently consider investing more in R&D among their top-three priorities to de-risk their businesses against economic headwinds. This relatively low percentage is likely due to uncertainty about the benefits of technology investment. Roel Louwhoff, who is the chief transformation, technology and operations officer at Standard Chartered Bank, highlights that emerging technologies can bring about both financial and non-financial gains, but “if not deployed well, they can produce undesirable outcomes”. He adds that the successful deployment of technology depends on factors such as regulations, the investment required and the people with the right skills.

Figure 3: Business performance forecasting and risk assessment is businesses’ key de-risking strategy in APAC

Factors driving adoption of AI and automation-based technologies in companies that have fully adopted them (eg, robotics and natural language processing)



Source: Economist Impact Survey of Business Leaders in APAC, 2023

Macroeconomic and technological headwinds have brought corporate leadership into sharp focus. Leaders look to not just steer their organisations through the complex environment, but also successfully convert risks into opportunities, all while maintaining a steadfast focus on growth. The next chapters

dive deeper into the macroeconomic and technology landscape across various geographies in APAC, starting with ASEAN. Along with this, they discuss the leadership traits that business executives perceive as critical to help navigate their businesses through the disruptive environment.



Chapter 1: ASEAN

Macroeconomic risks and opportunities in ASEAN⁷

South-east Asian countries have demonstrated more resilience than other economies in the face of economic shocks and geopolitical churn.⁸ While the Asian Development Bank has scaled down the region's growth projection from 5.6% in 2022 to 4.6% in 2023—due largely to tamer international demand for manufactured exports⁹—South-east Asia can expect to benefit from more tourism-driven dividends as covid-19 impacts recede and domestic demand picks up.

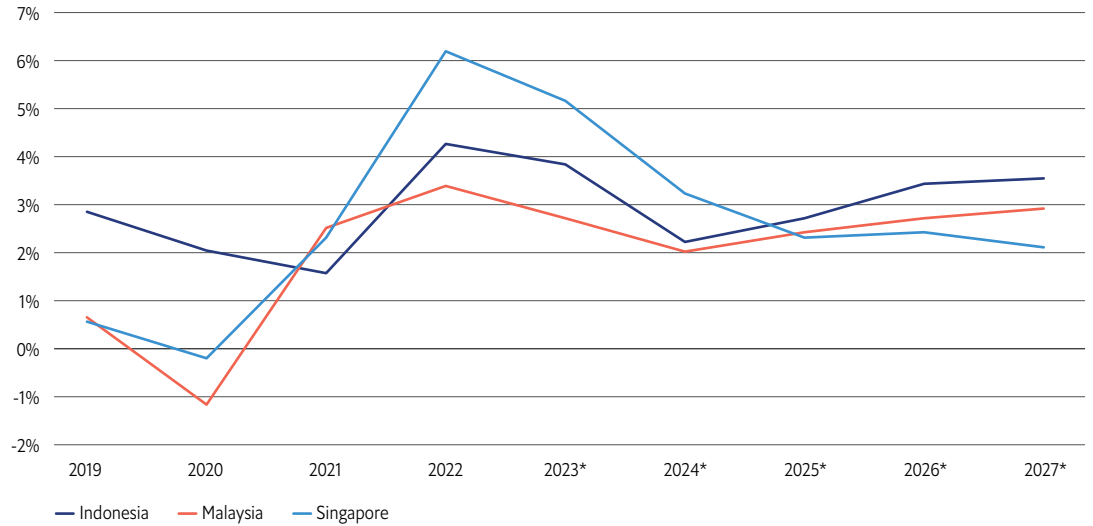
Nevertheless, weaker export demand is already impacting some of the region's economies, including Malaysia, which is heavily reliant on shipments. Fizzling external demand and a weaker global economy brought the country's

year-on-year GDP growth to just 2.9% in the second quarter of 2023—the slowest for Malaysia in nearly two years—and lowered 2023 growth expectations to the lower end of the Malaysian central bank's 4% to 5% range.¹⁰

Meanwhile, Singapore has dialled down its 2023 economic growth forecast to just 0.5-1.5% after expanding by only 0.5% in the second quarter of 2023.¹¹ Other ASEAN markets are weathering the shocks more soundly. GDP expansion in Indonesia exceeded expectations, clocking in at 5.2% in the second quarter of 2023 after riding a wave of strong household and public expenditure, offsetting slowing exports.¹² Growth for the whole of 2023 is expected at 4.9%, driven by resilient domestic demand.¹³

Figure 4: South-east Asia’s inflation is expected to moderate in 2023

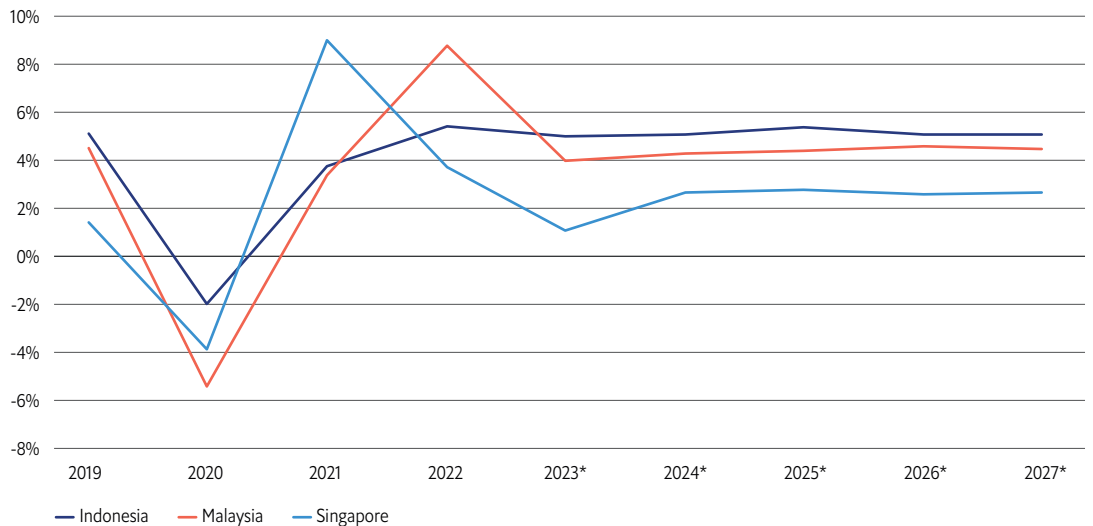
Consumer price inflation outlook for key ASEAN economies



Source: The Economist Intelligence Unit, 2023. Note: * denotes forecast numbers

Figure 5: Indonesia will drive ASEAN economic growth over the next few years

Real GDP growth outlook for key ASEAN economies

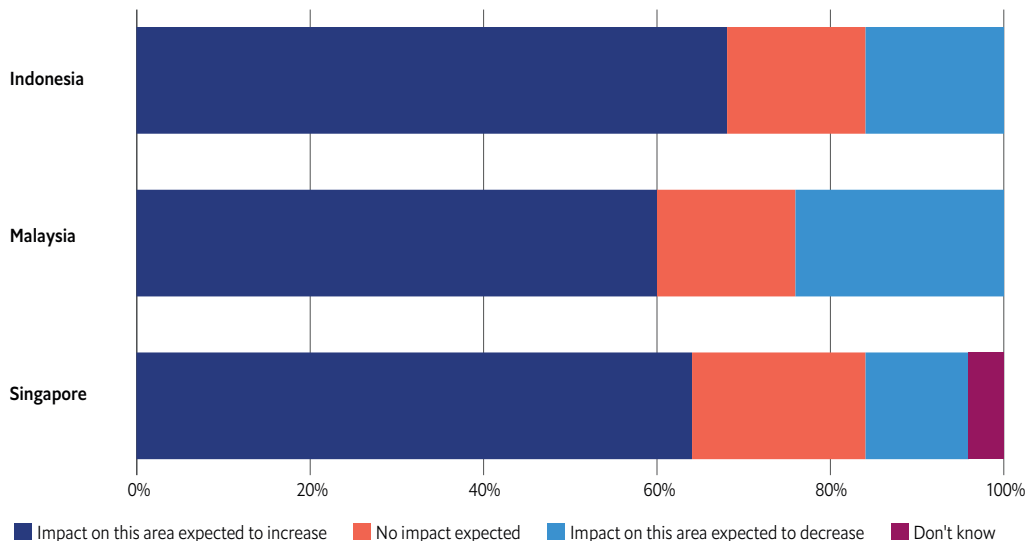


Source: The Economist Intelligence Unit, 2023. Note: * denotes forecast numbers

The effects of the macroeconomic headwinds are apparent on businesses in ASEAN. In Singapore, 68% of survey respondent reported that their companies are “very or extremely impacted” by high inflation, a sentiment echoed by 56% of those in Malaysia and 52% in Indonesia. Yet a higher share of executives in Indonesia (52%) stated that their companies are “very or severely impacted” by the risk of recession, with the corresponding shares for Malaysia and Singapore slightly lower—at 48% and 36%, respectively. Despite Indonesia’s resilient economic growth, it appears corporate leaders in the country are more cautious about their prospects, potentially due to persisting inflation.

Across the three economies, executives expect the impact of economic headwinds on their net profit margin to increase over the next 12 months. The impact on technology investments, however, is varied, with a larger share of executives in Singapore (64%) expecting to see increased impact compared with just 44% and 40% in Indonesia and Malaysia, respectively. The impact on non-technology investments is not expected to rise significantly, with less than half (48%) of respondents expecting to see this in Indonesia and Malaysia, and an even lesser share in Singapore (40%).

Figure 6: ASEAN executives expect economic headwinds to impact net profit margins
 Executives’ expectations of the impact of economic headwinds on their net profit margins over the next 12 months



Source: Economist Impact Survey of Business Leaders in APAC, 2023

In Indonesia, 28% of businesses are focusing on cutting operational costs as the top strategy to de-risk business. In Malaysia, making shifts in supply chain strategy is the top de-risking strategy for 28% of businesses. A recent HSBC report found that 67% of Malaysian businesses prefer reducing their number of supplier relationships and developing deeper and more strategic relationships with a select few. Additionally, many are looking at nearshoring to secure supply chain resilience.¹⁴

Emerging technology landscape in ASEAN

Adopting emerging technologies could facilitate the more efficient use of company resources and contribute to savings in the long run. Business leaders who have embraced new technologies in South-east Asia appear to recognise this. Cloud solutions have the highest uptake relative to other technologies among the surveyed companies: 64% and 68% of respondents in Malaysia and Singapore, respectively, report fully adopting these technologies. Jimmy NG, group head of operations, DBS, explains how his company has made the most of this technology. “We have been able to maximise the benefits of our AI/ML and blockchain initiatives by adopting a hybrid, multi-cloud infrastructure that has provided the bank with greater resilience, flexibility and scalability, as well as reduced infrastructure costs,” he says.

