IZO™ PRIVATE CLOUD

CLOUD SECURITY: THE CHALLENGES FOR THE DATA CENTRE AND IT ENVIRONMENT

NOVEMBER 2016

TATA COMMUNICATIONS

ENTERPRISE IT STRATEGY – DEFINED BY VARIOUS STAKEHOLDERS

CIO

- Become provider of choice
- Need easy deployment and integration
- Need round-the-clock support

CFO

- Convert to pay-as-you-grow
- Reduce CAPEX
- Increase profitability

CISO

- Need to be prepared against unknown threats
- Secure all parts of the infrastructure
- Need compliance, fast response

Business User

- Need resources for faster time to market
- Give me self-service capability
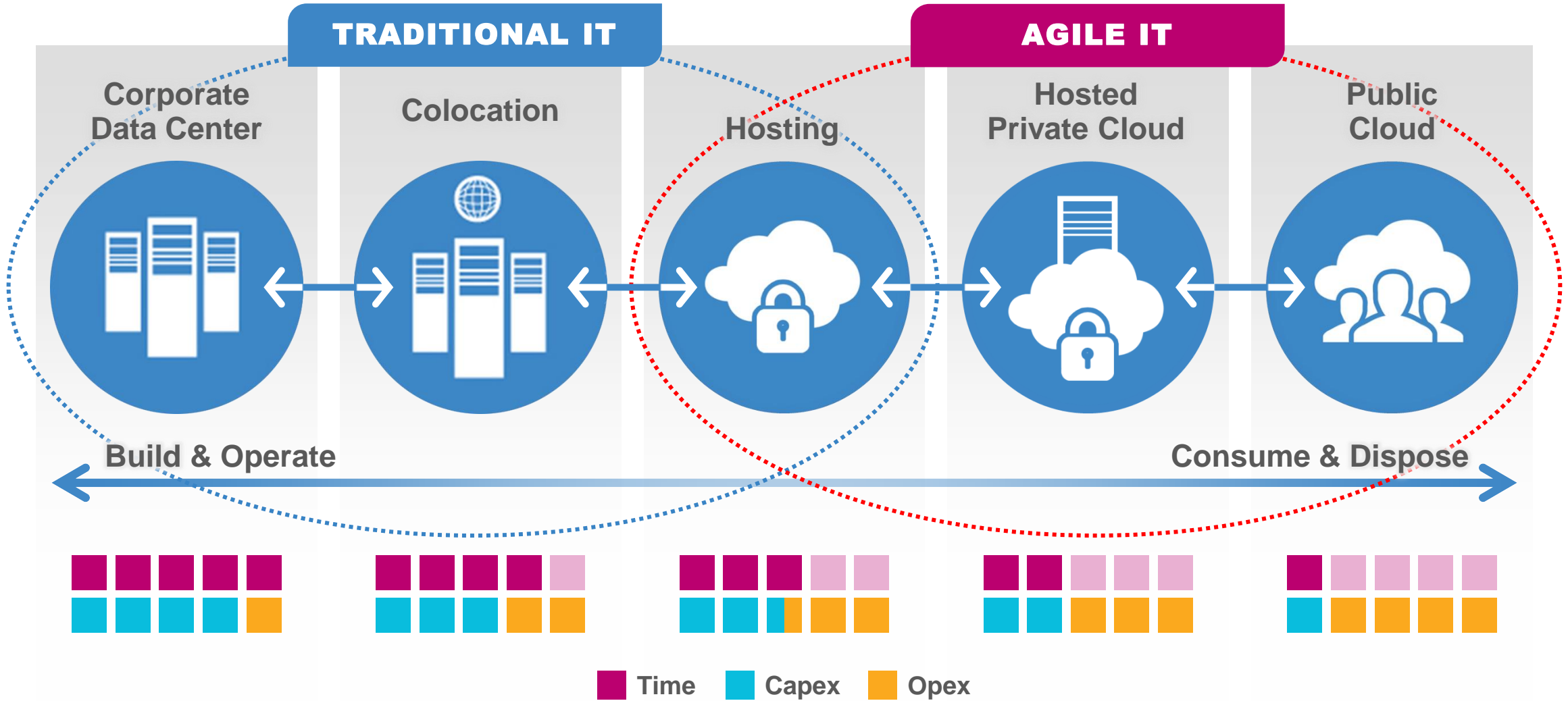
CLOUD HAS MANY BENEFITS BUT ALSO CHALLENGES FOR ENTERPRISE UPTAKE

