Awards & Recognition

To know more
Visit the Cognitive Business Operations page on tcs.com
Email: cbo.marketing@tcs.com

About Tata Consultancy Services Ltd (TCS)
Tata Consultancy Services is an IT services, consulting and business solutions organization that has been partnering with many of the world’s largest businesses in their transformation journeys for over 50 years. TCS offers a consulting-led, cognitive powered, integrated portfolio of business, technology and engineering services and solutions. This is delivered through its unique Location Independent Agile™ delivery model, recognized as a benchmark of excellence in software development.

A part of the Tata group, India’s largest multinational business group, TCS has over 453,000 of the world’s best-trained consultants in 46 countries. The company generated consolidated revenues of US $22 billion in the fiscal year ended March 31, 2020, and is listed on the BSE (formerly Bombay Stock Exchange) and the NSE (National Stock Exchange) in India. TCS’ proactive stance on climate change and award-winning work with communities across the world have earned it a place in leading sustainability indices such as the Dow Jones Sustainability Index (DJSI), MSCI Global Sustainability Index and the FTSE4Good Emerging Index. For more information, visit us at www.tcs.com.

For TCS global news, follow @TCS_News.

IT Services
Business Solutions
Consulting
The way the world does business has changed significantly over the past few years. Now, organizations are looking to automate operations, enable real-time decisions, improve customer experience and operational efficiencies by building a strong digital core and leveraging technologies such as 5G, AI/ML, XR, and IoT.

**Edge computing brings processing closer to the edge of a network, enabling organizations to combine the power of digital technologies to create connected and personalized customer experiences. This, in turn, sets the stage for business model innovations.** Considering the massive growth of connected devices, video traffic, and demand for immersive user experience, companies are exploring edge computing actively.

**TCS Edge Computing Services helps enterprises accelerate their adoption of edge computing to create business value and drive digital transformation. These services enable clients to develop sustainable solutions that enrich and transform industries, with real-time insights and ultra-low latency.**

### Overview
The advent of 5G has accelerated the adoption of edge computing. It has not only led to proliferation of consumer-oriented, internet-connected devices that necessitate ultra-low latency, but also opened doors to a world of possibilities enabled by augmented reality and robotics. By placing computing and storage resources at the edge of the network, edge computing enables faster data processing, real-time decision making, and new business models and cost optimization. It also ensures uninterrupted services and helps in reducing security breaches due to localized processing. However, building a secure, scalable, and robust edge computing solution is fraught with challenges. Unlike core computing, edge computing architecture is use-case-centric. The architecture must be hardware-agnostic, scalable, and have a hierarchy of levels that share the workload. As this network grows and spans several geographies, infrastructure management gets challenging. Maintaining a vast distributed network also warrants a specialized team of service engineers well-equipped to oversee IT-OT operations while tackling security risks. With TCS Edge Computing Services, enterprises get complete visibility and centralized control of the edge computing infrastructure across remote, geographically disparate edge locations.

### Our Solution
TCS Edge Computing Services deliver an end-to-end strategy and solution for enterprises to design, implement, and manage their edge computing landscape and seamlessly perform remote operations. These services are focused on scale, security, connectivity, cognitive computing, and autonomous operations. TCS Edge Computing Services are powered by the following capabilities:

- **Expert Advisory:** Helps discover edge computing use cases that can boost business performance
- **Services:** Design, build, deploy, and manage services around Edge applications, networking, and security with the following:
  - **Edge SecOps:** Allows remote security operations and centralized monitoring and visibility across remote Edge locations
  - **Cognitive Edge:** Includes analytics models that are optimized for the edge and constrained devices
  - **Converge Edge:** Allows end-to-end edge infrastructure enablement from IoT edge to enterprise edge
- **Platform (PaaSEdge):** Integrated management platform to enable IoT edge orchestration, edge security, and provisioning
- **Industry Solutions:** Provides edge-enabled industry verticalized solutions such as worker safety, predictive maintenance, quality inspection, branch in a box, etc.

TCS’s Cognitive Edge for edge carries a vast collection of ‘value builders’ – pre-built, configurable, reusable digital solutions that bring together multiple digital levers to address specific business KPIs. These solutions are easy to deploy, modular and scalable to address the varying needs of the organization. The suite’s value builders include an edge orchestrator, edge command center, and edge manager.