Data platforms are another common choice. Half of the executives in Indonesia, Malaysia and Singapore report that data platforms—which allows organisations to collect, manage and analyse data and draw key business insights from it—have helped minimise cost and complexity in their processes, as well as maximise productivity. Beyond that, emerging technologies are also

helping companies run more efficiently even as they pursue business expansion: many business leaders in Indonesia, Malaysia and Singapore report that AI and automation-based technologies have helped them plug inefficiencies and identify growth avenues for their business. Mr Ng echoes this: “To extend our lead against the competition, we have continued to experiment with emerging technologies such as blockchain and AI/ML to deliver differentiated customer experiences.”

However, business leaders in Indonesia report lower rates for the full adoption of several emerging technologies compared with Singapore and Malaysia, including cloud computing (Indonesia, 44%), data platforms (Indonesia, 28%; Singapore and Malaysia, 40% each), AI and automation-based technologies (Indonesia, 16%; Malaysia, 24%; and Singapore, 20%). These figures may point to limitations to the broader technology ecosystem in Indonesia, such as inadequate telecommunication and internet infrastructure, as well as uneven levels of capacity and readiness among the country’s firms in adopting new technologies.¹⁵

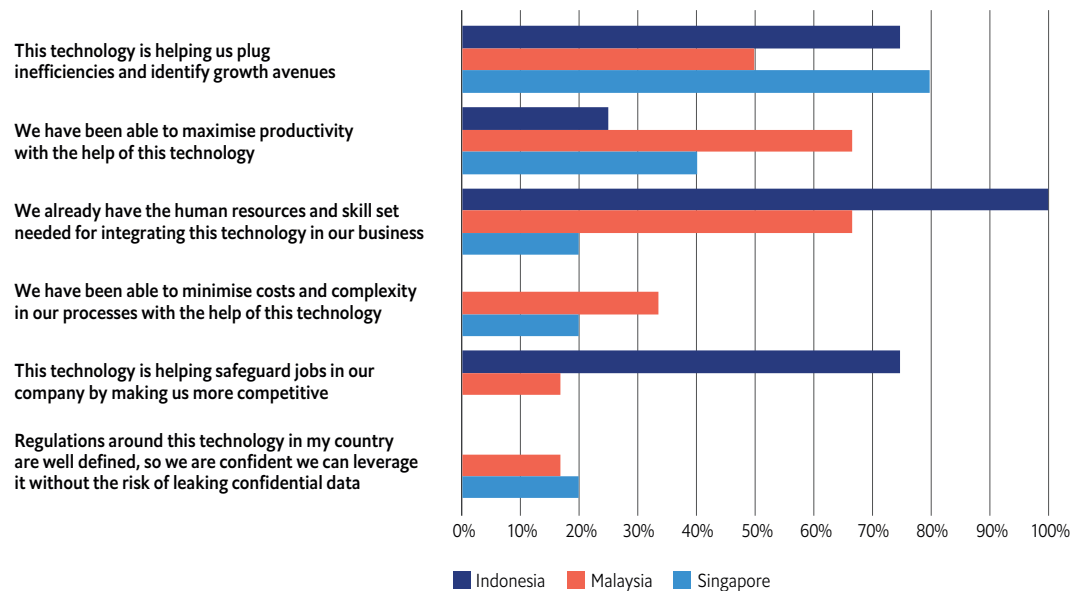
Singaporean companies have made robust progress on embracing new ways of working to advance their existing digital ecosystems. Seventy-two percent of companies have made strong progress on adopting open source principles and technologies—the highest adoption rate in APAC. A relatively lower share of companies has made comparable progress in this area in Malaysia (64%) and Indonesia (48%). Comparable statistics from other regions show that while APAC is fast catching up, there is room for more widespread adoption. For example, a 2021 survey found that 97% of UK companies are deploying open source software, operating systems and programming languages.¹⁶ Open source software is also deployed by 99% of

Fortune 500 companies.¹⁷ Over three-quarters of Singaporean executives and over 72% of Malaysian and Indonesian executives also reported strong progress on modern applications development. Malaysian companies outpace their ASEAN counterparts in developing in-house data science capabilities: 80% of executives reported strong progress here, compared with 48% in Indonesia and 64% in Singapore.

Finally, 64% of Malaysian and Singaporean executives reported strong progress on advancing sustainability in their IT ecosystems, compared with just 40% in Indonesia. Highlighting the interaction between technology and sustainability, Mr Ng notes that “technology

enables the bank and our clients to make better informed decisions on sustainability. In our corporate lending business, we have started experimenting with AI/ML to analyse our clients’ public disclosures and quantify their Scope 3 emissions.” He also underlines the role of technology in enhancing how banks can engage with and deliver sustainable advisory and financing solutions to their clients: “For our institutional clients, we have developed an in-house analytical tool to help relationship managers assess each client’s greenhouse gas emissions, and to compare these to the client’s peers and the decarbonisation targets which we set in 2022 for our lending and financing activities.”

Figure 7: AI and automation-based technologies are boosting efficiency and growth in ASEAN
 Factors driving adoption of AI and automation-based technologies in companies that have fully adopted them (eg, robotics and natural language processing)



Source: Economist Impact Survey of Business Leaders in APAC, 2023

Although investing in new technology can positively impact company operations, there are material barriers for those adopting emerging technologies in the region. Costs are the largest prohibitive factor for all businesses in Indonesia and Singapore that have not invested in cloud computing. Meanwhile, 69% and 70% of companies in Malaysia and Singapore that have not adopted generative AI attributed this to the lack of human resources needed to integrate it in their business, underscoring the need for companies to upskill their labour force to keep pace with innovation.

For major financial services institutions such as Standard Chartered Bank and DBS Bank, security is increasingly a prohibitive factor for technology adoption. “In the case of generative AI, concerns around data security weigh over the banking industry that handles sensitive customer data,” says Mr Louwhoff. He adds that the bank has put in place guardrails for the appropriate use of generative AI by employees. Business leaders are also anxious about the possibility of triggering job losses with the greater use of AI and automation-based tech: 57% of those surveyed in Indonesia and 60% in Malaysia fear that AI will make a large share of jobs in their companies redundant.

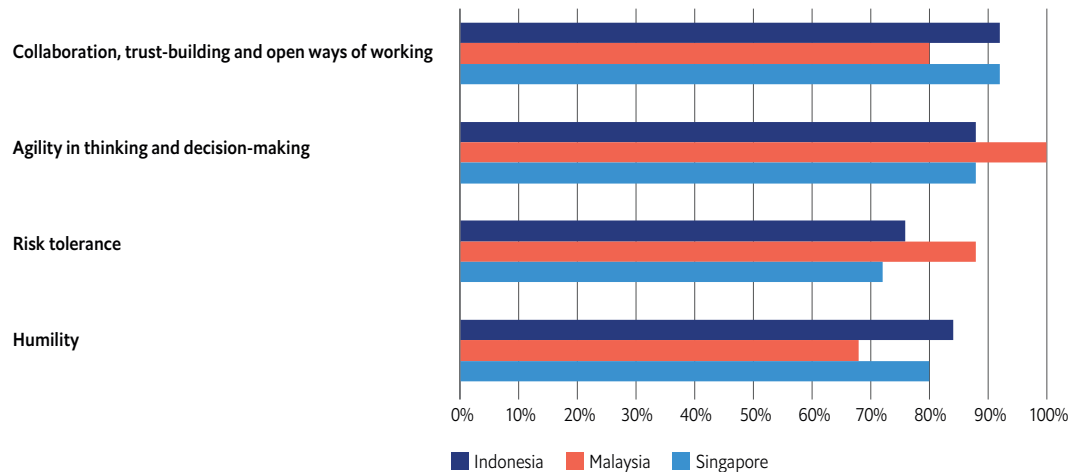
Adaptive leadership in ASEAN businesses

Agile and humane leadership is critical during crises. Most respondents in the three markets expect collaboration, trust-building and open ways of working—both with employees and

external stakeholders—to be highly important in overcoming ongoing macroeconomic and technological challenges. Collaboration emerged as a clear winner in Indonesia, where 92% regarded it as very or extremely important.

Agility in thinking and decision-making also emerges as a valuable leadership trait, but particularly in Malaysia, where all respondents selected this as very or extremely important. According to Mr Louwhoff, “leadership is changing from a more self-absorbed style to a more decentralised style that leverages the individual strengths of employees and is agile and adaptable.” He says it is “important to keep learning and evolving and trust the knowledge and capabilities of the teams a leader works with”. Highlighting the importance of creating a safe space for innovation, Mr Ng says that “the key word in ‘digital transformation’ is not ‘digital’ but rather ‘transformation’. We had to transform to become more nimble. This means focusing on two things: teaching people to use the tools of innovation, and providing them with opportunities to apply these tools in an environment where it is safe to take risks. Our people are our secret sauce, and psychological safety is very important to me.” He also believes that a key aspect of leadership, especially amid uncertainty, is knowing how to balance risks and rewards, both short and long term. “This requires leaders to be ambidextrous: being able to embrace both the hardware and ‘heartware’, being able to understand technology and business, and ultimately being able to connect the dots at both the macro and micro levels,” he says.

