BUILDING COMPETENCIES

As we look to create winning business opportunities for our customers, we are enhancing our technological capabilities in emerging areas and building scalable platforms, assets and solutions to become a preferred partner for Digital Transformation.

NOW

At Tech Mahindra, we have identified and are building competences in emerging technologies we believe are the key bets and will change the way experiences are delivered and business is conducted.

5G network, being an experience platform instead of intelligent connectivity platform, Communication Service Providers (CSPs) are re-accessing and keenly investing in it. The pandemic has further driven fundamental shifts like acceleration in adoption of Network Automation and 5G with enterprises for Industrial Automation, making operations AI-enabled and transforming BSS for differentiated customer experience.

As the CSPs intend to develop capabilities to monetise differentiated customer experience, our strategy is to partner with them as a 'Continuous Integrator' to design, built, transform and operate 5G networks. Our deep 5G knowledge along with innovative and scalable platforms such as NetOps. AI make us a trusted transformative partner.

5G

1

Operating the world's first Cloud Native Network with Tier 1 Carrier in Japan

Tech Mahindra designed, built, tested and operated world's first 5G end-to-end Cloud Native Platform (CNP) for a Tier 1 Carrier in Japan. We orchestrated, virtualised and tested multiple hyperscalers, RAN/Core OEMs in the CNP to achieve extreme lower latency to drive newly-augmented used cases for enterprises and consumers. This includes automation of subscribers on real-time boarding and provisioning. Our innovative approach to simulate and automate software base test cases and virtualisation enabled rapid scale and lowers the time-to-market new services.
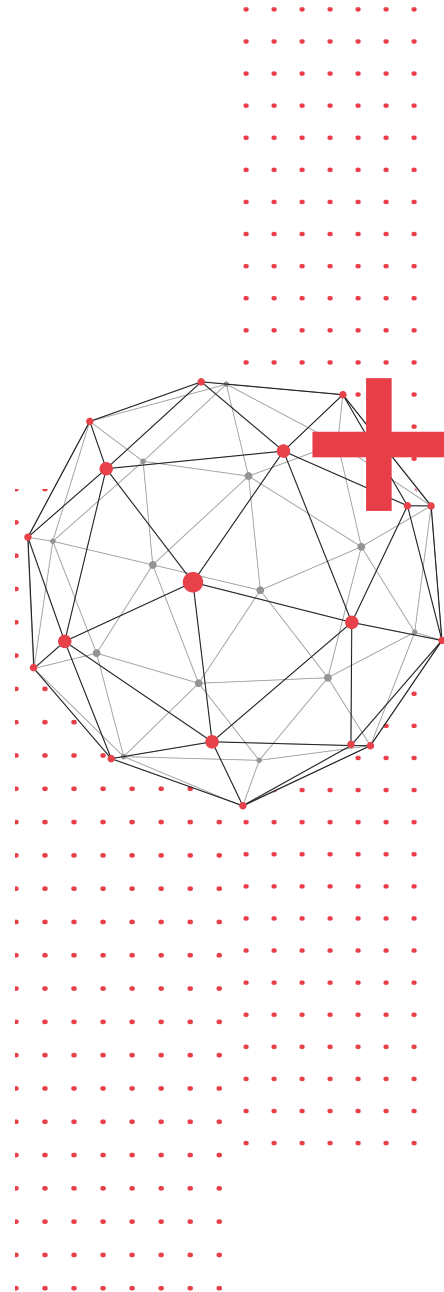
Enabling enterprises to accelerate their digital transformation

Industry 4.0 requires extensive storage, high computing and ultrafast speeds. We are working with a client to deploy Intelligent 5G Mining Solutions that will increase coal production of mines by 3X.

A similar work is underway with Airline Industries to co-create automation, surveillance and remote monitoring solutions.
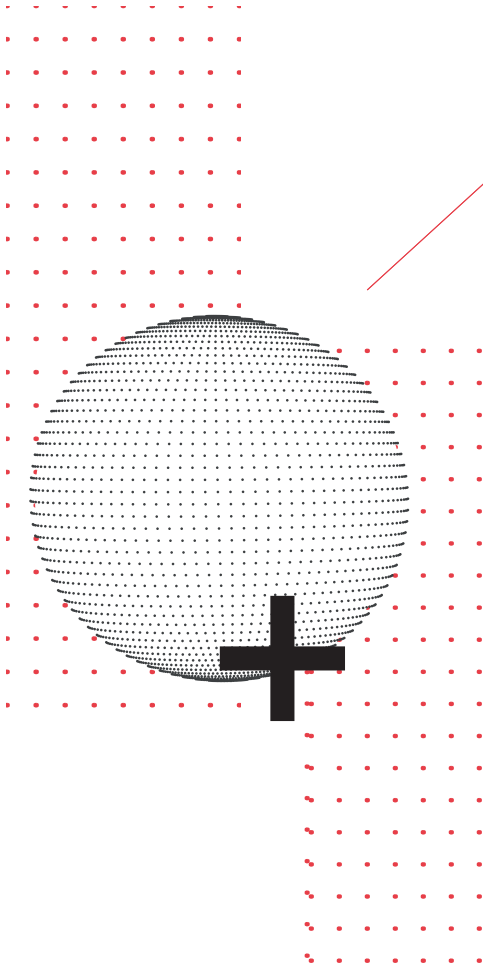
Diving economy with 5G

