



# CONTINUED VALUE CREATION WITH CLOUD, DIRECTIONS 2025





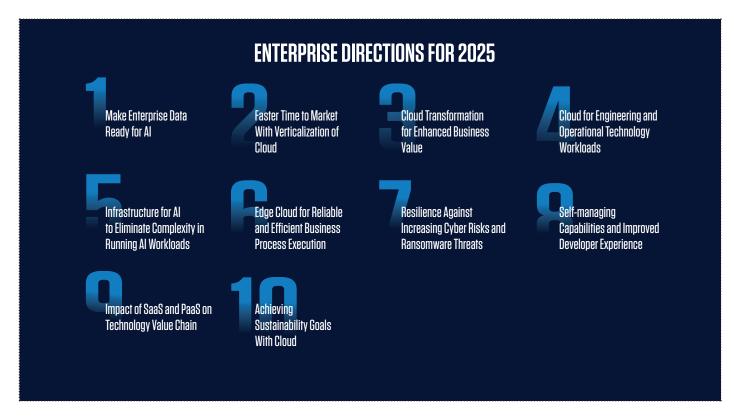
### Introduction

The enterprise cloud journey has evolved significantly, shifting from a tactical solution to a strategic necessity. Initially, cloud adoption was driven by specific IT needs and focused primarily on cost savings and efficiency improvements until around 2020. Organizations sought to exit data centers, reduce infrastructure costs, and address hardware end-of-life by optimizing IT spending. Over time, the role of the cloud grew from a cost-saving tool to a strategic enabler, supporting broader growth goals and driving market disruption. Today, the cloud is crucial in optimizing operational costs, fostering business growth through market expansion, enhancing customer service and driving innovation with new products and services.

By 2024, the cloud had become the primary operating model for enterprises, deeply integrated into their business strategies. Its purpose extended beyond mere support to actively drive business initiatives. The cloud landscape has matured into a continuum that includes public, private, edge and SaaS deployments. Additionally, 2024 saw widespread experimentation with generative AI (Gen AI), setting the stage for large-scale enterprise AI rollouts anticipated from 2025 onward.

As we look ahead to 2025 and beyond, organizations will strive to become fluid and timeless enterprises with AI at their core. The cloud will emerge as the new operating model that supports enterprises in scaling their transformation journeys. This strategy aims to create a fluid and timeless enterprise characterized by agility, resilience and long-term sustainability. This model will leverage the integration of cloud, data, security and other technologies as the foundation for successful AI implementation and adoption. By strategically combining these elements, enterprises will unlock new opportunities and develop future-ready organizations capable of sustained growth and profitability through innovation and compliance.

To enhance their digital capabilities, enterprises must take several key steps. They should update their technology, create resilient platforms and modernize applications to support real-time business processes while integrating internal and partner capabilities to facilitate faster market launches of new products and services. By using data strategically and implementing advanced AI technologies, businesses can plan and execute processes more effectively while reducing human intervention, allowing organizations to better adapt to customer needs and scale profitably.



## Enterprise Directions for 2025

1

## Make Enterprise Data Ready for AI; Needs Modernized Applications With Instrumentation

Data is the new growth engine, but existing processes often require digitization, and applications need modernization and instrumentation to generate meaningful, consumable data. Modernizing applications and building a robust data estate in the cloud with the right quality data is crucial. Enterprises will employ analytics, AI, and Gen AI technologies coupled with cloud-scale processing on their data estate to drive innovative product development, optimize processes, implement autonomous procedures and more.



### Capability for Faster Market Response will be Delivered Through the Verticalization of Cloud

Within each industry segment, enterprises, technology vendors, and system integrators have worked together to establish consortia and define industry-wide standards. This collaboration has accelerated growth and developed a rich ecosystem of providers and partners, creating marketplaces for business capabilities, data and technologies. Enterprises will adopt composability as a strategic method to leverage industry cloud platforms and marketplace solutions, enhancing innovation and responsiveness. This strategy facilitates the creation of new business capabilities by effectively combining internal functions with available marketplace offerings based on industry standards. Enterprises will look at utilizing specialized data marketplaces to enhance product development and expedite time-to-market.

