

# UNIFIED CLOUD EXPERIENCE

IMPERATIVES TO DRIVING BUSINESS  
INNOVATION WITH CUTTING-EDGE PRACTICES



Over the past few years, the cloud has rapidly evolved both in its purpose and its elements. While the push toward cloud migration was flagged off with a set of primary goals such as agility, cost optimization, and scalability, it has since transformed radically as a key driver of business innovation. Today, cloud underpins the enterprise transformation juggernaut, serving as a foundation and execution venue for technologies such as AI, Edge Computing, Machine Learning, IoT, blockchain, and many more.

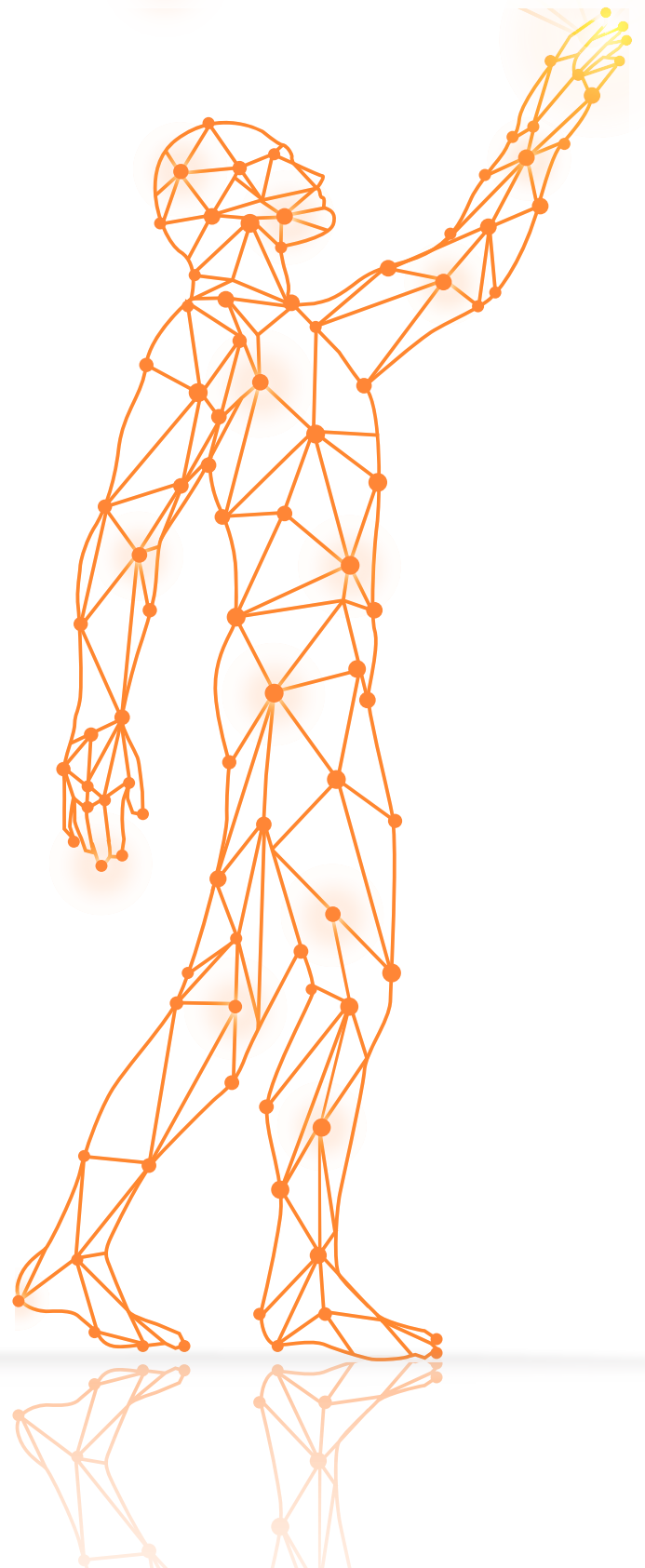
The faith in cloud is affirmed by **latest market surveys** that project the global cloud computing market to be worth \$832.1 billion by 2025, up from \$371.4 billion in 2020, recording a sensational CAGR of 17.5% during the forecast period. However, this also raises critical questions on organizational readiness to leverage cloud and all the benefits that it promises to deliver.