We are partnering with a European Government for co-developing 5G /6G Intelligent Labs to research, test and deploy use cases that can have a compounding effect on the country's economic growth and job creation.

Data, Analytics and Artificial Intelligence (AI)

We aspire to be a data-driven and AI-first organisation. Our 10,000+ associates are delivering data solutions to over 300 customers (including 30 Fortune 500 companies) across 50 countries. With AI set to grow five-fold and become one of the largest workload categories in cloud, we are strengthening our competencies which spans 40+ industry solutions and 50+ technologies. We run several labs across the country, where we are co-innovating with partners (cloud providers and hyperscalers), customers and start-ups. Further, we are also co-funding along with partners like IBM, Amazon and Azure in creating specialised AI labs.

2

Putting AI to use for cognitive detection

A leading global medical technology company, specialising in blood component and cellular technologies, was facing the challenge of improper loadings in the blood platelet machine. This resulted in leakages and spills, causing a biohazard.

We helped them address the issue by building a solution, using open source technologies and architectures, that would cognitively detect, classify and validate bearings' proper assembly with the machine. The solution used computer vision technique, multiple Convolutional Neural Network architecture and latest AI technologies for cognitive detection.

The system used video feed as data to train. Further, various object detections, classification architectures and pre-trained models were used to judge performance and accuracy.

The result: The automated validation led to higher accuracy, savings in time and money, and elimination of human errors. It also improved process quality and increased machine control at each stage of integration.

Cloud

With the advent of pandemic, we have seen a strong acceleration in cloud adoption. The focus has shifted towards creating agility & speed to innovate faster and elevate customer experience. With a sharp rise in remote working across the globe, there has been a growing awareness on the importance of shifting workloads to the Cloud, application modernisation, cloud-based operations and implementation of Software as a Service (SaaS). Tech Mahindra is positioned strongly to benefit from these shifts by leveraging proprietary platforms.

+ PASSPORT.NXT - a business value framework to accelerate cloud journey with first time right approach by performing comprehensive cloud-ready assessments

+ MAC (Migration Accelerator to Cloud) - helps seamless migration of applications and data to the Cloud with zero business impact

+ iCOPS (Integrated Cloud Operations and Subscription Management platform) - helps clients manage and optimise their cloud operations, reducing wasteful spends

+ mPAC (Managed Platform for Adaptive Cloud) - a hybrid, Multi-Cloud Management Platform giving a single pane of glass view across multiple cloud environments
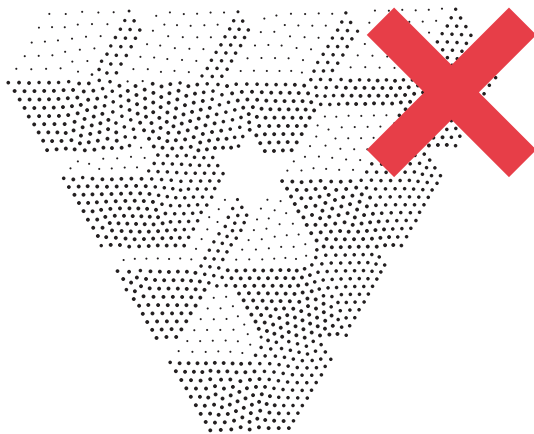
3 +

One of Largest Cloud Transformation Programs

Tech Mahindra is working with a leading US Telecommunications player to optimise the number of data centres, migrate the IT and Network applications to cloud, move to a modern architecture. TechM is the largest partner in this transformation journey for this client enabling the customer to focus on core objectives, including, having the most advanced software defined 5G network, and migrate the majority of its non-network workloads to the public cloud by 2024. This comprehensive programme will help drive sustainable operational improvement across the network and software development domains.