#### 3

#### Enhanced Business and Technology Value will be Delivered Through Cloud Transformation

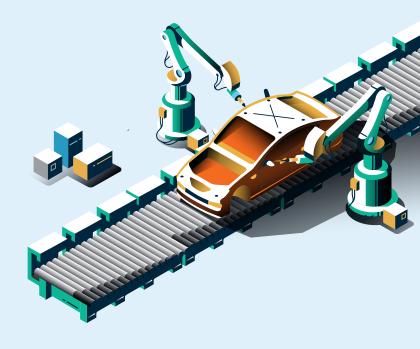
Established enterprises must be agile to compete with digital-native companies across various industry segments and offer features that match or exceed those of their digital-native counterparts. For instance, a Gen Z consumer does not differentiate between a century-old bank and a five-year-old digital bank when accessing services through a mobile application, the product fitment and experience matter. Enterprises will liberate themselves from technological constraints and embrace innovation as a core principle in their transformation journey. Beyond mere migration, they will modernize to become agile and continuously evolving entities. Modernization will streamline business processes and update applications with cloudnative technologies such as containers, serverless computing, low-code/no-code platforms, and SaaS. Agile and DevOps methodologies will complement it.





#### Cloud Can Deliver More Value to Engineering and Operational **Technology Owners**

R&D, engineering and operations teams often use a technology stack dominated by commercial off-the-shelf (COTS) products that differ from those managed by IT teams. Vendors in this space are incorporating cloud capabilities into their products to assist customers with faster time-to-market, enhanced process efficiency, improved reliability and safety in operations and reduced costs. For example, design software utilizing high-performance computing (HPC) cloud can perform design simulations more quickly and improve rendering, enabling the creation of innovative products while decreasing product development time. CIOs will extend their technology services reach and integrate engineering and operational technology workloads into their cloud adoption strategy, facilitating organizational transformation.





#### Robust "Infrastructure for AI" to Eliminate Complexity in **Running Al Workloads**

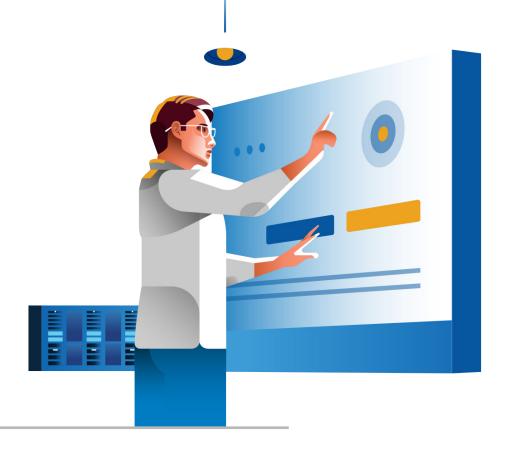
As AI becomes more widely adopted for augmenting workforce tasks and developing autonomous capabilities within organizations, a hosting solution that allows the models to operate cost-effectively, securely and responsibly is required.

Technology organizations will develop capabilities to decouple business use case implementation from AI model hosting within the cloud computing continuum, incorporating suitable silicon for AI, software stacks and models, which will continuously reduce the per-unit cost of AI operations, enabling enterprises to scale the adoption of AI across all value streams, thus enhancing their competitive edge.



#### **Edge Cloud's Role in Reliable** and Efficient Business **Process Execution**

Across various industry segments, adopting technologies such as IoT, Analytics, and AI on the shop floor, in a warehouse, or even at an oil rig or mine site significantly enhances safety, efficiency and product quality. Edge cloud will be integral in the cloud computing continuum, complementing both public and private clouds and providing capabilities to run these operational technology (OT) workloads. IT organizations will play an active role in technology services for OT, going beyond traditional enterprise IT and delivering edge computing capabilities as part of the cloud computing continuum.





