



the 5th epoch series
from c21-virtual

Infosys® | CONSULTING

C21-Virtual Event : The IoT Connection 25.v1

The IoT Connection : Hyperconverged TMT Networks: Space + Terrestrial 25.v1

April 10th . 2025 . 14:00 UK Time

Session Topic

- Enabling IoT/IIoT: The Telco Imperative in Network Convergence

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Industry Leader - Telecommunications

Telco to Techco Transformation and Cross Industry Enablement

We discussed so far how hyperconverged TMT networks are enabling IoT and IIoT opportunities for Telecom companies

Better Connectivity & Scalability

Ability to support more devices, even in remote areas.

Faster Processing (Edge Computing)

Enabling real-time applications by processing data closer to devices.

Easier Management

Potential to simplify running large IoT/IIoT networks.

Stronger Security

Offering integrated features to protect connected devices.

New Services

Ability to offer advanced services beyond just connectivity (e.g., data analysis).

Private Networks

Ability to facilitate dedicated, high-performance networks for industrial use

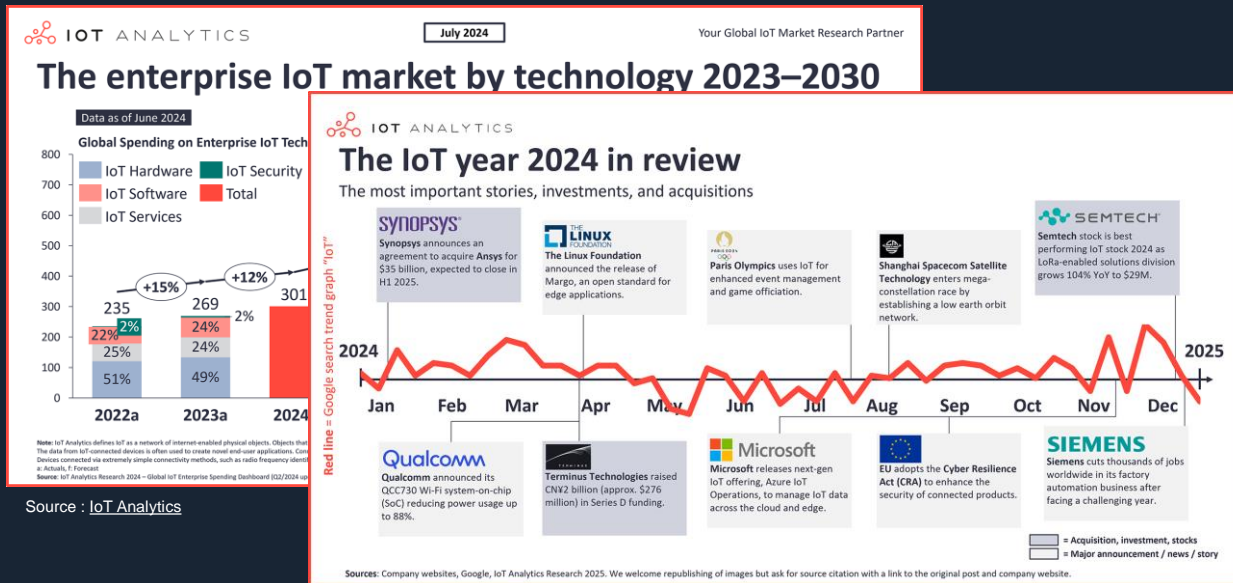
Cost Efficiency

Opportunity to reduce operational costs for managing large-scale deployments..

IoT market has enormous growth potential

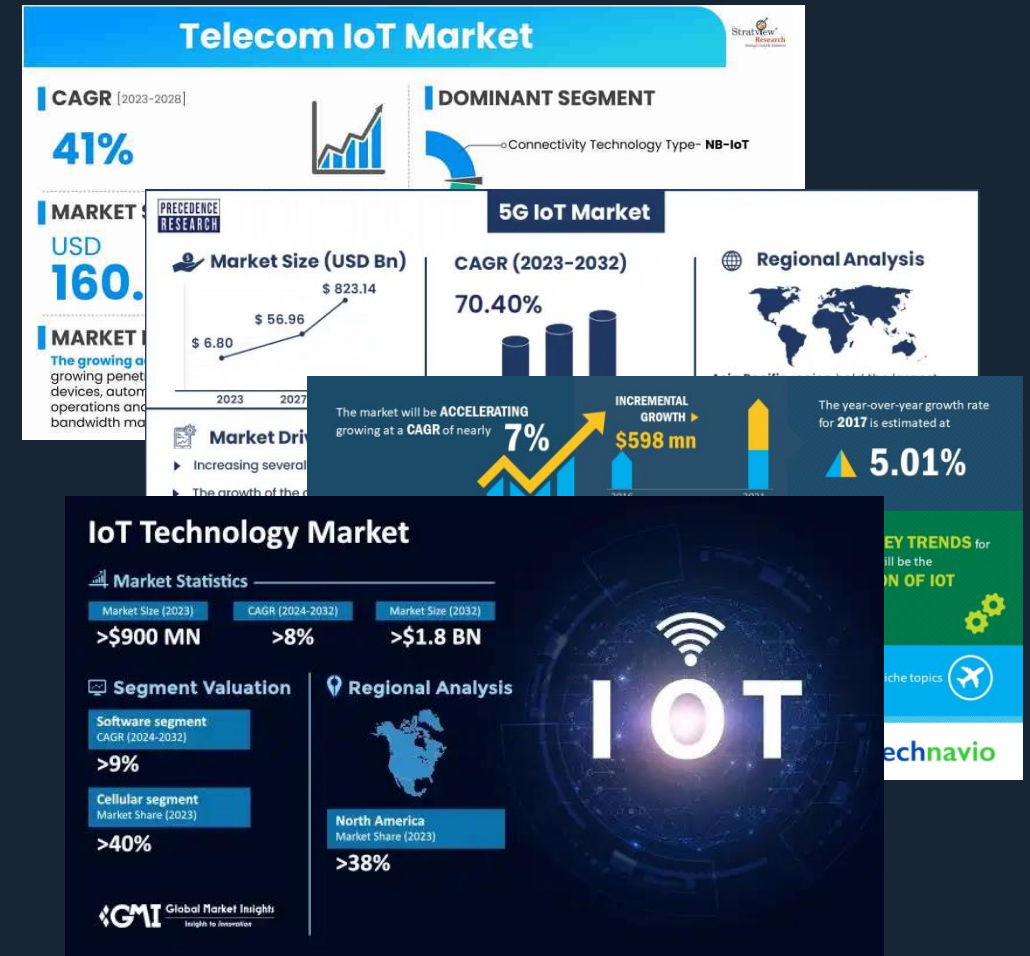
Depending on the lens we apply various predictions and trends and there is opportunity for all : some of the industry stats readily available on google