With our cloud expertise backed by proprietary platforms, we created solutions aimed at clearing 900+ applications migration roadway to cloud. We invested in Cloud Fusion which led the pathway to migrate these applications using a Platform As a Service (PaaS) framework instead of Infra As a Service (IaaS). This led to additional 40% saving for our client, and unblocking additional 300+ applications for cloud migration. We used a number of tools & processes to ensure applications on cloud taking real traffic information and making them self-sufficient to monitor and ensured continued customer experience. We also modernised the applications which required combination of cloud native skills and next-generation technologies. We have been in the forefront of this cloud transformation project setting new milestones through the journey, with migrating the largest of the applications in lowest possible timeline. We are the single largest partner for Data centre consolidation exercise.

4 ✚

Enhancing credit management and expediting cross-border payments with blockchain

We have developed a VIN (Vehicle Identification Number)-based Dealer Financing solution for a leading public sector company. Based on Hyperledger Fabric, this blockchain solution enables banks (including captives) to improve credit quality and financial health of dealers by tracking the flow and usage of funds across dealer-financing ecosystem.

Addressing pain areas of inadequate and outdated vehicle supply data, unregulated delivery cycles and payment discrepancies, it also drove optimisation by tracking sales, providing real-time updates and integrating with participants' legacy systems.

Additionally, we have developed an Audit Trail of Remittances which offers bank a permanent record of audit transactions in cross-border payments and a unified view transaction information from various systems. This has brought down transaction processing from 12 hours to under an hour.

Block Chain

We have architected a comprehensive strategy to become a world leading blockchain company. We are working on a holistic Block Ecosystem framework comprising levers like Block Studio, Block Engage, Block Talk, Block Geeks, Block Accelerate, Block Access and Block Value. These facilitate in creating industry leading applications, architected on innovation and human excellence, to unlock significant value for all stakeholders.

We are fulfilling unaddressed or underserviced needs through a combination of cutting-edge technology, domain expertise and by offering a range of service offerings. We have developed cutting-edge platforms that transform customer experience and optimises network effects such as:

✚ Blockchain-based Contracts and Rights Management System for M&E Industry
✚ Aviation Record Management and Vehicle Lifecycle Management for Manufacturing sector
✚ Asset-backed Securitisation and Digital Payments and Loyalty Management for BFSI sector

Economic Times BFSI Innovation Award 2020 winner for VIN-based dealer financing solution

5

Cyber security

The transition to WFH amid the pandemic has heightened cyber security challenges with companies witnessing several cyber-attacks globally from simple reconnaissance to brute force. We are helping them secure their organisation with our end-to-end security transformation capabilities, specialised offerings in Secure Access Service Edge (SASE), Cloud and Network Security among others and proprietary platforms.
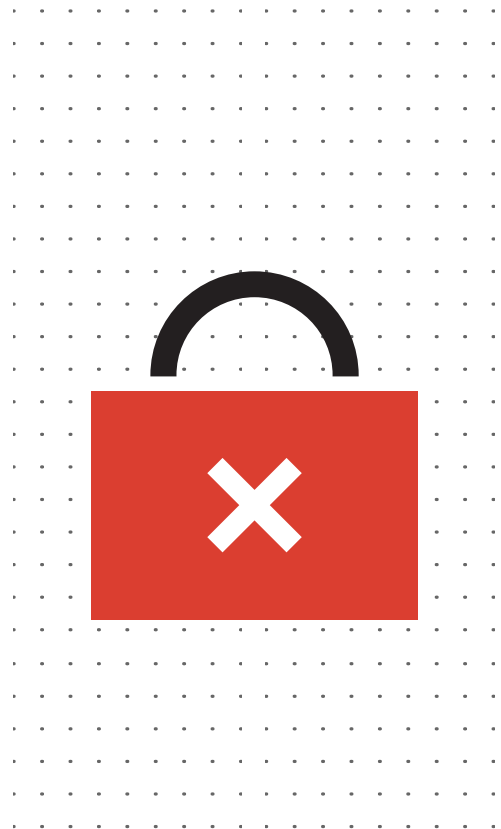
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Enabling security transformation

Tech Mahindra worked with a leading Asian Telecom Service provider on security transformation services. We deployed three solutions integrated together: Security Information and Event Management, Privileged Access Management and Vulnerability Management. This helped reduced infiltration and exfiltration, improved vulnerability discovery and prioritisation due to improved scan policies, and helped detect and contain behaviour-based anomalies.

Delivering advanced e-mail security solution

We worked with a leading Financial Services player to implement an advanced e-mail security solution to effectively protect against phishing, spam and malware emails. We designed and implemented a password vault solution to securely store sensitive credentials. This improved visibility of customer's risk posture by improved reporting and measurement of compliance as per regulatory requirements.

Tech Mahindra