Figure 8: ASEAN executives leverage collaboration to meet headwinds
 Character traits considered very and extremely important by executives in helping navigate their organisations through the current economic and technological headwinds



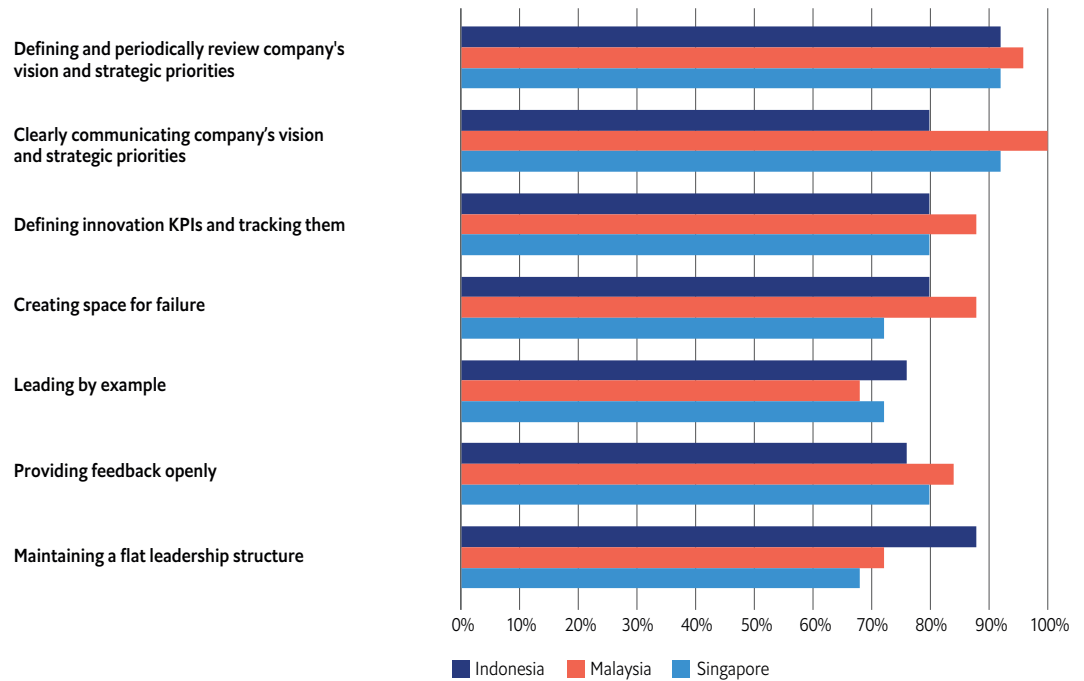
Source: Economist Impact Survey of Business Leaders in APAC, 2023

In the face of persisting uncertainty, companies are being driven to foster innovation to preserve competitiveness. But interlinking innovation with material business outcomes is important, as observed by Austin R. Bryan, chief digital officer of CLP Holdings, who says that “companies must systematise a few ideas that are linked with their overall strategy rather than pursuing many concurrently.” Mr Louwhoff agrees: “Innovation cannot be pursued as a standalone activity. Companies must ensure it directly impacts the work they do and produces benefits.”

According to most respondents in ASEAN, defining and periodically reviewing the company’s vision and strategic priorities is “very or extremely effective” (Malaysia, 96%; Indonesia and Singapore, 92%); and communicating the vision and priorities is as important (Malaysia, 100%; Singapore, 92%; and Indonesia, 80%). Despite the growing popularity of flat organisational structures, however, relatively lower shares of executives in Singapore and Malaysia (68% and 72%, respectively) have respectively found flat leadership to be highly effective, indicating that corporate culture in these countries continues to value hierarchical decision-making when facilitating innovation under adversity.

Figure 9: ASEAN executives bring their corporate vision to bear on innovation

Actions regarded as very and extremely effective by executives for fostering an innovative culture in a company that is under economic pressure



Source: Economist Impact Survey of Business Leaders in APAC, 2023



Chapter 2: Australia

Macroeconomic risks and opportunities in Australia

Despite the initial robustness of its post-pandemic recovery, Australia has seen a significant slowdown in its economic momentum, with GDP growth dipping from 3.7% in 2022 to 1.6% in 2023.¹⁸ The slowdown is on account of tighter monetary policy, which is impacting private consumption—particularly as Australian households have drawn on savings during the pandemic—and private investment.¹⁹

Reprieve may not be forthcoming yet. Consumer inflation reached a 17-month low of 4.9% in July 2023 before rising again to 5.2% the following month, well over the Australian central bank’s 2-3% target, suggesting future hikes in the interest rate²⁰, which, in turn, will continue to impact investment.

Figure 10: Australia grapples with near-term economic challenges
Macroeconomic outlook for Australia

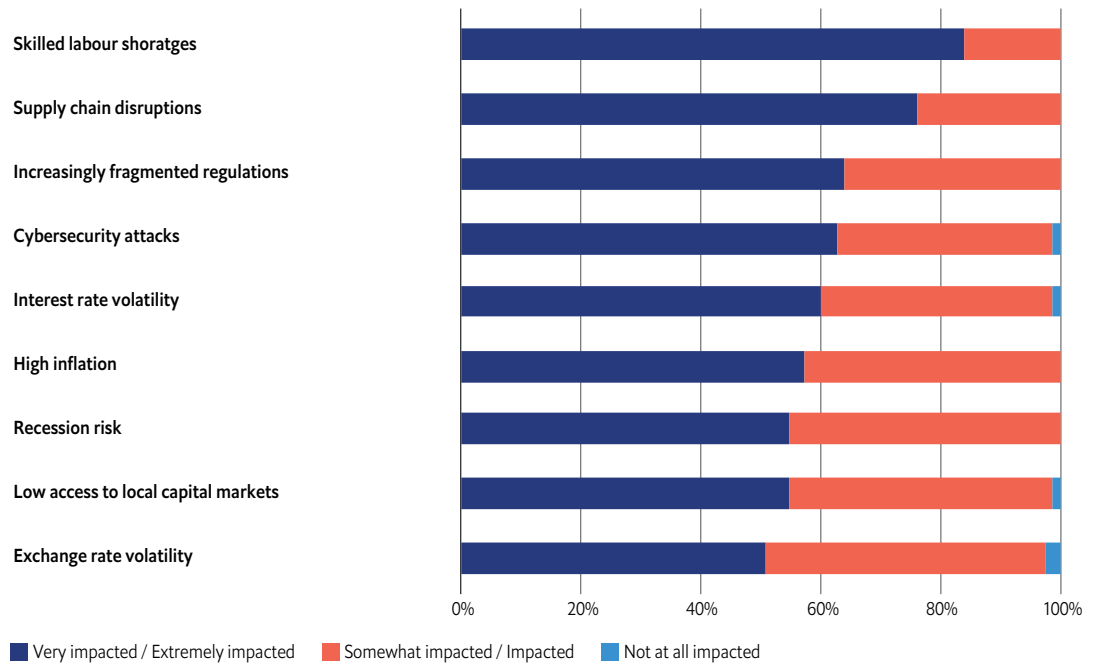


Source: Economist Intelligence Unit, 2023. Note: * denotes forecast numbers

More than half (55%) of corporate leaders in Australia say recession risk has heavily impacted their business. They are also experiencing talent constraints: 84% say their firms have been “very or extremely impacted” by skilled labour shortages,

suggesting the country is wrestling with more than just conventional economic headwinds. In fact, the Australian National Skills Commission found that 286 occupations had skilled labour shortages in 2022, up from 153 in 2021.²¹

Figure 11: Companies in Australia are struggling with skilled labour shortages
How much are various business risks impacting businesses?



Source: Economist Impact Survey of Business Leaders in APAC, 2023

Business leaders are already anticipating the impact of these economic difficulties on profits. Of those surveyed, 73% expect the economic environment to have an increased impact on their net profit margin. As inflation in the

region is projected to normalise, however, some respondents seem to look forward to increased consumer spending, with 43% expecting the impact of economic headwinds on their sales revenue to decrease in the next 12 months.

Emerging technology landscape in Australia

Australia is contending with technological disruptions as well, according to The Economist Intelligence Unit's cybersecurity risk data: the country scored 3 out of 4 in terms of the likelihood of cyber attacks and only 1 out of 4 in preparedness in July 2023.²² In a bid to improve its cybersecurity, the Australian government announced plans in September 2023 to leverage its partnership with the US, Japan and India to reign in the trade of unsafe software products.²³ Technological headwinds like these are already influencing the way Australian executives are looking at emerging technology investments. More than three in five (65%) respondents expect the complex technology climate to have an increased impact on their technology investment.

Australia has one of the highest adoption rates of cloud computing, with the survey results showing that 72% of firms have fully adopted cloud, while 24% are in the early stages. The role of the technology in helping firms stay competitive as well as robust access to workers who capable of deploying it emerged as key driving factors. However, Australian companies present a mixed picture in the adoption of AI and automation-based technologies. Just 4% of companies have fully adopted these and 23% are in the early stages. A sizable 32% reported pausing adoption due to experiencing challenges such as high capital costs and the lack of human resources.

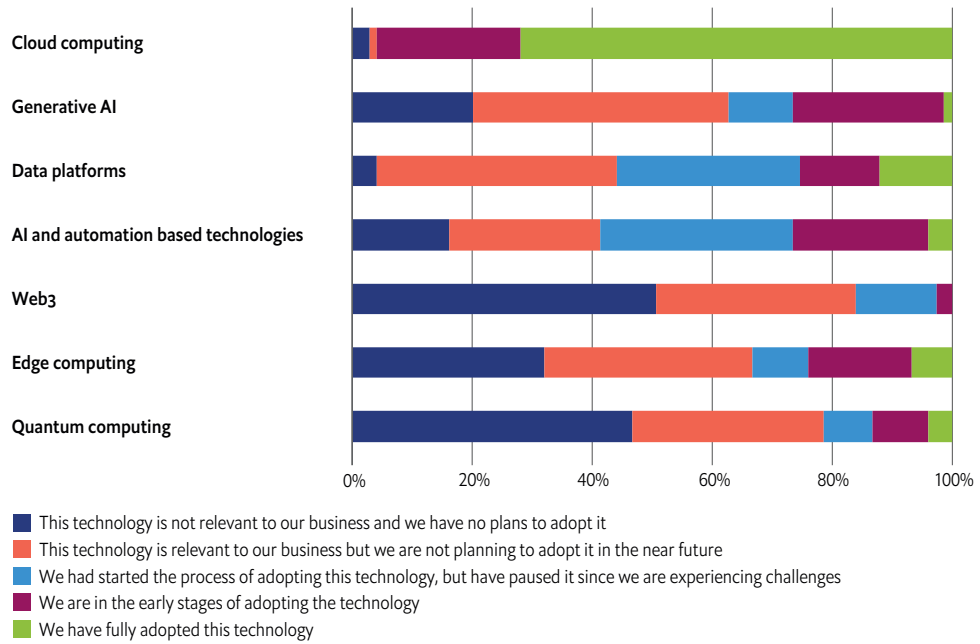
Rob Sewell, chief information officer at NBN Co Australia, says businesses in Australia must look at technology as an enabler, and to that end, NBN Co's network investment plan is taking fibre deeper into communities, as well as improving and extending fixed wireless coverage and satellite capabilities to deliver faster speeds and greater capacity, and delivering an excellent customer experience.

Technology adoption makes businesses more resilient and more able to adapt, as Mr Sewell observes. "Cloud solutions and on-premise software have their own roles, and our organisation is not pushing in one direction or other," he says.

Although broader spending on IT is expected to grow by nearly 6% in 2023,²⁴ investments in emerging technologies could take a hit, as only 44% of those surveyed reported the adoption of emerging technologies as a priority strategy for reducing business risk amid economic headwinds. Despite the growing popularity of generative AI, for example, some companies in Australia may be constrained from fully adopting the technology because of the current economic environment. More than four in ten (43%) do not plan to adopt it soon despite its relevance to their business, while 11% confirm pausing its adoption after experiencing challenges during the process.