The enterprise IoT market size reached \$269 billion in 2023, representing 15% growth year-over-year,



Source : IoT Analytics

Source : Multiple Analysis views from Google Search



Telco's are the epicentre of this change

growing market demand,

changing customer needs and

technology evolution

So, what are the key challenges and focus areas that Telco's need to navigate to enable these opportunities

To capitalize on IoT/IIoT, telcos must evolve into comprehensive solution providers by

upgrading networks

building platforms

analyzing data

ensuring security

forming partnerships

innovating services

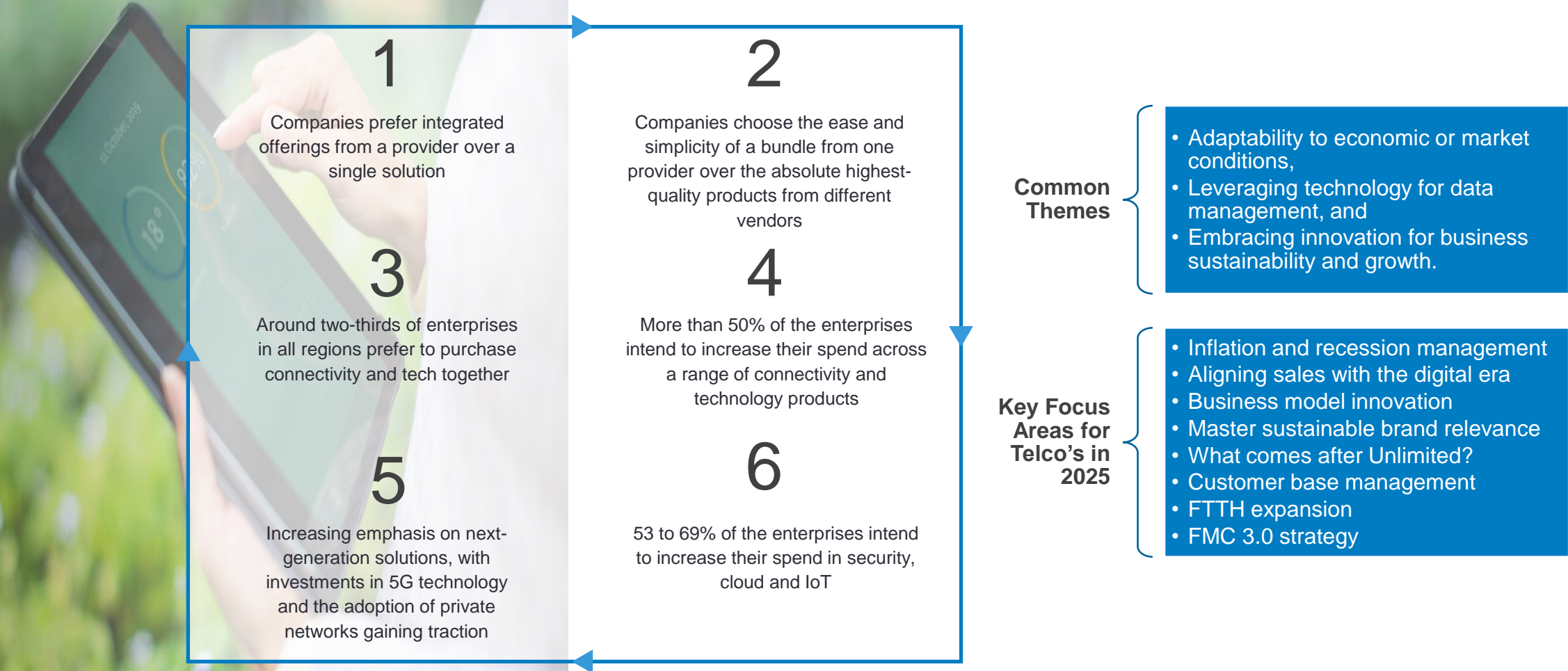
managing network convergence

driving organizational change, and

establishing new delivery models.