# THE HYBRID MULTI-CLOUD INTEGRATION CONUNDRUM

To thrive in a highly competitive market space, companies have had to embrace a functional technology ecosystem, shaped by cutting-edge digital strategies. In that pursuit, the majority have ended up with disparate IT environments consisting of on-premise, private cloud, and multiple public clouds bought over time to cater to different business requirements. This has resulted in the creation of a hybrid multi-cloud environment, which makes interoperability and orchestration of distributed cloud landscapes a real challenge.

**According to a latest Cloud Report**, companies now leverage around five different cloud platforms on an average. Also, **another survey by Gartner** reveals that the hybrid multi-cloud approach has been advantageous for 81% of the organizations. These figures underline the fact that hybrid multi-cloud environments are fast replacing existing IT infrastructure environments. However, to ensure tangible outcomes from this transition, and assure a cohesive cloud environment where the interoperability between new-age and traditional technologies are seamless, companies will have to ensure that the interdependencies between the core components of hybrid multi-cloud, namely application workloads, network, security, and compliance are managed strategically and innovatively.



# ACCELERATING BUSINESS INNOVATION - REALIGNING CLOUD STRATEGY TO DRIVE VALUE

Going forward, as technology, data, processes, and workloads rapidly shift across diverse and disparate execution avenues, companies will need to embrace a unified approach towards hybrid multi-cloud management. This approach requires uniformity of provisioning capacity management, access control, and cost control for all cloud initiatives running in parallel. To broaden their perspective and include the fringe aspects of being truly cloud native, companies will have to place equal emphasis on the following strategies:

## Chart out a Robust Migration Plan

Companies need to start by defining a viable cloud migration plan on the basis of assessments done to determine cloud readiness. Once the roadmap is in place, companies can execute the migration journey by optimizing and right-sizing the workloads, establishing a common infrastructure foundation for disparate cloud platforms, clearly defining services and modernizing existing databases and applications.

For example, Tata Communications helped a company specializing in telematics and IoT-powered location intelligence applications to migrate its workload to a private cloud platform is an excellent example of a successful cloud migration roadmap. The company initially leveraged the public cloud to store and manage large streams of data that were collected to feed customers' ERP systems and analytics dashboards. But the charges for uploading and downloading data were increasing as the number of customers grew. With monthly data volumes hitting 5TB and increasing, the company decided to shift its storage to Tata Communications Vayu Cloud platform Services, which helped them save 30% of the cost over the previous cloud arrangement as it offers predictive cost. This migration was performed with zero business downtime and with seamless database integrations.

## Bolster the Enterprise Cloud Security Posture

In 2021, a whopping **64% of respondents in a Statista survey** reported that their biggest cloud security concern is data loss. The cybersecurity risks are growing every day and companies need to take a unified approach to hybrid multi-cloud security to ensure that their data remains safe. Stringent data access policies such as tokenization, encryption, data blocking, data redaction, and data masking can go a long way in helping companies implement contextual data access controls on the basis of data type and the location of data storage. These security actions need to be taken through a shared responsibility model that clearly outlines the accountability of cloud providers and cloud users to ensure full coverage of cloud security and hassle-free data governance.

## Create a Resilient Network Infrastructure

Network and infrastructure are some of the most dynamic aspects of a cloud environment that keep changing with business requirements and market needs. When a company diversifies its services in pursuit of growth, its cloud infrastructure may require more network storage or more computing power. In a hybrid multi-cloud approach, companies may need to upgrade their infrastructure from time to time in alignment with cloud scalability requirements. Hence, companies will have to make provisions for a network that facilitates secure direct cloud connectivity while ensuring minimal latency and maximum network uptime.