Australian firms are also leveraging new ways of working to enhance their digital ecosystems. Sixty percent of executives reported strong progress on adopting open-source principles and technologies, with banking, manufacturing and public sector companies leading the trend. More than three-quarters of Australian firms (77%) also reported strong progress on deepening their data science capabilities—one of the highest shares in APAC. With almost 43% of companies reporting low progress on modern applications development, there is room for more widespread adoption of this trend in the market.

Figure 12: Firms in Australia have varying technology investment priorities
 Companies' current strategic position on the adoption of various emerging technologies

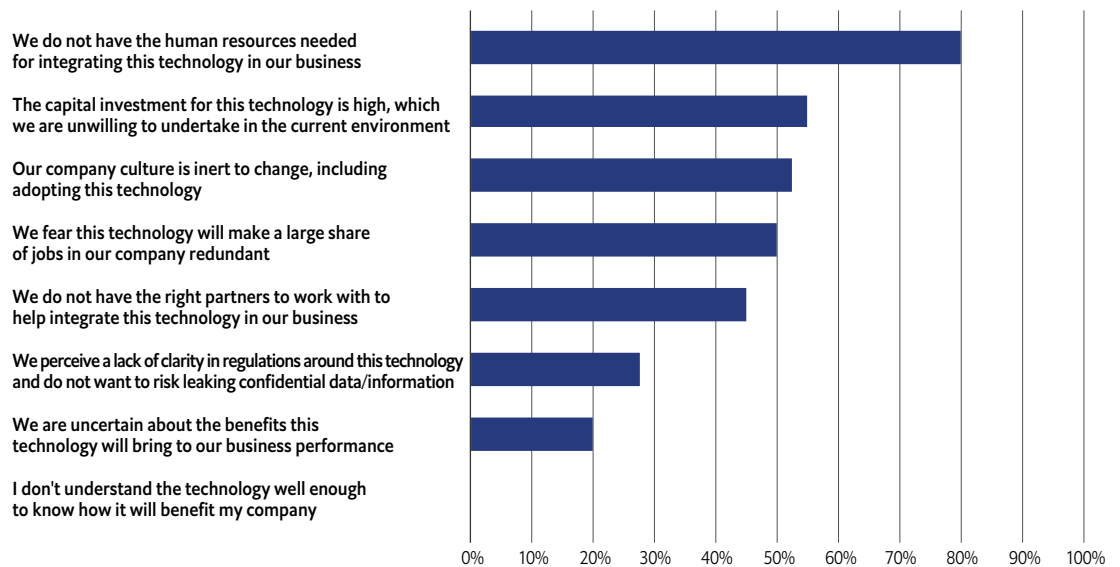


Source: Economist Impact Survey of Business Leaders in APAC, 2023

Mr Sewell acknowledges the availability of sourcing the right skills at the right time as a challenge, as requirements continue to shift: “For example, it was hard to find people with skills in 4G at one point in time, but is not now. [Today,] finding people who can do some of the technical work in the areas of AI/ ML is a challenge,” he says, as is finding people “who know how to look at a business problem and address it”.

Figure 13: High capital investment and skills deficit limit Australian firms from investing in generative AI

Barriers perceived by companies in the adoption and use of generative AI



Source: Economist Impact Survey of Business Leaders in APAC, 2023

Adaptive leadership in Australian businesses

In navigating this complex environment, certain leadership qualities emerge as especially valuable: almost 95% of leaders in Australia say that collaboration, trust-building and open ways of working with employees and external stakeholders will be helpful in their ability to weather persisting economic and technology headwinds. Meanwhile, 92% and 91% respectively cite agility in thinking and decision-making and risk tolerance as priority qualities for sustaining their business in the face of difficulty.

Being purpose-driven helps. “I think that gives us an edge in resilience,” Mr Sewell says. He further likens a leader’s job to horse-riding.

“Look where you’re going. Keep your head up level and your eyes on the horizon for where you’re going. Because if you look down, you’ll wind up on the ground too... It’s always your job to use clear vision and storytelling to reiterate that vision and keep it there.”

Three in four executives in Australia also say that possessing an innovative mindset will be important. To foster innovation, 96% report that clearly communicating the company’s vision and strategic priorities has been effective. Less popular among the country’s business leaders are rewarding success in innovation—which only 45% of respondents found to be “very or

extremely effective”—and allowing employees dedicated “innovation time”. However, 77% affirm the importance of understanding how emerging technologies can benefit the company. This indicates that while the current market environment may not be ideal for emerging technology investment, business leaders in Australia remain open to learning about how new technologies can unlock growth avenues—and potentially investing in them when conditions are more amenable.

As businesses in Australia steel themselves against inflationary impacts and the threat of recession, they are likely to be conservative about emerging technology investments, focusing instead on near-term strategies that will ensure resilience. In the meantime, businesses will look to upskill their workers, both to resolve the skills deficit and to build greater resilience to shocks.



Chapter 3: Greater China

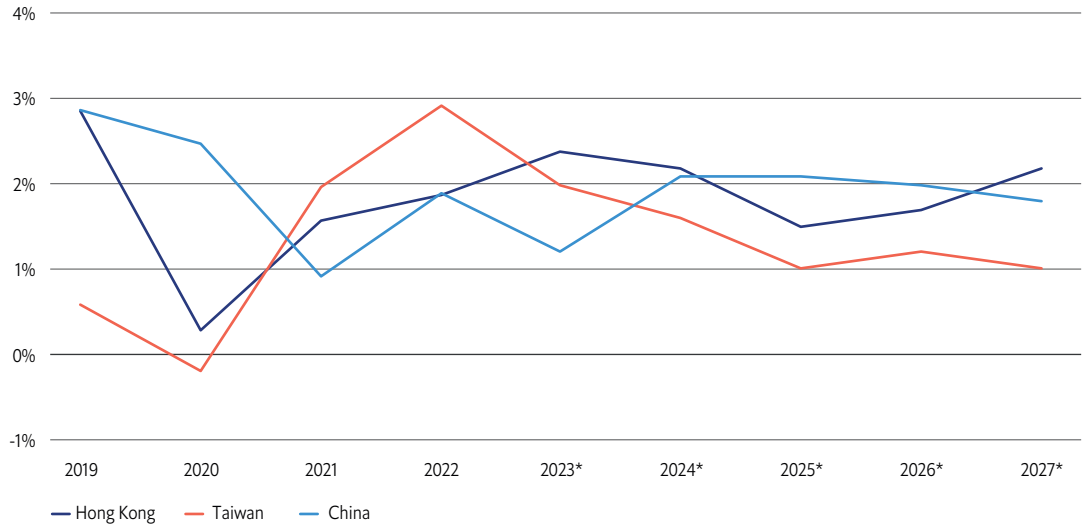
Macroeconomic risks and opportunities in Greater China²⁵

The outlook for Greater China bears the imprint of China's outsized influence. Continued US–China tensions and fraught geopolitical realities in the region are shaping the sub-region's economic and geopolitical future. Slower-than-expected growth in China²⁶ introduces further uncertainty into the regional giant's economy, which is already at moderate risk.²⁷ In tandem, this will likely create further headwinds for Hong Kong and Taiwan as global demand for Chinese exports dips.

Nonetheless, China's GDP is expected to grow to 5.5% in 2023, up from 3% in 2022, on the back of reasonably strong private consumption and capital investment that's driven by state-owned enterprises. Taiwan's economy, meanwhile, will only grow by 0.8% in 2023, given the global demand slowdown. Hong Kong, on the other hand, is expected to grow at 3.5% in 2023,²⁸ as its economy emerges from strict pandemic-induced lockdowns. Its strong links to mainland China, and its continued role as a gateway to the economy, will mean Hong Kong will remain a major global financial centre in the coming years. Its economy is also expected to receive a boost from deeper integration into the Greater Bay Area.

Figure 14: Inflation is not a major cause of concern in Greater China

Consumer price inflation outlook for Greater China economies



Source: The Economist Intelligence Unit, 2023. Note: * denotes forecast numbers

Figure 15: Growth in Greater China is expected to steadily moderate through 2027

Real GDP growth outlook for Greater China economies

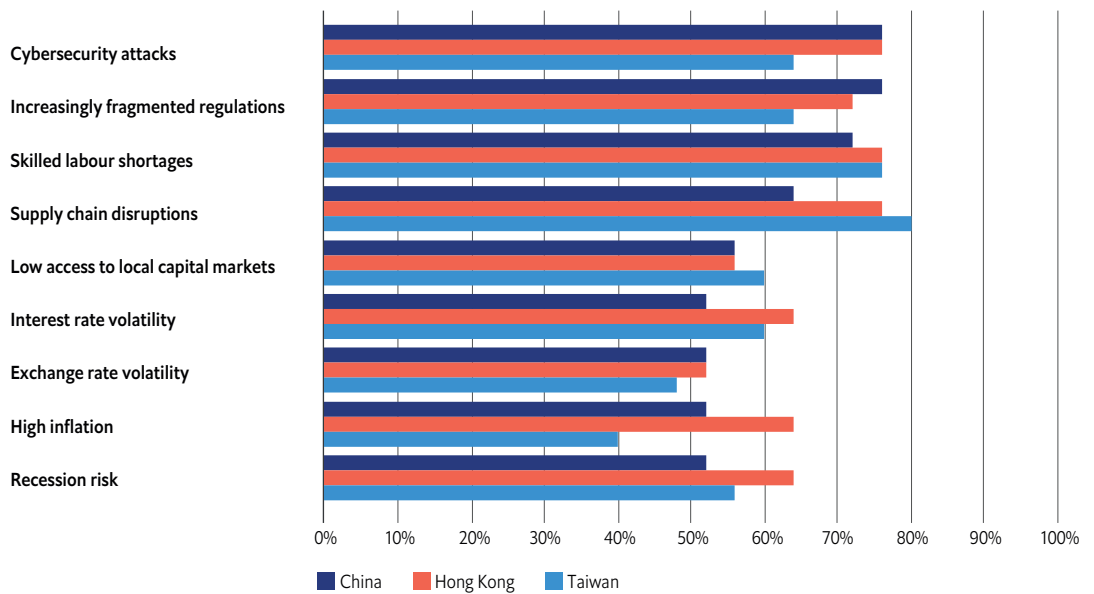


Source: The Economist Intelligence Unit, 2023. Note: * denotes forecast numbers

Hong Kong and Taiwan are meeting challenges unique to their economies in different ways. Taiwan’s economy is dependent on electronics exports and is, therefore, vulnerable, owing to the downturn in global electronics demand. However, an electronics spending uptick is expected in the last quarter of 2023, and that augurs well for Taiwanese businesses, given the economy is at the forefront of innovation

in sectors such as semiconductors. The risk clouding this outlook is further deterioration in China–US ties and US export controls, which can dampen cross-Strait trade. Echoing this, the key risks across the region, according to the surveyed business executives, are supply chain disruptions, cyber attacks, skilled labour shortages and increasingly fragmented global regulations, which can impact how business is conducted.