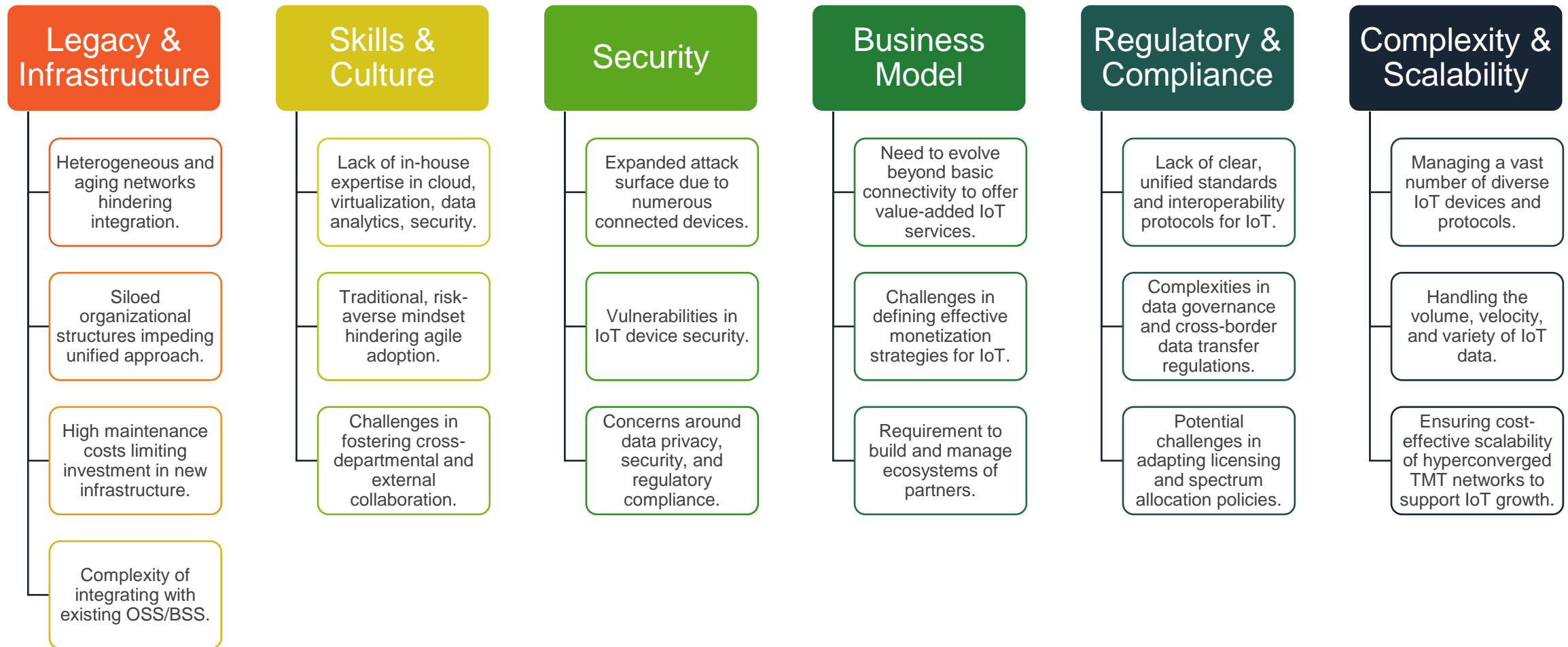
Ask : Telecom Industry Enterprise “B2B” Business Needs (End Customer)

Growth Drivers : What will drive growth and lead innovation in the sector?



Where are the CSP challenges in the adoption

Challenges that are slowing the adoption and enablement of Hyperconverged TMT networks and enable IoT solutions



Key Challenges so far in IoT adoption at industry level

Some of the key historical reasons and challenges which restricted IoT adoption

Category	Reason for Failure
Strategy & Planning	Lack of Clear Business Objectives and ROI
Integration & Interoperability	Integration Challenges
Scalability	Scalability Issues
Security & Data Governance	Security Concerns
	Data Governance Concerns
Skills & Resources	Lack of In-House Expertise and Talent
Financial Considerations	High Implementation Costs and Lack of Budget Control
Technology & Standards	Immature or Lack of Standardization and Interoperability
Supply Chain & Logistics	Supply Chain Issues and Device Availability
Organizational Factors	Organizational Readiness and Cultural Resistance
Infrastructure	Connectivity and Infrastructure Limitations

HOW
HYPERCONVERGED
TMT NETWORKS
ENABLES WAY
FORWARD

How Hyperconverged TMT networks addresses these challenges

Enhanced Connectivity	Hyperconverged networks integrate computing, storage, and networking into a single system, ensuring seamless and reliable connectivity. This is crucial for IIoT, where uninterrupted data flow between devices is essential
Easy of Scalability	Now HC TMT networks are designed to scale efficiently, accommodating the growing number of connected devices in industrial environments. This helps overcome challenges related to network capacity and device integration.
Improved Security	With built-in security features, hyperconverged networks address IIoT's cybersecurity concerns, such as protecting sensitive industrial data and preventing unauthorized access
Reduced Latency	By processing data closer to the source (edge computing), hyperconverged networks minimize latency, enabling real-time decision-making and control in industrial processes.
Improved Cost Efficiency	Consolidating infrastructure reduces deployment and maintenance costs, making IIoT adoption more financially viable for industries.
Enhanced Interoperability	With latest technology development TMT networks now support diverse protocols and devices, ensuring smooth integration of legacy systems with modern IIoT technologies.

Opportunity Areas for Telecom Companies

IoT Connectivity Platforms

Virtual Desktop Infrastructure (VDI)

Data Center Modernization

Disaster Recovery

Edge Computing Services

Hybrid Cloud Enablement Integration

Data Analytics and AI Services

B2B API-Enabled Products



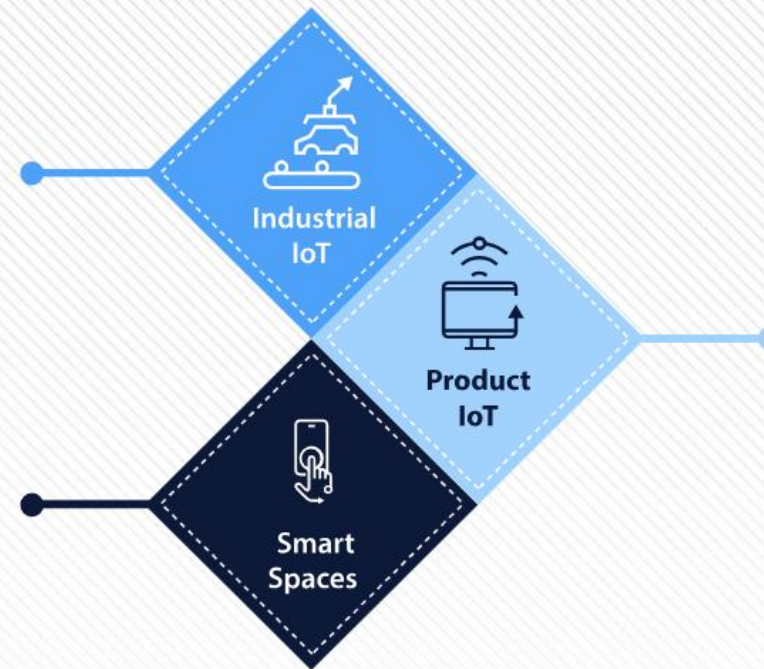
**How Infosys is
helping customer in
delivering the
hyperconverged
offerings**

[Infosys IoT Solutions](#)

**JOURNEY TO SUCCESS
BEGINNS WITH
REALIZATION
AND BEING STAY
RELEVANT**

Infosys has strong engineering, domain, and IT expertise which allows us to combine physical and digital worlds to deliver end-to-end services across the IoT business landscape including consulting, system integration, technology services, platforms and support.