Cloud strengths

- **Agility** – elasticity and scalability
- **Highly automated** – Self-service provisioning
- **Cost effective** – Pay per use model on standardized architectures; charge-back
- **Speed** – Faster provisioning

Cloud Challenges

- **Security and controls –** Access controls, log management and regulatory compliance
- **Performance –** Latency and uniform global experience
- **Integration –** With legacy and on-prem IT infra

Customer Need

Cloud fit for the Enterprise

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IT TRANSFORMATION IS NOT EASY

LEGACY APPLICATIONS

RESOURCES

GOVERNANCE

PERFORMANCE

COMPLIANCE

SECURITY

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IT TRANSFORMATION – BALANCE AGILITY WITH CONTROL

Cloud-enabled IT Transformation

IT transformation will happen via cloud-enabled managed hosting

SECURE
- Secure cloud environment available through orchestration of enterprise class security solutions
- Provide audit trail and authentication solutions

INTEGRATED
- Integrated view for the infrastructure deployed at various locations and of various platforms
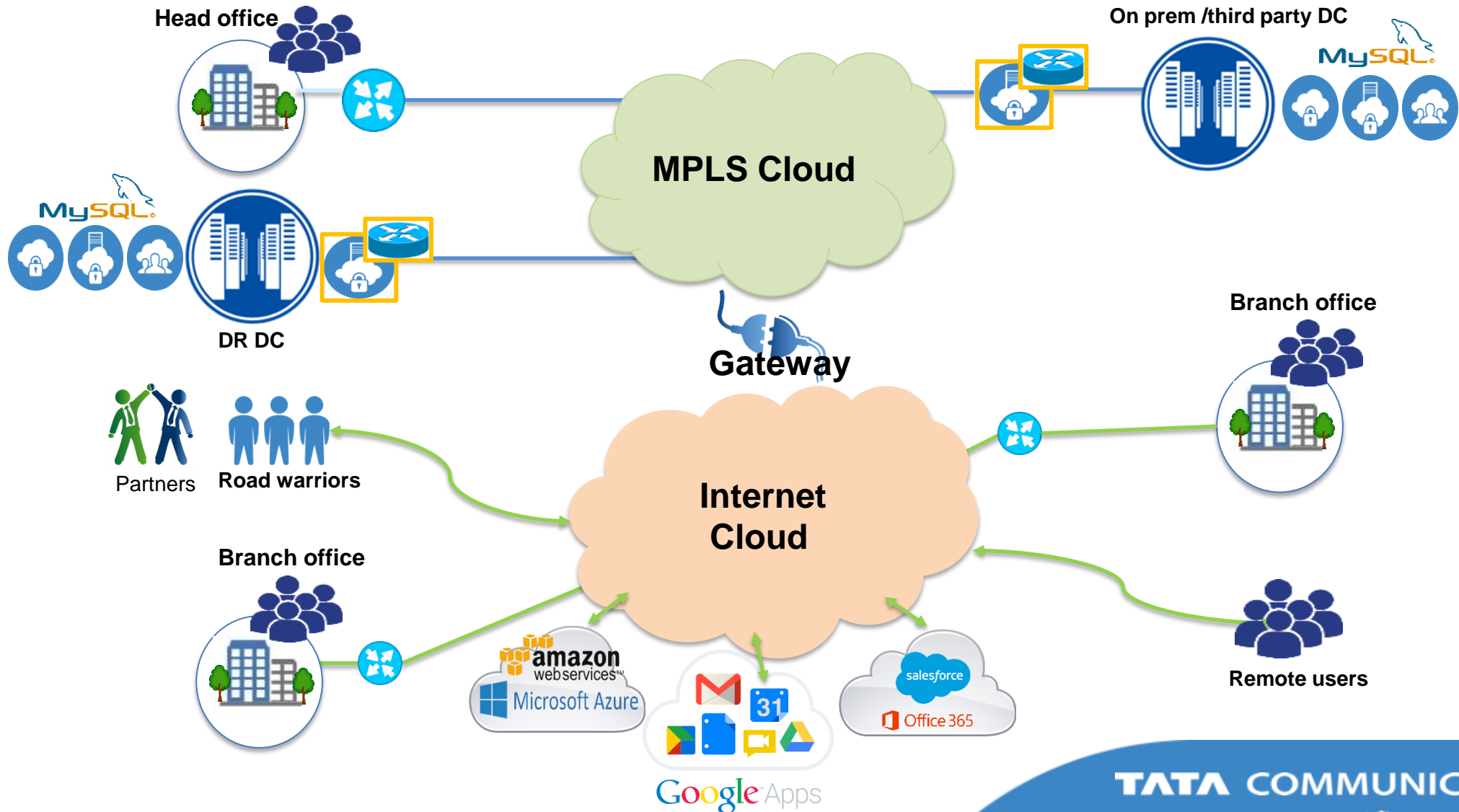- Ease of integration with the in-house IT