Figure 16: Supply chain disruptions present a key risk in Greater China, especially in Taiwan
Extent to which each of the various macroeconomic and technological risks is impacting businesses



Source: Economist Impact Survey of Business Leaders in APAC, 2023

These headwinds are expected to impact business profitability. Business leaders in China are especially watchful of the consequences that economic challenges will have on their net profit margin, with 80% saying that they expect challenges on this front—slightly more than their counterparts in Hong Kong (64%) and Taiwan (68%). This suggests Chinese businesses are still not confident about the strength of the economic recovery in China.

In each of the three markets, companies have different priorities as they look to de-risk their business against economic headwinds. Geopolitics and its impact on supply chains is top of mind for businesses in China, with 56% of them placing shifts in their supply chain among the top three business de-risking strategies. The electronics sector is a case in point. China’s imports of chips declined in the first half of 2023, primarily due to US efforts to restrict the export of advanced chips from elsewhere to China.²⁹ However, recent developments in domestic

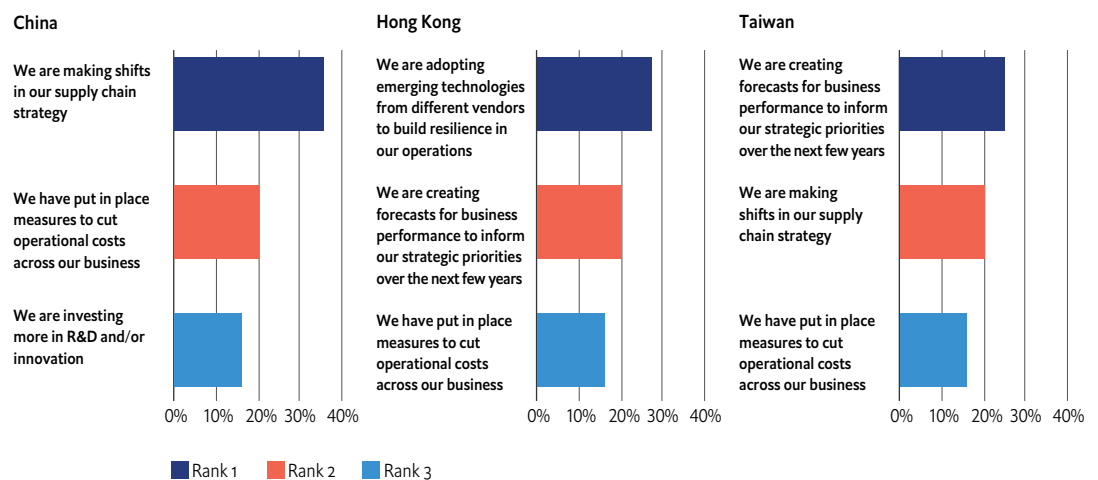
chip development capacity³⁰ suggest that domestic chip development and manufacturing capabilities are progressing in China, and that the country’s chip industry is looking to overcome geopolitics-related supply chain challenges through domestic innovation in manufacturing.

Emerging technology landscape in Greater China

Globally, businesses are looking to adopt emerging technologies to mitigate risks, and this is also seen in Hong Kong, where 28% of businesses rank new technology adoption as their top priority for mitigating economic risks. By contrast, however, none of the executives surveyed in Taiwan ranked emerging technology adoption as a top strategy to de-risk business; instead, they are prioritising creating forecasts and risk assessments for business performance to inform their strategic priorities (56% ranked this among their top three strategies).

Figure 17: Top business de-risking strategies vary in Greater China markets, but operational cost cuts emerge as a key action

Top three actions companies are taking to de-risk their business against economic headwinds



Source: Economist Impact Survey of Business Leaders in APAC, 2023

At least three in five businesses in each of the three economies in Greater China expect technological disruption to provide a boost to their technology investments, creating opportunity out of risk. In Taiwan, 80% of business leaders report that they either do not plan to adopt AI and automation-based technologies soon despite their relevance or have paused the integration of the technology because of difficulties. Almost seven in ten (68%) respondents in Hong Kong and 64% in China reported the same status.

Barriers to adoption include a range of business concerns. Among businesses in Taiwan reluctant to embrace generative AI, 80% believe the technology represents a threat to existing jobs in their business, potentially rendering them redundant. The same risk appears to give executives in China (50%) and Hong Kong (53%) pause when it comes to these technologies too. The lack of right partners to work with to help integrate the technology into their business is also a challenge among businesses in all three economies, but particularly in China (75%).

Even then, new technology adoption is occurring. In China, cloud computing is the most-in-demand technology, with 68% reporting full adoption at their organisations. This could be driven by talent availability: 71% of Chinese firms already have the human resources and skill sets needed for integrating this technology. In addition, 40% are in the early stages of adopting AI and automation-based technologies, since these can maximise productivity. Quantum computing is not among technologies 44% of Chinese firms are planning to adopt owing to high upfront investment needed for the technology.

Three in five (64%) Chinese firms have made high to very high progress in adopting open-source principles and technologies and developing sustainability within their IT ecosystems (eg, developing green IT infrastructure). A slightly larger share (76%) has also adopted company-level regulations around responsible AI use and complying with applicable regulations.

As with Chinese businesses, 64% of Hong Kong firms have fully adopted cloud computing technology, as it is helping safeguard jobs in their companies by making them more competitive. As Mr Bryan of CLP Holdings notes, “The core of our business is cloud native, and in this sense, we are uniquely placed in the industry.” On the other hand, 64% of businesses in Hong Kong do not plan to adopt quantum computing, largely because this technology is costly to implement and could make a large share of jobs redundant in their companies (according to 86% of Hong Kong executives).

In Taiwan, 76% of respondents report the full adoption of cloud computing technology, as their firms possess the human resources and skill sets needed for integrating this technology in their businesses. Around four in ten (44%) are in the early stages of adopting data platforms, as the technology is helping plug inefficiencies and identify new growth avenues. Quantum computing is the least favoured technology at present, with 72% reporting no plans to adopt it, citing reasons such as a lack of clarity regarding regulations and risks of leaking confidential data.

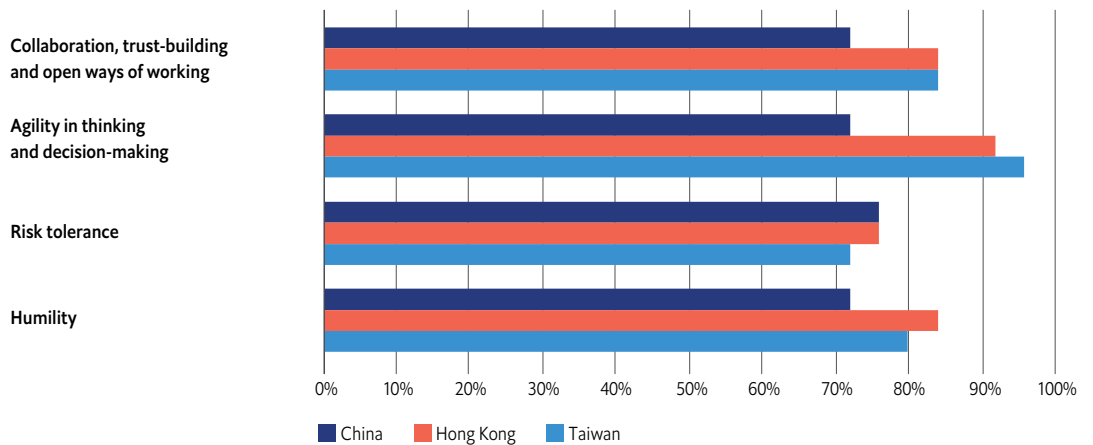
The Greater China sub-region is yet to fully catch up in the adoption of new ways of working aimed at enhancing their digital ecosystems. The open source adoption landscape is similar across Greater China economies, with 64%, 60% and 68% of executives, respectively, in China, Hong Kong and Taiwan reporting strong progress. Telecom, manufacturing, banking and public sector companies have relatively high adoption rates.

Adaptive leadership in Greater China businesses

As companies in the sub-region negotiate these risks and barriers, executives in China show the greatest preference (76%) to risk tolerance as a leadership value amid ongoing economic and technological headwinds. Their contemporaries in Hong Kong (92%) and Taiwan (96%) appear to give higher priority to agility in thinking and decision-making, however, believing this trait will be very or extremely important in helping their businesses weather the current disruption.

Figure 18: Agile thinking is among the top character traits that business leaders in China rely on to navigate headwinds

Character traits considered very and extremely important by executives in helping navigate their organisations through the current economic and technological headwinds



Source: Economist Impact Survey of Business Leaders in APAC, 2023

In an uncertain environment, business leaders in the region are prioritising specific strategies to innovate under economic pressure. Most respondents in China (92%) and Hong Kong (84%) regard defining and periodically reviewing their organisations’ vision and strategic priorities as critical, while more respondents in Taiwan (84%) value a robust understanding within the leadership of how emerging technologies can benefit their companies. This potentially

suggests that while businesses in Taiwan may not prioritise the adoption of new technologies at present, their interest in how technology can benefit their organisations remains high. The region’s three economies also provide a nuanced perspective on how various challenges impact businesses in different markets (albeit closely tied and in the same geographic region) and how they are choosing to respond differently to these challenges.



Chapter 4: North Asia

Macroeconomic risks and opportunities in North Asia³¹

Japan and South Korea are both expected to see modest growth of 1.3% in 2023.³² In Japan’s case, this is a continuation of low growth, while in South Korea this marks a slowdown from 2022.

Japan’s growth is expected to remain constant between now and 2027, at about 1.1% per annum.³³ Growth in 2023 and 2024 is expected to be driven by the reshoring of manufacturing products such as semiconductors. Both countries have since outpaced expectations for their

recovery, recording economic expansion in Q2 2023 at a rate faster than previous forecasts. Japan saw exports rebound on the strength of the automotive category, while recent years have seen semiconductor and car shipments propel South Korea’s growth.^{34 35}

South Korea is expected to see average growth of 2.4% per annum between 2023 and 2027,³⁶ driven by the expected upturn in global electronics demand, as well as stronger domestic demand than Japan.