For enterprises to be resilient and flexible during these unprecedented times, there is a need for forward-looking strategies and data-driven decision making. Infosys helps enterprises develop connected processes, products and infrastructure through comprehensive solutions across 'Sensor 2 Insights'. These solutions enhance business transparency, quality, operational efficiencies, and end-user experience and reduce the cost of operations.



Telco B2B Business Transformation is essential for success

1. Cultural Shift

2. Digital
Transformation

3. Product and
Service Innovation

4. Organizational
Structure and Talent

5. Customer
Centricity

B2B Big Bet

Five key mantras for success

01

“Build a Bionic Core Business”
Focus on Value creation to transform existing Core Business

02

Invest to build a Next-Gen Operating Model to handle existing challenges and cater future opportunities

03

Establish AI driven virtualized and cloud native networks to Prepare for upcoming technology disruptions

04

Embrace GenAI for Innovation, increased productivity and deliver enhanced customer experience

05

“Telco to Techco Journey”
Growth Outside the Core
Gear up for Intensified Competition.

How Infosys Consulting is helping Telcos in solving these challenges

We are actively helping Telcos with Business Transformation needed and along with wider Infosys capabilities, our approach encompasses providing a range of services and solutions aimed at different layers of the IoT ecosystem



Consulting and advisory services to define the IoT strategy, assess their readiness, and plan their digital transformation journey

Business Enablement Services and New Revenue Streams

Infosys IoT Services

As a larger Infosys eco-system we provide more comprehensive services in this area

5G and Network Engineering Services

Engineering Services :

We offer engineering services to deploy and manage next-generation networks, including 5G, including the services for network design, optimization, and automation.

Network Inventory Management :

We provide solutions to manage the complex network infrastructure required to support a massive number of connected devices, ensuring efficient resource allocation and service delivery.

Cloud and Telecom Expense Management :

We offer solutions like CTEMS to help telcos manage the costs associated with their cloud and telecom infrastructure, gaining better visibility and control over spending as they integrate hyperconverged networks.

IoT Platforms and Device Management

IoT Platforms and Middleware:

We help telcos build and integrate IoT platforms for device onboarding, management, data collection, and processing. This includes solutions for managing diverse device types and communication protocols.

Device Provisioning and Management :

Our services cover the lifecycle management of IoT devices, from initial setup and configuration to monitoring and updates.

Mobile Device Management (MDM):

We also offers MDM services to securely manage the increasing number of connected devices, including BYOD scenarios, within the telco environment and for their enterprise customers.

Data Analytics and Insights

Big Data Analytics:

Infosys provides capabilities to handle and analyze the massive volumes of data generated by IoT devices, enabling telcos and their customers to extract valuable insights for better decision-making and new service creation.

AI and Machine Learning:

We leverage AI/ML technologies to develop predictive analytics, anomaly detection, and intelligent automation for IoT applications in areas like network optimization, predictive maintenance, and customer service. **Infosys Topaz is an AI-first platform** that helps telcos enhance operations and customer experiences.

Security Services

IoT Security Solutions:

We offer a comprehensive security strategies and technologies to protect IoT devices, networks, and data from cyber threats. This includes fraud management, threat detection, and data encryption.

Cybersecurity Services for Critical Infrastructure:

Recognizing the critical nature of telecom networks, Infosys provides specialized cybersecurity services to ensure the resilience and security of their infrastructure in the face of increasing IoT connectivity.

Examples of Infosys's involvement

What are the key industry focus and initiatives we are building

Partnership with NVIDIA

- We have expanded and invested in our collaboration with NVIDIA to develop AI-powered solutions for the telecom industry, leveraging generative AI to enhance customer experiences and network operations.

AI-powered Network Operations

- We have built a fully automated AI-driven tools to help telcos improve network performance, predict potential issues, and automate troubleshooting.

Smart Spaces Solutions

- We have built solutions for creating intelligent and connected environments, leveraging IoT for applications like smart buildings and campuses.