## Facilitate End-to-End Orchestration

To ensure that a hybrid multi-cloud environment delivers to its full potential, companies will need a unified cloud platform that can seamlessly allocate workloads depending on the execution venue. This platform should be able to deliver this while ensuring maximum uptime across hybrid IT architectures. With unified infrastructure management (UIM) platforms, companies can achieve the desired levels of cloud orchestration while continuously monitoring all IT resources in real time.

## Create a Nimble Procurement Strategy

The right cloud procurement strategy plays a critical role in helping companies maintain the integrity of their cloud operations. For organizations to achieve this, the key considerations are the industry type, the size of the enterprise, the essential applications, and data categorization for seamless processing. Organizations must also identify the right storage options, integrate data repositories, and ensure data sovereignty and classifications.

## Vitalize Compliance as a Pillar of Service Excellence

Mitigating compliance costs is a genuine challenge with hybrid multi-cloud IT environments. In 2017, **several companies had to spend millions of dollars** to comply with the EU's General Data Protection Regulation (GDPR) in the run-up to its full implementation by May 2018. It goes without saying that companies need to implement adequate measures to comply with industry regulations, localization laws, and government directives, failing which they may risk facing costly sanctions or penalties. For instance, **the PDP bill is considered to be a landmark legislation** which is expected to regulate how various organizations manage consumer data within India. This law is also expected to lay down stringent data localization norms for organizations that retain critical user data.

Carefully working on these strategies and bridging all gaps in the cloud infrastructure is indispensable to creating a connected, secured, and robust digital ecosystem of tomorrow. After all, unless all the loopholes are addressed, companies cannot expect to derive optimum results from new technological implementations that demand an agile, scalable, adaptable, and highly resilient platform to breed.

# THE NEED TO PARTNER WITH CLOUD EXPERTS

Organizations must aim at onboarding hybrid cloud experts who offer unified cloud experience as a solution. The recent evolutions in cloud computing make it necessary for subject matter experts who can drive both technological and business innovations with a sophisticated hybrid multi-cloud model. And it is here that cloud transformation partners such as Tata Communications can help companies create a difference.

Besides providing a comprehensive unified cloud experience solution that encompasses IT infrastructure and cloud security architecture assessment, data and resource migration and monitoring, management, and control of public cloud security, Tata Communications also guides companies

to make their cloud strategy a success through proactive suggestions and knowledge sharing. We adhere to a shared responsibility model to ensure that companies have an equal sense of ownership at various layers like app management, end-to-end infra management, Identity and access management, network control and various others – be it IaaS, PaaS or SaaS. Over the years, we have nurtured meaningful collaborations with cloud service vendors, created a strong enterprise network backbone, and carefully crafted our own security portfolio with an innovation-first approach. With us, companies will not just have a partner with a proven industry presence, but also with the capacity and capability to deliver a holistic cloud experience.

## HOW TATA COMMUNICATIONS CAN HELP

Tata Communications, a digital ecosystem enabler, has helped enterprises across industries to build agile, scalable, and secure IT ecosystems. The Tata Communications Vayu Cloud Platform Services portfolio brings a gamut of managed cloud offerings that helps enterprises build an agile IT foundation. Our composite portfolio serves the need of private cloud, cloud storage, SAP Hana, managed public cloud, and community cloud for government and BFSI. We enable a unified cloud experience through operationalizing hybrid multi-cloud environments, factoring migration, security, compliance, data, and network needs.

Our 24/7 managed support services are delivered by over 300 certified Cloud professionals, who ensure that your business is always on. With cloud nodes present across geographies, 240,000+ kms of the world's only round-the-globe, subsea cable system and Tier-1 secure IP network, we can help you grow your business across the globe.