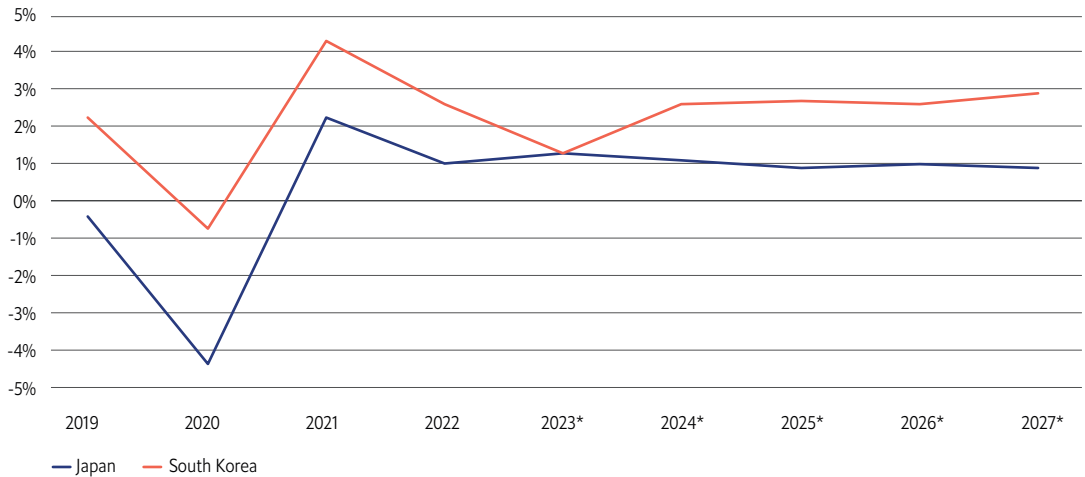
Figure 19: Inflation will moderate in Japan and South Korea

Consumer price inflation outlook for Japan and South Korea



Source: The Economist Intelligence Unit, 2023. Note: * denotes forecast numbers.

Figure 20: Economic growth in South Korea will outpace Japan in the next five years
 Real GDP growth outlook for Japan and South Korea



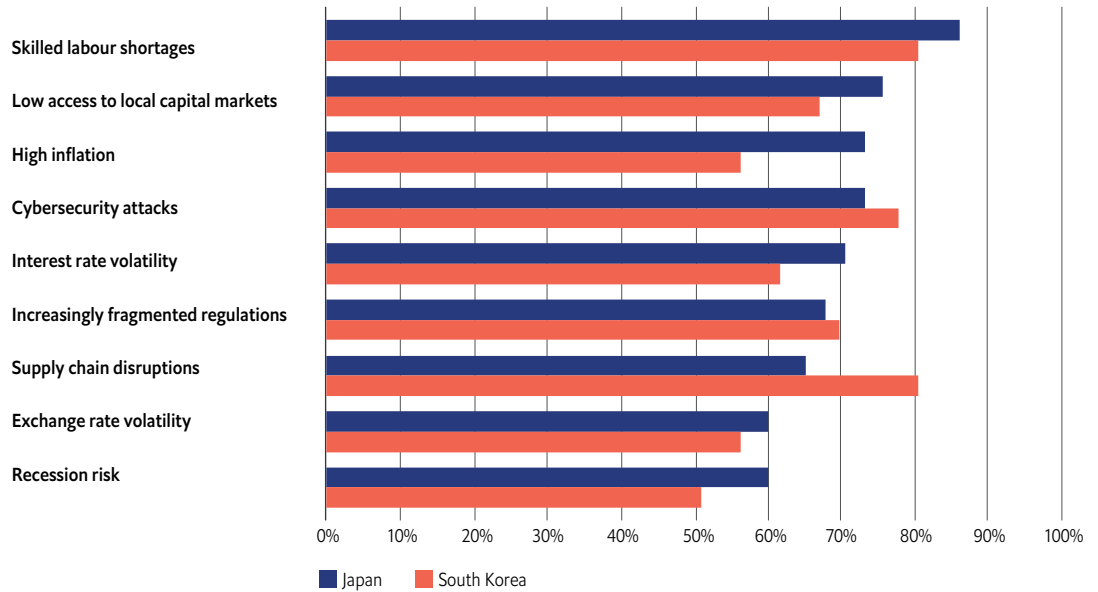
Source: The Economist Intelligence Unit, 2023. Note: * denotes forecast numbers.

For both countries, deeper collaboration with the US and other economies in Western Europe can be expected, likely providing a boost to sectors such as defence, supply chain resilience and technology. Conversely, how their relations with China evolve will also impact business prospects, particularly for those that export to China.

Even as companies in North Asia deal with these complexities, they cannot overlook the rapidly ageing populations in both countries, which are resulting in labour shortages and limiting growth potential. In fact, 87% and 81% of executives in Japan and South Korea, respectively, reported that skilled labour shortages have had a high impact on their business. Low access to capital markets is also particularly affecting businesses Japan (76%), where tighter restrictions on foreign investment have been in play in recent years.³⁷

Among other risk considerations, 81% of business leaders in South Korea point out that supply chain disruptions are impacting their business. Mindful of this challenge, in 2022 the South Korean government announced it would create a fund to secure the supply of key manufacturing raw materials to stabilise supply chains by addressing bottlenecks.³⁸ The US–China trade conflict is compounding the woes of chip manufacturers in South Korea: in October 2022 the US imposed curbs on the export of US-manufactured equipment to China, potentially impacting the likes of Samsung and SK Hynix, which are major chipmakers. Meanwhile, in August 2023 the governments of the US, Japan and Korea set up a trilateral structure to expand their strategic partnership to manage supply chain risks and disruptions,³⁹ potentially alleviating the risk for businesses in both North Asian economies.

Figure 21: Businesses in Japan and South Korea wrestle with the impact of skilled labour gaps
Extent to which each of the various macroeconomic and technological risks is impacting businesses



Source: Economist Impact Survey of Business Leaders in APAC, 2023

For now, however, business leaders in the two markets are anticipating the increased impact of these economic challenges on their net profit margin. Furthermore, at least six out of ten respondents in both markets expect technological headwinds to boost their technology investment.

While some companies plan to leverage emerging technologies to combat economic and technological risks, none of the respondents in South Korea identify the adoption of new technologies as a leading strategy to build resilience. Meanwhile, only 5% of respondents in Japan confirm that integrating emerging technologies to de-risk their businesses is their top priority. Instead, more respondents in the country (24%) appear to favour making shifts in their supply chain strategy, such as identifying new markets to divert supply chains. More executives (35%) in South Korea also

prioritise more conventional ways of mitigating risk, specifically the development of business performance forecasts and risk assessments.

Emerging technology landscape in North Asia

Nevertheless, executives in the region agree that certain emerging technologies are relevant to their businesses, and even growth engines for some. This is the case for Rakuten, a Japanese multinational internet services company, as Sunil Gopinath, the company’s India CEO, explains. “All companies start off by using technology as an enabler of the business. But we have reached a point where technology is the business. We use AI every day for everything from AI in our healthcare business, to our telecom business, to deep personalization for our e-commerce and payments, to even AI in cybersecurity,” he comments.

Cloud computing adoption eclipses that of other technologies in the region: 87% of Japanese executives confirmed they have fully adopted cloud computing technology, as it is helping safeguard jobs in their companies by giving them a competitive edge (64%).

In South Korea, on the other hand, 65% of executives report the full adoption of cloud computing technologies, which they find is helping safeguard jobs by making their businesses more competitive (75%) and maximising their productivity (63%). More than half (54%) have no plans to adopt Web3 technologies, as it could make a large share of jobs in their companies redundant (71%).

A noteworthy number of companies in the region either do not plan to adopt emerging technologies or are meeting barriers to their full integration. In Japan, 74% of respondents report that they either do not plan to adopt AI and automation-based technologies in the near future despite their relevance, or that they are suspending adoption because of challenges. Meanwhile, 60% of leaders in South Korea report the same for generative AI, indicating that despite the mounting relevance of these technologies, businesses in the region are encountering barriers preventing them from optimising these innovations. Mr Gopinath

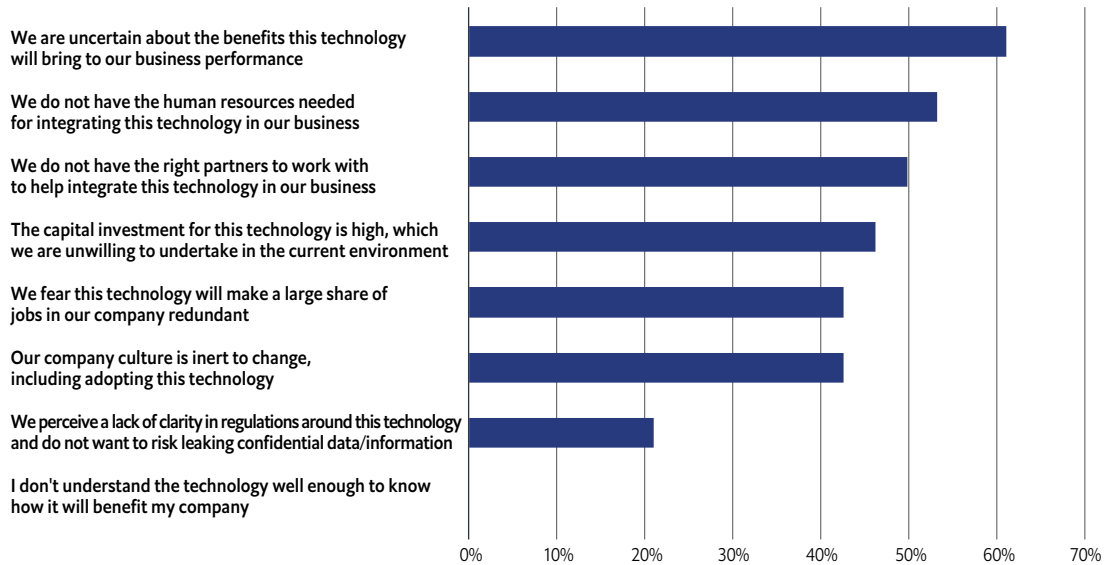
highlights the time cost of deploying technology: “There is a long period of training and multiple iterations before AI becomes effective for you. It requires some level of customisation to align to the specific business need.” In addition, he highlights challenges related to capital costs, data quality, and regulatory compliance.