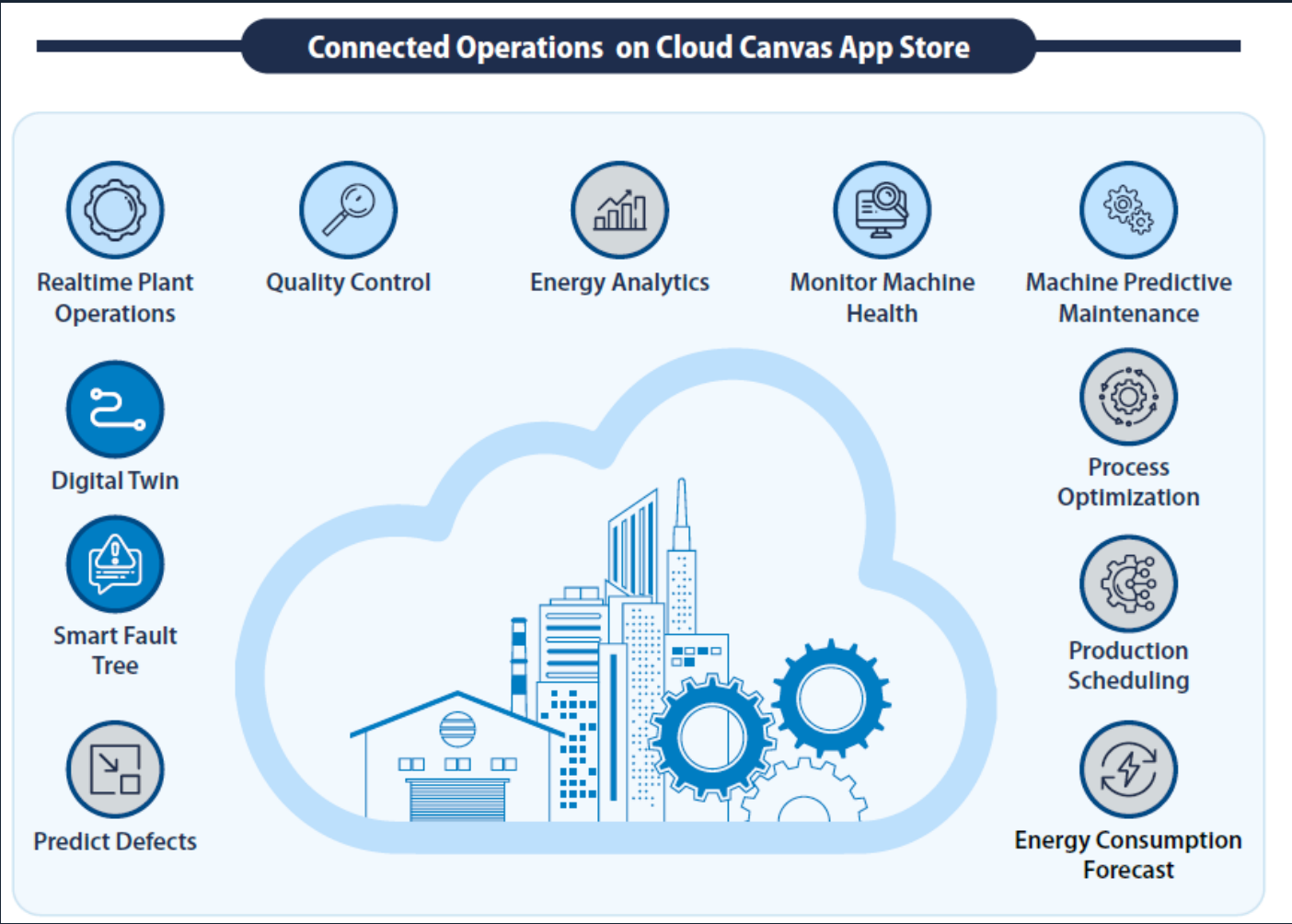
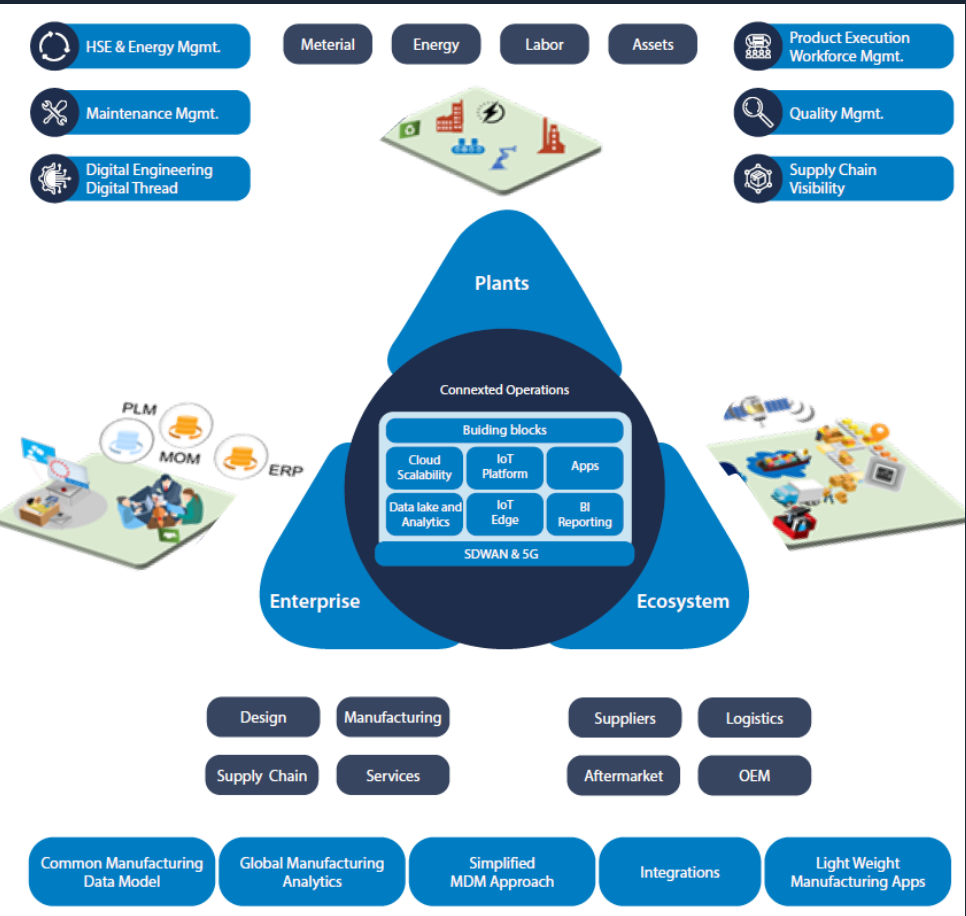
Industrial IoT Solutions

- Infosys offers solutions for industrial monitoring, asset management, and predictive maintenance, enabling telcos to cater to the growing IIoT market.

