Econ 4.0

BY RAJU CHELLAM

New Year forecast: Cloudy weather ahead

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Here's a New Year story with a nifty twist: A CEO, a CTO and a CFO are having lunch at a pizza place. The CEO says: "Let's use a hybrid cloud model. Leverage the best of both worlds — scalability and flexibility of the public cloud and security and control of the private cloud." The CTO says: "Let's go for a multi-cloud model. Avoid vendor lock-in and choose the best cloud provider for each service." The CFO says: "Why not use a no-cloud model? Save money and avoid paying for unnecessary and expensive cloud resources."

The CEO and CTO glare at the CFO. "Are you serious?" the CTO asks. "How can you run a modern business without cloud computing? That's like running a pizza shop without an oven." The CFO replies: "No. It's like running a pizza place without a delivery service. Cloud computing is like pizza. You can have it delivered or you can make it yourself. Either way, you have to pay for the cheese."

If that snippet made you snigger, these statistics should make you smile: Government and corporate end-users worldwide are set to spend a whopping US$678.8 billion (RM3 trillion) on public cloud services in 2024, up 20.4% from US$563.6 billion in 2023, according to the latest forecast from US technological research and consulting firm Gartner Inc.

"Cloud has become essentially indispensable," says Sid Nag, a Gartner vice-president. "However, that doesn't mean cloud innovation can stop or even slow. The tables are turning for cloud service providers as cloud models no longer drive business outcomes, but rather, business outcomes shape cloud models."

INDUSTRY CLOUDS

How so? For example, organisations deploying generative AI (GenAI) opt for the public cloud, given the scale of the infrastructure required. "But then, to deploy GenAI effectively, these organisations will require cloud providers to address non-technical issues related to cost, economics, sovereignty, privacy and sustainability," Nag says. "Hyperscale cloud service providers that support these needs can then capture a brand-new revenue opportunity as GenAI adoption grows."

One emerging paradigm? ICPs (industry cloud platforms). ICPs are packaged solutions that combine cloud services like IaaS (infrastructure as a service), PaaS (platform as a service), SaaS (software as a service) and a library of business capabilities tailored for specific industry verticals such as banking and finance, retail and e-commerce, healthcare and transport.

By 2027, more than 70% of enterprises will use ICPs to boost their business initiatives, up from less than 15% in 2023. The ballast comes from GenAI. "GenAI models applicable across industry verticals might require significant customisation, affecting scalability and cost-effectiveness," Nag notes. "Public cloud providers can position themselves as partners in the responsible and tailored adoption of GenAI by building on the same approaches applied to industry clouds, sovereign clouds and distributed clouds."

The AI juggernaut is most palpable in Asia. The Asia-Pacific region (including China, India and Japan) will invest US$78.4 billion on AI by 2027 — compared with US$24.8 billion in 2022 — growing at a 25.5% annual clip. That estimate from International Data Corporation includes hardware, software and services.

SOVEREIGN CLOUDS

Another significant paradigm? The rise in digital sovereignty or the ability of governments to own and control data generated in their respective sovereigns. IDC says data sovereignty and sovereign cloud are subsets of digital sovereignty.

"In essence, this means giving data owners total control over how and where their data is managed, stored and processed by service providers," says Rahiel Nasir, lead analyst for IDC's global digital sovereignty practice. "That includes the underlying infrastructure, such as data centres and networks, as well as the support and admin staff with access to that data and infrastructure."

Why does this matter? Because global spending on sovereign cloud solutions may reach US$258.5 billion by 2027, growing at a 26.6% annual clip between 2022 and 2027. IDC says the combined spending on operational, technical and data sovereignty crossed US$79 billion in 2022 and will touch US$103 billion by end-2023.

While regulatory compliance has traditionally been the primary driver for the demand for sovereign solutions, digital sovereignty is also sought by other data-driven industries, especially in BFSI (banking, financial services and insurance), shipping and transport and healthcare. "Expanding cloud use and the need to enhance cybersecurity are now the main drivers for these industry users," IDC says.

The big bugbear is cybersecurity. The Southeast Asian region is set to spend US$6 billion on beefing up security solutions by 2026, up from US$3.2 billion in 2021. "Digital sovereignty concerns are changing the IT strategies of 70% of the companies in the region," says an IBM Institute for Business Value study. "Cyberattacks are more prevalent, creative and faster. AI can not only expand visibility and accelerate response times with orchestration and automation, but compliance and security controls can also be built into a hybrid cloud architecture, determining who gets access to what and when, helping to automate their compliance controls with the ever-expanding set of regulations that firms must abide by."

ACTIONABLE AGENDA

Forming the right agenda is not easy, especially with the advent of GenAI, the heightened risk of hacker attacks and the increasing regulatory pressures from government agencies. What then should be on the C-level agenda for 2024? "Developing the right operating model to bring business, technology and operations closer together is perhaps the most complex aspect of a digital and AI transformation," says the latest McKinsey study. "This will determine how companies navigate the tech world to achieve sustainable competitive advantage."