In Japan, 61% of respondents are uncertain about the benefits this technology will bring to their business performance, while 54% say they do not have the human resources needed to integrate the technology. For many South Korea-based business leaders (68%), the labour skills gap underpins their reluctance to embrace generative AI.

There is room for more widespread adoption of open source principles and technologies in the sub-region: 68% and 62% of executives in Japan and South Korea, respectively, reported strong progress on adoption, with manufacturing, banking, public sector and telecom companies leading the trend. Additionally, 73% of South Korean companies have made high to very high progress in adopting data science capabilities—similar to Japan’s 74% share, while 70% have implemented company-level regulations around responsible use of AI and being compliant with applicable regulations, behind Japan’s 82%.

Figure 22: Business leaders in Japan are unsure about the beneficial impact of AI and automation-based technologies

Barriers perceived by companies in the adoption and use of AI and automation-based technologies



Source: Economist Impact Survey of Business Leaders in APAC, 2023

Adaptive leadership in North Asia businesses

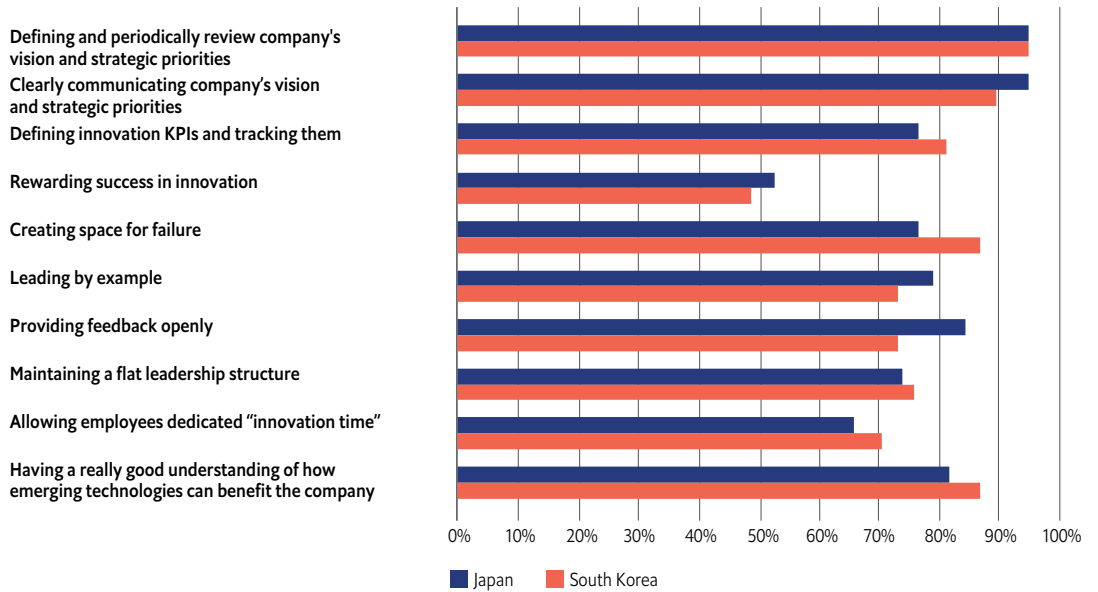
Amid challenges, business leaders in North Asia are cleaving to values they deem most important. Leaders in Japan are partial to collaboration, trust-building and open ways of working, with 92% saying this leadership trait will help their companies in navigating disruption. Highlighting the importance of this trait, Mr Gopinath at Rakuten India outlines four leadership principles at Rakuten that he finds effective for creating impact with technology. “First, we believe in ‘boundaryless leadership’ where a leader can cut across multiple functions. Single function roles have limited value and limited impact in a company like ours. Second, we enable next level leaders through delegation and empowerment. Third, we practise authentic leadership. We believe as long as leaders bring their natural strengths and also exhibit a sense of vulnerability, it becomes easy for the organisation to connect with such leaders. Fourth, we nurture a culture of experimentation and taking calculated risks.

We encourage all our employees to continuously build new ideas and proofs of concepts,” says Mr Gopinath. Most (87%) of their counterparts in South Korea, however, are prioritising risk tolerance as a means to overcome ongoing and future challenges.

As companies in these two markets seek to grow their business in the face of headwinds, business leaders find common ground in their approach to pursuing innovation. Almost all business leaders in Japan (95%) and South Korea (95%) favour defining and periodically reviewing their companies’ vision and strategic priorities, suggesting that businesses in both markets are inclined to revisit the fundamentals of their businesses to enable innovation. At the same time, eight of ten executives in both countries are of the view that a strong understanding of how emerging technologies can benefit their companies is highly effective in inducing innovation.

Figure 23: A strong understanding of emerging technology will be effective in fostering innovation in Japan and South Korea

Actions regarded as very and extremely effective by executives when fostering an innovative culture in a company under economic pressure



Source: Economist Impact Survey of Business Leaders in APAC, 2023

While economic and technological disruptions may impact the appetite of Japan and South Korean businesses for emerging technology investments, both markets are open to learning about how new technologies can positively transform their organisations, especially as they pursue innovation in a swiftly evolving business landscape.



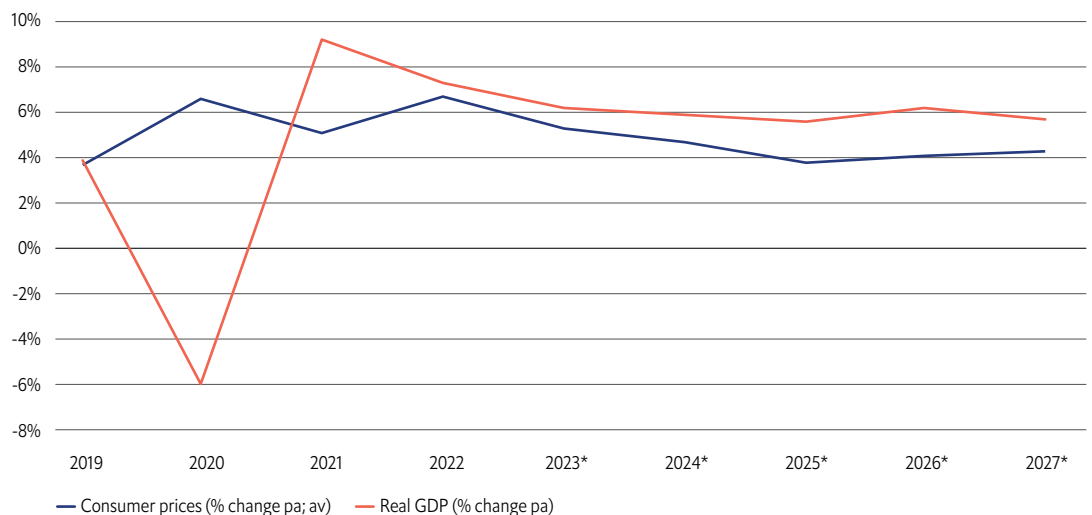
Chapter 5: India

India will be the fastest growing major world economy between 2023 and 2027, with real GDP projected to grow at an average rate of 5.9% per annum.⁴⁰ Much of this growth will be driven by the services sector, but improving logistics and infrastructure development will support manufacturing growth too.

A large working-age population also points to a favourable outlook for the economy, but this is a double-edged sword, as unemployment is expected to register

at 7.1% in 2023. Other risk factors such as persistent income and wealth inequality could hamper domestic demand as well. Inflation is another challenge Indian businesses continue to grapple with, both in terms of it inhibiting private consumption as well as increasing the cost of manufacturing inputs. According to the Economist Impact survey, six of ten business leaders in India confirm that their business has been heavily impacted by inflation, while 68% have been impacted by the related challenge of interest rate volatility.

Figure 24: India looks forward to stable growth over the next few years
Macroeconomic outlook for India

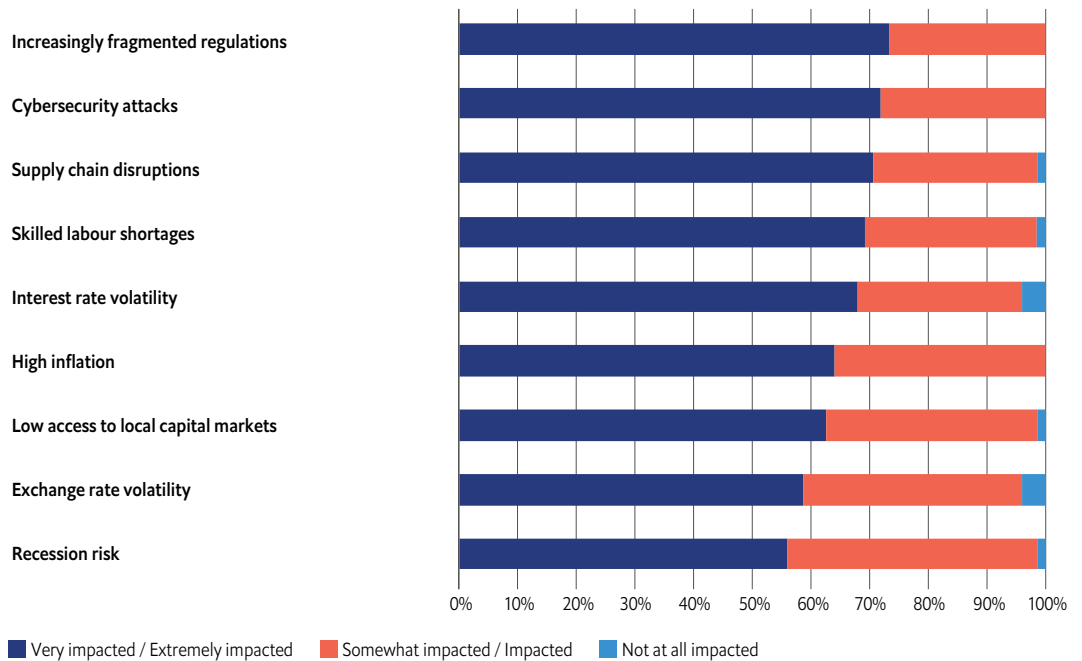


Source: The Economist Intelligence Unit, 2023. Note: * denotes forecast numbers.

Notably, 73% of business leaders in India say that increasingly fragmented regulations globally such as those around trade and ESG have adversely affected their companies, illustrating the impact of trade curbs, protectionist measures and retaliatory tariffs, as well as differences in ESG requirements—a combination of factors that has come to characterise global trade in recent years.^{41 42}

Another key risk executives report as impacting their business is that of cyber attacks (picked by 72%), underscoring gaps in cyber-preparedness among Indian companies.