Example 1 : Infosys Connected Operations in the Cloud

Set of pre-configured and ready-to-deploy micro applications

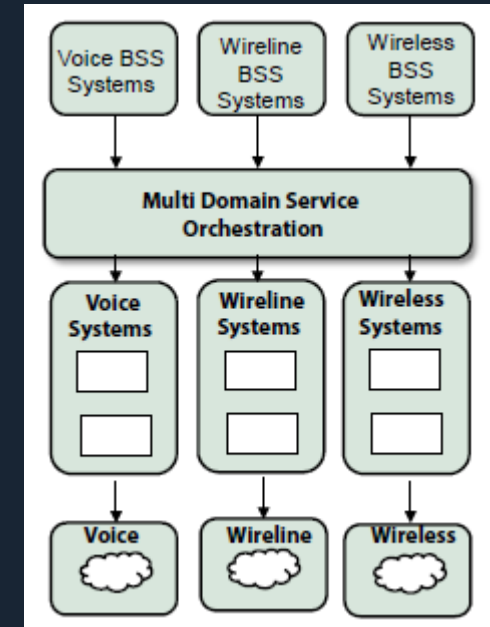
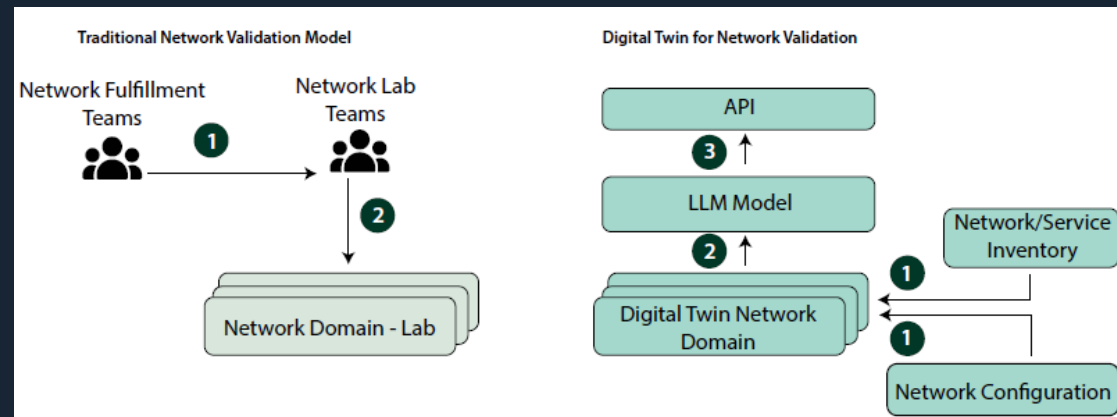
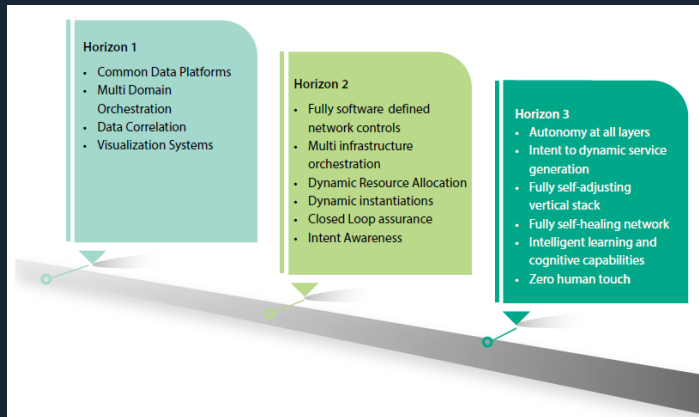
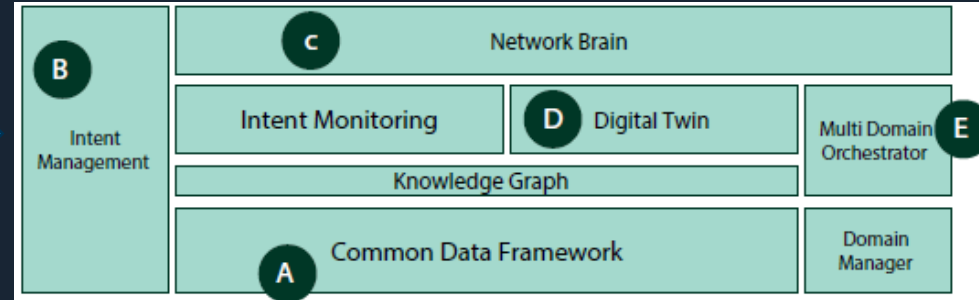
Infosys Connected Operations on Cloud is a suite of cloud-agnostic modular applications that act as the connective tissue between machines, processes, systems, and people – to achieve operational excellence.



Example 2 : Engineering Autonomous Networks

Making a multidomain and cross network management a reality

GAP areas	GAP Width			
	Awareness	Analysis	Decision	Execution
Common Data Management	Low	Low	High	High
Data models and Uniform language	Low	Low	High	High
Off-the-shelf products for critical components	Low	Medium	High	High
Testing frameworks and methods	Medium	High	High	High
Critical Skills	Low	Medium	High	High
Organization Slack	Low	High	High	High



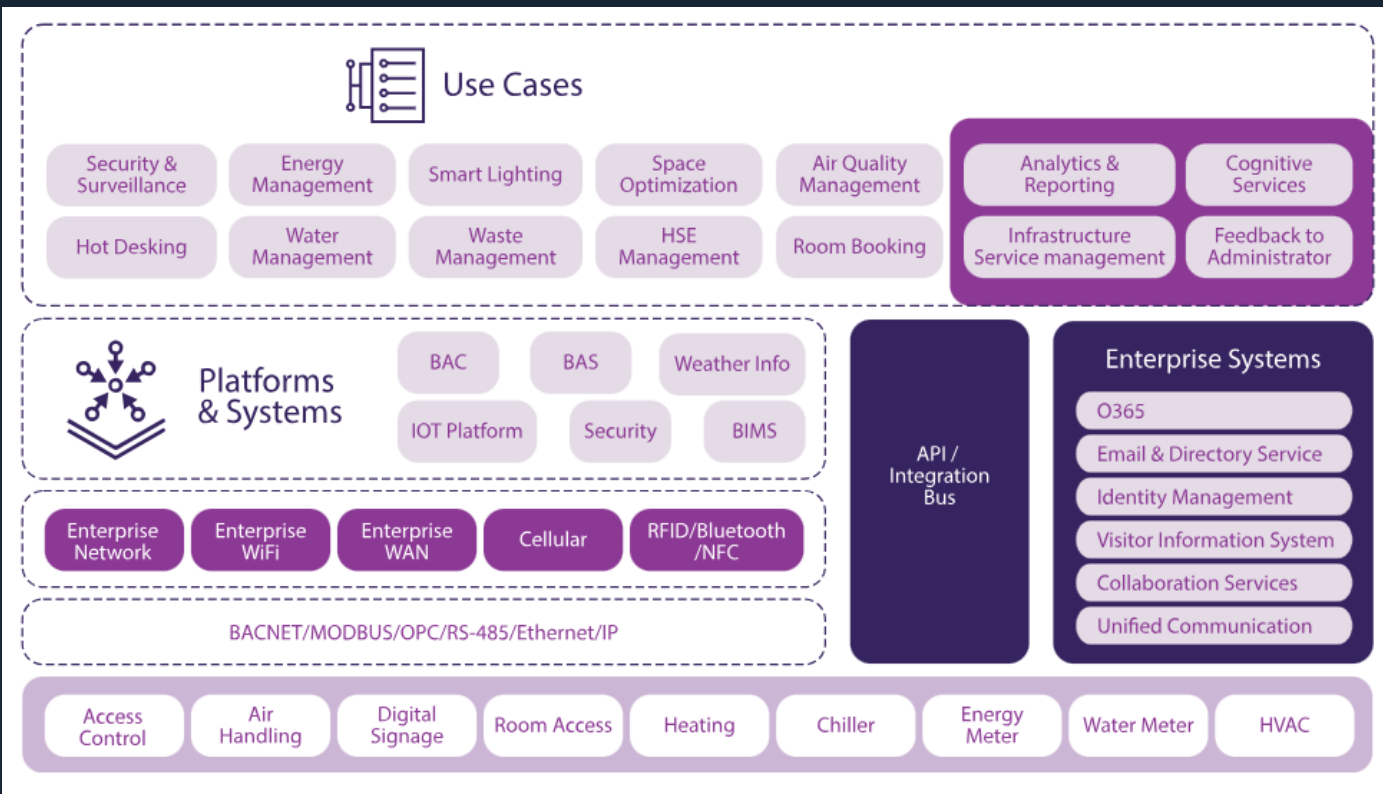
Example 3 : Infosys Smart Buildings and Spaces solution