Here are four critical issues that should be on your corporate agenda in 2024, in alphabetical order:

- **Ask AI:** Senior leaders should demystify the technology for employees and evaluate the strategic impact of GenAI, as well as its risks and opportunities for different solutions and business models. Craft a persuasive story for GenAI. Select a few high-value apps to experiment with and scale up, while engaging employees in the process. Invest in grooming talent with the necessary skills and capabilities (both current and future), so they can keep learning and innovating, assisted by GenAI, to maintain a competitive edge.

- **Beware of black swans:** These are unforeseen geopolitical events with high impact. For example, despite Russia's obvious military build-up in 2021, its full-scale invasion of Ukraine in 2022 was a prime example of a black swan event. Black swans are hard to predict, but debating various scenarios is vital for planning and readiness. Potential black swans could include the political collapse of a major economy, the violent overthrow of a leader or a government, a serious regional military conflict, a rare climate event that causes mass deaths, migrations and hunger, or another pandemic.
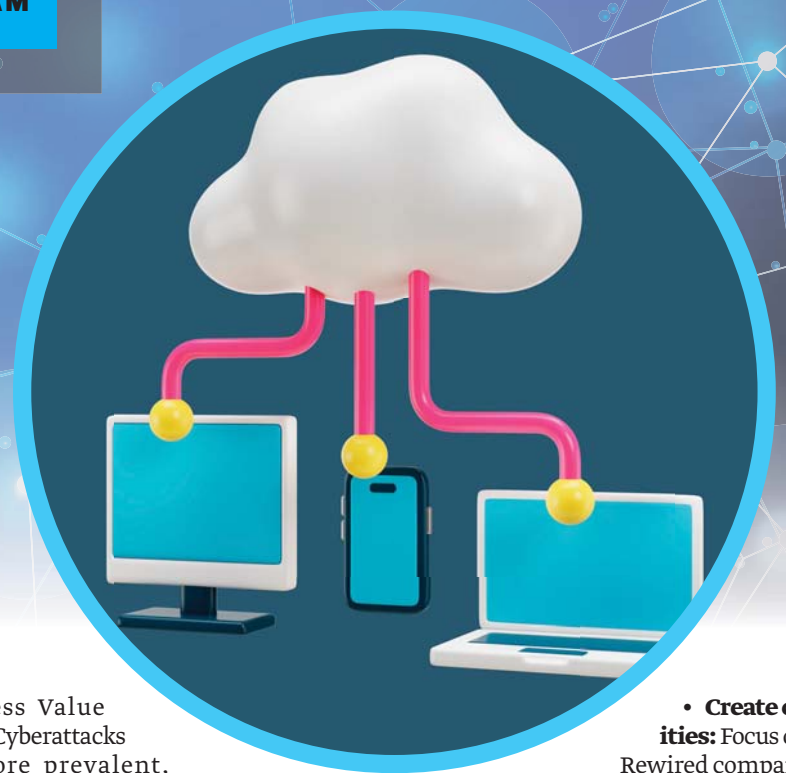
- **Create capabilities:** Focus on skills. Rewired companies use detailed skill progression grids with credentials. For instance, big tech companies have 10 levels of data engineers, each with different skills and pay. Without accurate skills measurement, it will be tough to identify and reward exceptional tech talent. Skills progression is also part of expert career paths and learning programmes. The digital-talent model is about nurturing excellence in people who love their craft and are prepared to go the extra mile.

- **Digital dare:** Digital players are used to high speeds and rapid turnarounds. On the other hand, green technologies need big investments in physical assets, unlike software or digital engineering. Green business builders can learn from digital scale-ups. "To cut costs and carbon fast, they need to compare their current emission reduction actions with the customer needs or net-zero targets," McKinsey advises. "They need to work quickly with suppliers and partners who can help them achieve both their cost and carbon goals."

The bottom line: As Danish physicist Niels Bohr once said, it's very hard to make predictions, especially about the future. Corporate and government leaders need to be prepared for changes in the global geopolitical order. What comes next? "One thing is for sure: events have an uncanny way of defying the expectations of experts," McKinsey notes. "In the face of that, management teams and boards should consider black swans in their scenarios and build geopolitical resilience that will serve them well, no matter which side of the coin comes up."

Since we started with a nifty joke, let's end with a shifty one: A cloud computing engineer and a pizza delivery driver are stuck in traffic. The pizza delivery driver says: "Hell, I have to deliver these pizzas in 30 minutes or less, or they're free." The cloud engineer says: "You're lucky. I must deliver cloud services in 10 seconds or less, or they're free." The pizza driver frowns. "That's tough. How do you manage that?" The geeky guy replies: "I use the cloud." The pizza man asks: "What do you mean, use the cloud?" The nerdy guy deadpans: "I mean, I use the cloud to order pizza." E

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