Figure 25: Most Indian businesses are affected by increasingly fragmented regulations globally
Extent to which each of the various macroeconomic and technological risks is impacting businesses



Source: Economist Impact Survey of Business Leaders in APAC, 2023

Most corporate leaders in the country (77%) expect the impact of economic headwinds on their net profit margin to increase. Further, only 20% of business leaders in India say that embracing new technologies is a top de-risking strategy, potentially due to cost concerns outweighing the need to invest in technology in an uncertain environment.

Nevertheless, this approach appears to be more popular than other more traditional methods,

such as forecasting for business performance and the pursuit of inorganic growth channels. According to Mr Gopinath at Rakuten India, “the current macroeconomic headwinds have sparked a focus on AI investments. Now is the time when the promise of AI is becoming a reality because of GPT-3 and GPT-4⁴³ where AI is no longer a wish but a reality that can be adopted across our businesses. With these technologies, we are trying to achieve operative effectiveness and do more with less.”

Emerging technology landscape in India

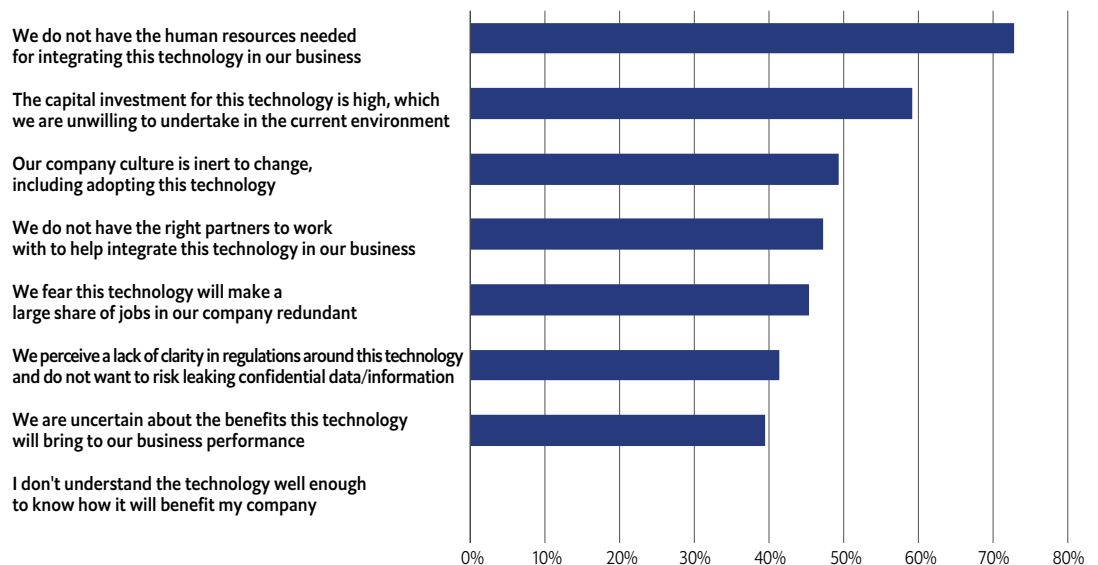
More than half the respondents (57%) say they are either not planning to adopt generative AI or are pausing their adoption of the technology despite its relevance, due to challenges. Nearly 70% express these reservations about AI and automation-based technologies as well, while 61% say the same of data platforms.

For businesses reluctant to adopt data platforms, the primary concern appears to be the cost of investing in the technology, as 65% of respondents say that they are unwilling to undertake the high capital investment under current conditions. Meanwhile, most executives hesitant to integrate generative AI (65%) and AI and automation-based technologies (73%) say they do not have the human resources to integrate these technologies in their business, which suggests that skill gaps in the labour force may be preventing companies from investing in emerging technologies.

Cloud computing maintains its dominance in India, with 68% of executives reporting full adoption. Businesses in the country that have adopted cloud computing report that it helps safeguard jobs by making companies more competitive (67%), as well as helping to plug inefficiencies and identify new growth avenues (63%). Conversely, 64% of respondents express no plans to adopt Web3 technologies, specifying concern over making jobs redundant (60%).

In addition, 71% of Indian firms have made high to very high progress on adopting data science capabilities and in implementing digital sovereignty, including implementing technologies and processes to guarantee the organisation’s control over its digital environment. The deployment of open source principles and technologies is picking up pace in India, with 65% of executives reporting strong progress on adopting these. Public sector, banking and manufacturing companies currently lead the adoption trend.

Figure 26: Skills gaps are preventing companies in India from investing in AI
 Barriers perceived by companies in the adoption and use of AI and automation-based technologies



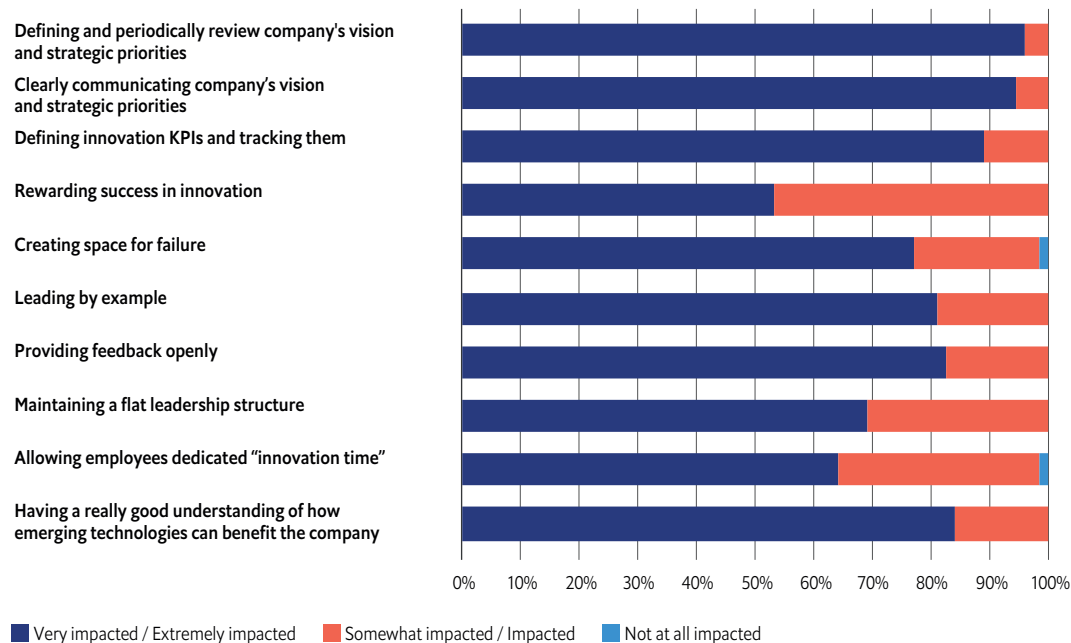
Source: Economist Impact Survey of Business Leaders in APAC, 2023

Adaptive leadership in Indian businesses

This emphasis on human resources is similarly reflected in the leadership traits business executives in India value, particularly in times of crisis. Most respondents (97%) named collaboration, including trust-building and open ways of working, as particularly helpful when negotiating economic and technological headwinds. Other priority behaviours among business leaders in the country are agility in thinking and decision-making (92%) and an innovative mindset (88%).

To foster innovation in their organisations, most business executives in India find that defining and periodically reviewing their vision and strategic priorities is most effective. Many corporate leaders also rely on clearly communicating the same vision and strategic priorities, while others find that defining innovation KPIs and tracking them produces results.

Figure 27: Indian executives bring clarity to their vision and strategy to catalyse innovation
 Actions and approaches considered effective by executives when fostering an innovative culture in an organisation under economic pressure



Source: Economist Impact Survey of Business Leaders in APAC, 2023

As India prepares to define itself as an emerging world leader—and as businesses pursue increased competitiveness in a promising but fraught market—the country is being challenged to address deficiencies in skilled labour among

its workforce. Left unaddressed, skills gaps could severely limit the ability of companies in India to keep pace with their peers overseas and realise their market potential, ultimately dimming their prospects in an otherwise bright environment.



Conclusion

The economic resilience of APAC means the outlook for its economies is more favourable relative to that for its peers elsewhere, but persisting global macroeconomic headwinds are compelling APAC businesses to assume caution. Across the region's major economies, executives anticipate difficulties in profit generation due to lingering headwinds, suggesting that APAC firms are preparing for leaner times and will recalibrate their business strategies accordingly.

For companies in some APAC countries, this broader challenge is already being complicated by distinct factors: Australia is entering a period of economic difficulty aggravated by an ageing workforce, for example, and Taiwan's reliance on exports is compromising its near-term prospects for economic recovery amid slow global demand. There is more optimism in developing economies such as India and Indonesia, but their businesses too must navigate uncertainties caused by deficiencies in skilled labour and technology infrastructure.

For businesses across the region, investments in emerging technology are expected to be affected by these headwinds. More companies are angling for tried-and-true methods to mitigate risk, with many favouring traditional de-risking strategies such as business forecasting, cost cutting and

modifying supply chain strategies. For some economies like Hong Kong and India, however, more businesses are willing to adopt new technologies to counter economic headwinds, suggesting that some APAC firms are cognisant of emerging tech's potential to soften the blow of macroeconomic disruptions.

Despite myriad challenges, new technologies like cloud computing are enjoying broad adoption in the region, and some businesses are in the initial stages of adopting emerging technologies like AI, generative AI and data platforms. For other companies in the region, however, obstacles to new technology adoption persist.

As companies look to enhance future-readiness amid economic and technological headwinds, certain leadership traits are emerging as important. For instance, executives in China are putting a premium on risk tolerance, while firms in Taiwan show a preference for an innovative mindset. A common theme across APAC, however, is the preference for collaboration and agility in thinking and decision-making. Even in a region so culturally diverse, working well together and nimbly can spell the difference between mere survival and success in a challenging world.

Endnotes

- 1 The survey was conducted between July and August 2023. The industries covered include banking/investment services, education services, energy, government, healthcare, insurance, manufacturing, media, natural resources, retail, services, telecommunications, transportation, utilities and wholesale.
- 2 <https://www.imf.org/-/media/Files/Publications/REO/APD/2023/April/English/text.aspx>
- 3 Economist Intelligence Unit, <https://viewpoint.eiu.com/data/>
- 4 <https://www.forbes.com/sites/forbestechcouncil/2020/03/20/ais-effect-on-productivity-now-and-in-the-future/?sh=5c185e775915>
- 5 <https://fortune.com/2023/04/30/ai-disruption-jobs-labor-world-economic-forum-report/>
- 6 <https://hbr.org/2022/10/leveraging-new-tech-to-boost-supply-chain-resilience>
- 7 ASEAN here includes Indonesia, Malaysia and Singapore.
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