Infosys Smart Buildings and Spaces offering provides application solutions to enterprises, integrate the physical and the digital divide through various digital technology intervention based on the proven Infosys's SCALE framework. **A brand-new opportunity for Telcos in a Hyperconverged connected world**

63% of millennials work for companies that offer personalized work experience and flexible work environment. Millennials will make up 50% of all workers in 2020 and beyond.

Buildings will be number 1 consumer of energy by 2025, and up to 50% of energy and water in building are often wasted.

Energy usage in data centers are doubling every 5 years, and in US, approximately 900 MMT of greenhouse gases are being generated by commercial buildings alone.



**ENTERPRISES NEED
TO BE AI-FIRST
TO STAY RELEVANT
AND THRIVE**

The AI Revolution is here and will transform the enterprise.

We are experiencing the **AI transformation era** and its emergence as a leading **disruptive** technology.

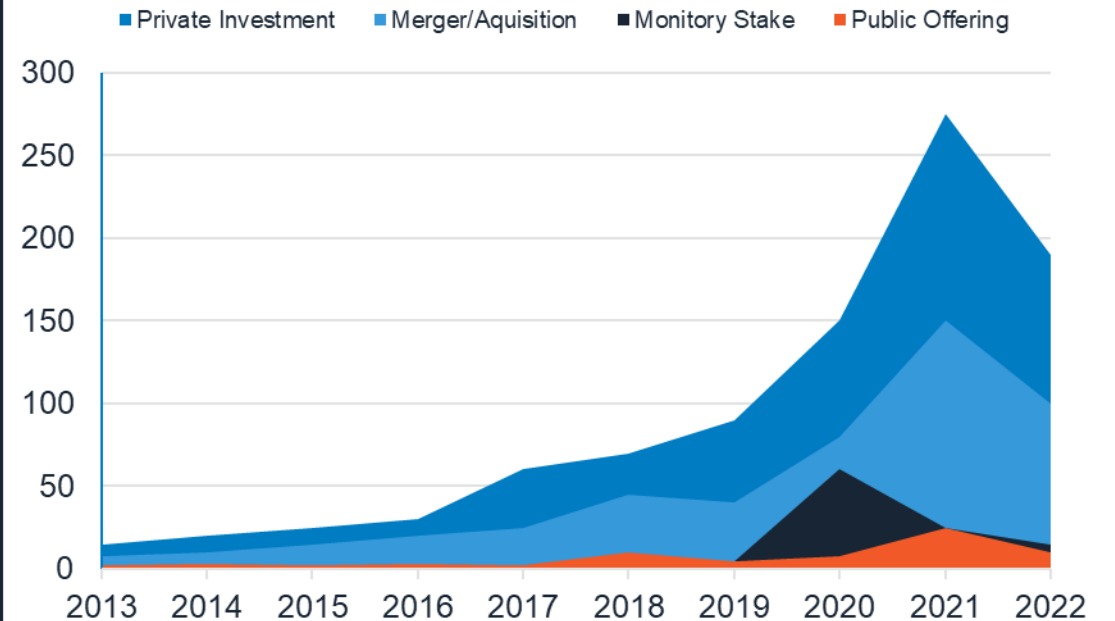
AI will drive the enterprise transformation in 2024 and beyond, with corporate investment set to skyrocket.

Types of innovation



Global corporate investment in AI

Sorted by activity from 2013 to 2022, in billions of US dollars



Source: Stanford Institute for Human-Centered Artificial Intelligence Created with Datawrapper, Source: World Economic Forum, 2023.

Infosys AI-First Strategy to enable fully autonomous hyperconverged networks

Building the AI-First Organization : The organization of the future will be an AI-first live enterprise

Our Vision

AI at the center

Build an AI-first company

An AI-first company is made out of four building blocks



The AI experience

AI-first firms rethink everything about how they're experienced, from using AI-led assistants to reimagining customer journeys with AI at the center



AI engineering excellence

We explore next-generation software development and platform engineering. We also discuss the advent of AI operations, Data and MLOps for high velocity products



Responsible AI by design

We explore the challenges posed by the explosion of AI, and how organizations will need to have robust processes in place to ensure that the risks are properly managed and mitigated



The AI operating model

What does the future AI-first operating model look like? We discuss how to bring about the changes that are needed