MANAGED
- Extend ITSM tools and expertise to the cloud environment to provide an integrated management and reporting interface
- Enable the IT department to provide, monitor and manage users via an extensive service catalog
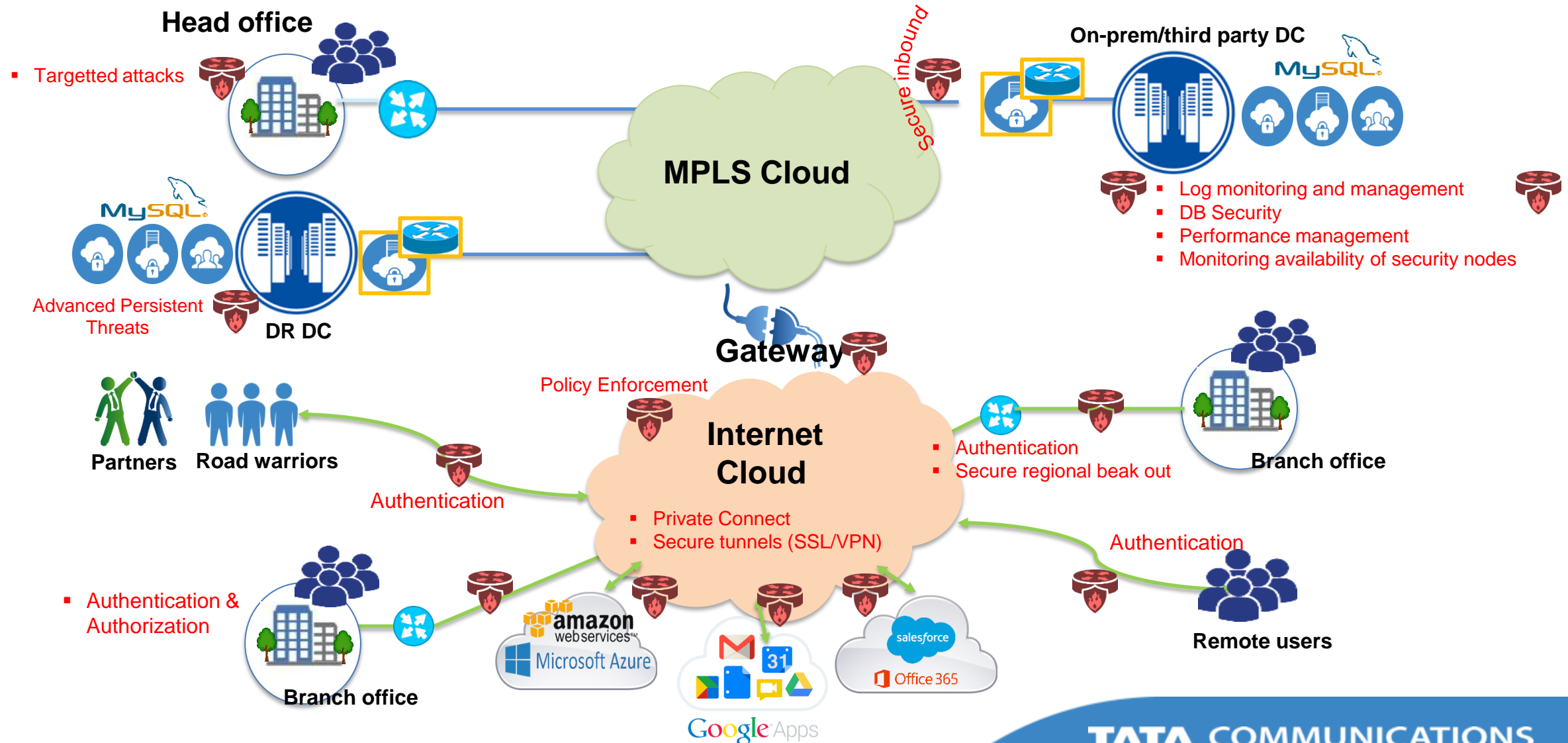
FAST