#### Building Resilience Against Increasing Cyber Risks and Ransomware Threats

In cybersecurity, prevention, detection and incident response are effectively implemented with advanced capabilities for newer threats. Resilience and recovery from ransomware attacks require more than traditional DC and DR capabilities and security response procedures. Business leaders and regulators need the ability to recover quickly during a ransomware attack. With end-to-end automation, IT teams will create resilience through robust environment, configuration and data recovery capabilities. Achieving this will require cloud services' robustness, on-demand capacity and secure data protection solutions for business service recovery within acceptable timelines.



#### Cloud Platforms Should Provide Self-managing Capabilities and Improve Developer Experience

Application portfolio owners need a resilient platform to build, deploy and run their applications, which includes essential technical capabilities such as performance, scalability, security and compliance while being easy to use with minimal friction. Platform owners will invest in ongoing engineering efforts and incorporate AI technologies to improve developer experience and deliver technical capabilities that are "self-managing," "self-healing," and accessible in a "self-service" manner. This will be achieved by enhancing the provisioning automation with Gen AI and control plane technologies and improving observability and lifecycle management with agentic AI technologies. Additionally, platform owners will implement Cloud FinOps practices and follow stringent cloud cost optimization measures to ensure cloud value is delivered to the business.



#### The Rise of PaaS and SaaS will Shift the Technology Value Chain's Responsibilities and **Operating Mode**

Until recently, delivering business capabilities required significant engineering and integration efforts across compute, storage, network, middleware, management tools, and application development. However, increasing technical and business capabilities will be delivered as PaaS and SaaS from cloud services and marketplaces; IT teams are now primarily responsible for composing, configuring and consuming these services. This shift will substantially change IT delivery and service management functions, including service assurance, partner operating models, security ownership, resilience and compliance. Additionally, emerging sovereignty requirements will necessitate critically evaluating cloud and SaaS providers' data residency and operational capabilities.

#### **Achieving Sustainability Goals** With Cloud

In addition to reducing the carbon footprint in business processes through technology, adopting cloud computing can also reduce the carbon footprint of IT itself. This can be achieved through a dual approach of "building cautiously" and "using effectively." Public cloud providers implement significant design considerations to reduce their carbon footprint, while enterprises building private clouds will aim to minimize their power usage effectiveness (PUE) ratio. Enterprises will adopt intelligent resource selection methods and efficient architectural designs for performance and maximizing resource usage. They will use existing observability tools, FinOps, and governance to prevent wastage and ensure effective resource use. This approach results in a reduction in the per-unit carbon footprint associated with each business transaction.



#### **Summary**

Enterprises will achieve a state of fluidity and timelessness by expanding their digitization efforts, adopting composability and developing autonomous business capabilities. The cloud landscape will evolve into a cloud computing continuum comprising public cloud, private cloud, edge cloud, and SaaS.

Digital transformation will intensify to increase digital density, enabling real-time business processes across an interconnected ecosystem. This will deliver exceptional customer experiences, provide enhanced process visibility, ensure resilient operations, and optimize service costs through integrated Cloud FinOps disciplines.

Enterprises will build the infrastructure for AI, as AI will be pervasively adopted to assist and augment human capabilities in business, and all enabling capabilities will be in place for AI adoption. Cyber resilience would be intrinsic in digitization to provide confidence and assurance to business owners and regulatory bodies about how technology can help enterprises meet all adversities.

With maturing industry standards and the evolution of the marketplace, increasing the composability will help enterprises create innovative products by integrating internal and marketplace business capabilities and being more responsive to their customer needs. Taking an Alfirst approach in business process execution, enterprises will redesign processes for adaptability, continuous evolution, and autonomous operations, starting with getting data ready for Al and building reasoning, planning and execution capabilities.

For more insights visit Infosys.com/Cobalt



For more information, contact askus@infosys.com

© 2025 Infosys Limited, Bengaluru, India. All Rights Reserved. Infosys believes the information in this document is accurate as of its publication date; such information is subject to change without notice. Infosys acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. Except as expressly permitted, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the prior permission of Infosys Limited and/ or any named intellectual property rights holders under this document.

Stay Connected