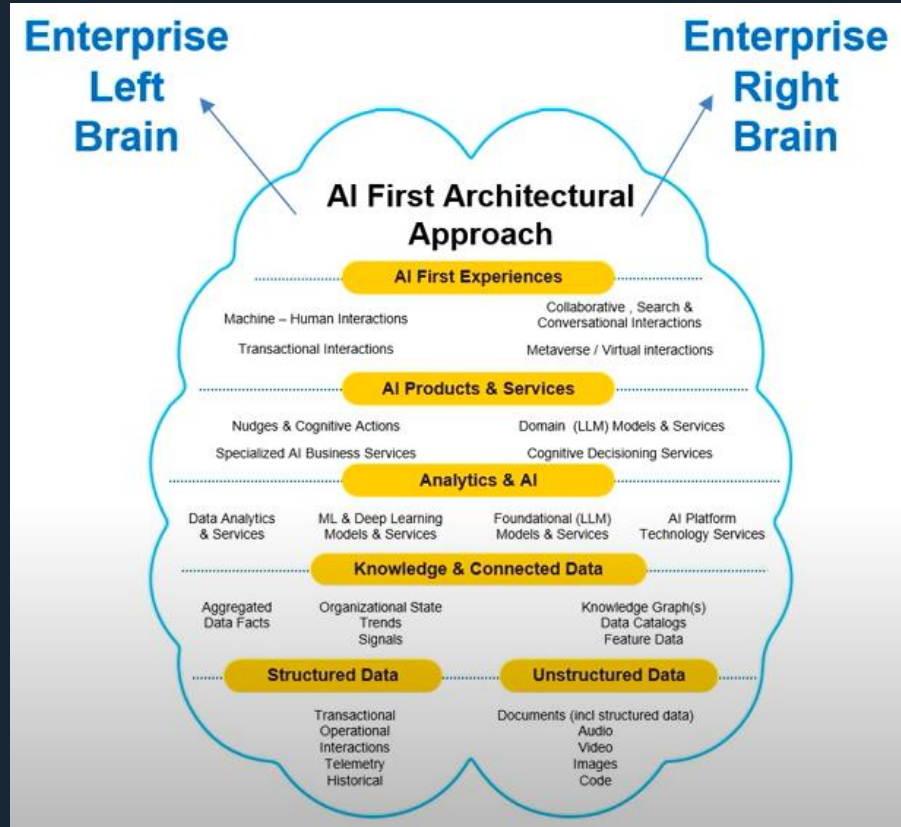
Infosys Topaz

Infosys' Topaz AI First Innovations including AI-enabled Analytics and AI-enabled Automation to help clients in significant cost savings, improved efficiency and customer experience across industry segments.

Infosys Topaz is an AI-first set of services, solutions and platforms using generative AI technologies.

It brings the **advantage of 12,000+ AI assets, 150+ pre-trained AI models, 10+ AI platforms** steered by AI-first specialists and data strategists, and a 'responsible by design' approach that is uncompromising on ethics, trust, privacy, security and regulatory compliance.

Leveraging Infosys applied AI framework to build an AI-first core that empowers people to deliver cognitive solutions,



RECOGNITION
Infosys Topaz Wins at NASSCOM AI Gamechangers Awards 2023-24

RECOGNITION
Infosys Wins 2024 HPE Global AI Partner of the Year Award



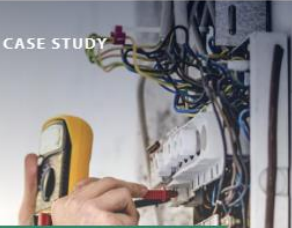
RECOGNITION
Double Win for Infosys Topaz at CogX; Bags 'Enterprise Adoption of AI' Award for Second Consecutive Year

RECOGNITION
Infosys Topaz Wins Global Acclaim with Business Intelligence Group's Artificial Intelligence Excellence Award

ANALYST RECOGNITION
Infosys Positioned as a Leader for the Second Time in the IDC MarketScape: Worldwide Artificial

ANALYST RECOGNITION
Infosys rated as a Leader in HFS Horizons Report for Generative Enterprise™ Services, 2023

Infosys IoT – Making you smarter, better, faster

 <p>PRESS RELEASES</p> <p>Infosys collaborates with Microsoft to accelerate Digital Transformation in Smart Spaces</p>	<p>VIDEO</p>  <p>Nitesh Bansal in conversation with Jim Heppelmann, CEO of PTC</p> <p>READ MORE</p>	<p>WHITE PAPER</p> <p>Industry 4.0 – Assessment and Roadmap Definition for Aerospace Manufacturing</p> <p>READ MORE</p>	
<p>VIDEO</p> <p>Raghav Karinja in conversation with Nitesh Bansal around Infosys' partnership with Dassault Systèmes</p> <p>READ MORE</p>	<p>POINT OF VIEW</p> <p>Resilience In Manufacturing Industry</p> <p>READ MORE</p>	<p>CASE STUDY</p>  <p>ABB Product Configurator</p> <p>READ MORE</p>	<p>PRESS RELEASE</p> <p>Infosys Joins Qualcomm Smart Cities Accelerator Program to Offer Smart Cities Solutions</p> <p>READ MORE</p>

A rich catalogue of autonomous and intelligent solutions for IoT adoption and establishing Hyperconverged Autonomous Networks

<p>AI Enabled RAN Engineering for Personalization & Superior Customer Experience In 5G Networks</p>	<p>Harnessing AI for Smart Fiber Rollout Lifecycle Management</p>	<p>IoT to AIoT: Accelerating Digital Transformation</p>
<p>Engineering autonomous Networks</p>	<p>.... And many more</p>	

<p>INSIGHTS</p> <p>Understanding building decarbonization with net zero carbon buildings</p>	<p>PRESS RELEASES</p> <p>Infosys Launches 'Return to Workplace' Solutions to Help Enterprises Build Safe Workplaces</p>	<p>POINT OF VIEW</p> <p>Remote Operation Center: Enabling Digital Disruption in the Mining industry</p>	<p>WHITEPAPER</p> <p>Systematic approach and best practices in predictive maintenance</p>
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**UNLOCKING THE FULL VALUE OF
HC TMT NETWORKS REQUIRES
DEEP CONNECTION TO BUSINESS
STRATEGY, COMMERCIALS AND
ORGANISATION TRANSFORMATION**



**THANK
YOU**

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