- Global network and multiples nodes enables faster content delivery and efficient use of bandwidth
- Integrating CDN with other products and services, provides a comprehensive customer solution customized to business need
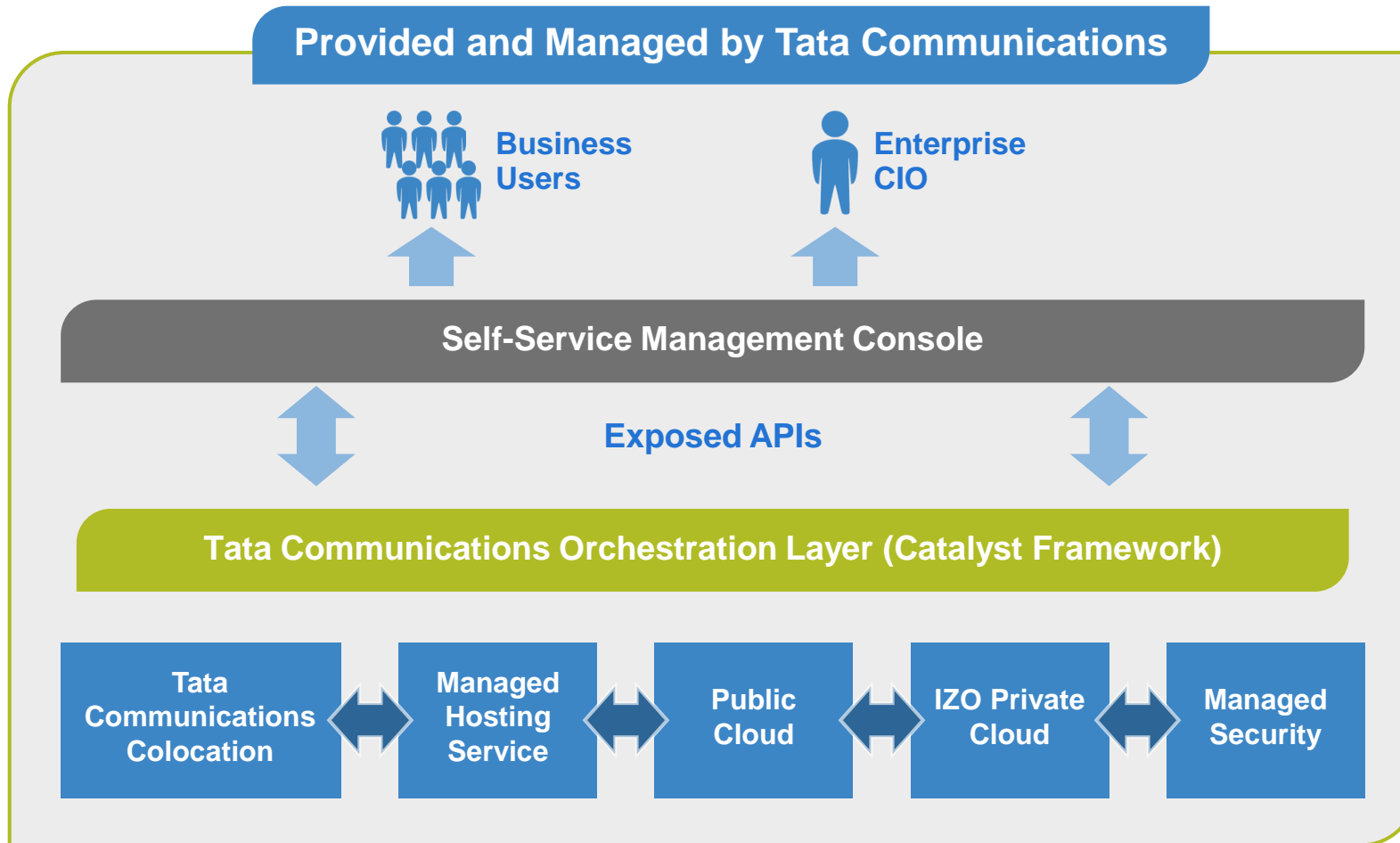
SECURITY WRAP FOR THE ENTERPRISE SETUP

Head office

- Targetted attacks

MySQL

- Advanced Persistent Threats

DR DC

MPLS Cloud

Secure inbound

On-prem/third party DC

MySQL

- Log monitoring and management
- DB Security
- Performance management
- Monitoring availability of security nodes

Gateway

Policy Enforcement

Internet Cloud

- Private Connect
- Secure tunnels (SSL/VPN)

Partners **Road warriors**

Authentication

- Authentication & Authorization

Branch office

amazon web services™

Microsoft Azure

Google Apps

salesforce

Office 365

- Authentication
  Secure regional beak out

Branch office

Authentication

Remote users

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AN INTEGRATED MANAGEMENT VIEW

Provided and Managed by Tata Communications

Business Users

Enterprise CIO

Self-Service Management Console

Exposed APIs

Tata Communications Orchestration Layer (Catalyst Framework)

Tata Communications Colocation	Managed Hosting Service	Public Cloud	IZO Private Cloud	Managed Security

Single Pane of Glass

→ CIO and IT are internal service providers to the business

→ Gives control back to Business

→ Ability to choose cloud platform depending on workload type

→ Single management console to manage infrastructure health

→ Security in the cloud

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CUSTOMER CASE STUDY – LEADING CONGLOMERATE IN INDIA

Consolidation of IT infrastructure for its 4 entities, with IZO Private Cloud setup and new disaster recovery (DR) facilities, now featuring comprehensive security and uninterrupted network connectivity.

CUSTOMER NEED

- The Group has four entities and each has a separate IT infrastructure.
- Data center (DC) consolidation across the group companies
- Disaster Recovery (DR) solution
- Private cloud environment where infrastructure provisioning can be orchestrated.
- Chargeback features for cost estimation and billing
- Upgrade the existing server, storage, network and security setup
- Migration of critical IT infrastructure to cloud based services
- MPLS connectivity for the DC and DR sites and DR services on a cloud based platform

OUR SOLUTION

- We proposed a hybrid cloud solution with **integration between the IZO Private Cloud, MHS and Managed Colocation**.
- Supported by deploying workloads on VMware and KVM hypervisors on the IZO Private Cloud platform.
- The benefits of the solution include:
  - → **IT consolidation and tech refresh** – help to reduce the number of servers and migration of workloads to cloud that helped to reduce capex
  - → **Cloud based web security** – the vProxy solution provided protection against web based malware and helped in securing internet connectivity
  - → **Secure Private Connectivity** – MPLS links were provided for uninterrupted connectivity between sites
  - → **Disaster Recovery Solution** – an end-to-end management of the platform for DR site was provided

WHY TATA COMMUNICATIONS

- Reliable partner to consolidate infrastructure with breadth of services
- Reduced CapEx, faster time-to-market
- Quickly increase business agility and innovation
- Disaster preparedness and business continuity
- Consultative approach, bespoke solution
- 24x7x365 proactive monitoring and management

SOLUTION COMPONENTS

- IZO Private Cloud
- Managed Hosting
- Managed Firewall
- Managed Security
- Network Connectivity

ALIGNED SERVICES

- Vproxy service
- MPLS, ILL Connectivity
- DC and DR service

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MUST HAVES FOR SECURITY IN THE CLOUD

- **Information –** on IT assets deployed and entry points in the corporate network

- **Ability –** to deploy enterprise security tools and to respond to threats in real-time

- **Alignment –** of IT assets across different platforms with corporate policies and industry practices

THANK YOU