### Benefits
By bringing data processing and storage capabilities closer to the edge of the network, TCS Edge Computing Services provide the following benefits to enterprises:

- **Hyper-personalized Experience**
  - Enhances customer experience by providing services even in intermittent connectivity environments
  - Transforms experiences of latency-sensitive applications such as gaming and online learning, with the use of AI-powered intelligent edge computing

- **Intelligent Decisions**
  - Employs streaming analytics to provide real-time insights at edge
  - Reduces operational risks and decreases equipment downtime with predictive and prescriptive analytics

- **Improved Operational Efficiency**
  - Ensures data availability for operations and remote monitoring with the use of enhanced visual inspection systems
  - Improves data privacy and security with stringent checks and control measures

### The TCS Advantage
TCS is uniquely placed in terms of supporting the enterprises who wish to explore or leap into intelligent edge computing. Partnering with TCS brings the following advantages:

- **Domain Expertise:** The trifecta of contextual knowledge, a certified pool of associates in IoT edge services, cloud, machine learning, and data processing, and intense domain expertise in sectors such as manufacturing, retail, oil and gas, and telecom for over 40 years makes TCS an obvious choice for edge computing services. Our certified subject matter experts and professionals have an industry background and strong product knowledge. They are well-versed in delivering strategic solutions to fulfill the varied requirements of different customers with ease.

- **Intellectual Property:** As an industry leader, TCS brings into play its homegrown IoT and intelligent edge platform solutions such as a TCS Connected Universe Platform (TCUP), TCS Intelligent Edge Gateway, and asset tracking units. Our Machine First Delivery Model (MFDM™) focuses on automation for exponential value.

- **Strategic Partnerships:** Our extended ecosystem of powerful alliances with leading-edge vendors, such as AWS, Microsoft, Google, Intel, NVIDIA, HPE, Nutanix, Dell and CISCO, helps future-proof IT operations with intelligent edge computing platform solutions at optimized costs.
The way the world does business has changed significantly over the past few years. Now, organizations are looking to automate operations, enable real-time decisions, improve customer experience and operational efficiencies by building a strong digital core and leveraging technologies such as 5G, AI/ML, XR, and IoT.

Edge computing brings processing closer to the edge of a network, enabling organizations to combine the power of digital technologies to create connected and personalized customer experiences. This, in turn, sets the stage for business model innovations. Considering the massive growth of connected devices, video traffic, and demand for immersive user experience, companies are exploring edge computing actively.

TCS Edge Computing Services helps enterprises accelerate their adoption of edge computing to create business value and drive digital transformation. These services enable clients to develop sustainable solutions that enrich and transform industries, with real-time insights and ultra-low latency.

Overview

The advent of 5G has accelerated the adoption of edge computing. It has not only led to proliferation of consumer-oriented, internet-connected devices that necessitate ultra-low latency, but also opened doors to a world of possibilities enabled by augmented reality and robotics. By placing computing and storage resources at the edge of the network, edge computing enables faster data processing, real-time decision making, and new business models and cost optimization. It also ensures uninterrupted services and helps in reducing security breaches due to localized processing.

However, building a secure, scalable, and robust edge computing solution is fraught with challenges. Unlike core computing, edge computing architecture is use-case centric. The architecture must be hardware-agnostic, scalable, and have a hierarchy of levels that share the workload. As this network grows and spans several geographies, infrastructure maintenance gets challenging. Maintaining a vastly distributed network also warrants a specialized team of service engineers well-equipped to oversee remote, geographically disparate edge locations.

Our Solution

TCS Edge Computing Services deliver an end-to-end strategy and solution for enterprises to design, implement, and manage their edge computing landscape and seamlessly perform remote operations. These services are focused on scale, security, connectivity, cognitive computing, and autonomous operations. TCS Edge Computing Services are powered by the following capabilities:

- **Expert Advisory**: Helps discover edge computing use cases that can boost business performance
- **Services**: Design, build, deploy, and manage services around edge applications, networking, and security with the following:
  - **Edge SecOps**: Allows remote security operations and centralized monitoring and visibility across remote Edge locations
  - **Cognitive Edge**: Includes analytics models that are optimized for the edge and constrained devices
  - **Converge Edge**: Allows end-to-end edge infrastructure enablement from IoT edge to enterprise edge
- **Platform (PaaSEdge)**: Integrated management platform to enable edge orchestration, security, and provisioning
- **Industry Solutions**: Provides edge-enabled industry verticalized solutions such as worker safety, predictive maintenance, quality inspection, branch in a box, etc.

TCS CogniX for edge carries a vast collection of ‘value builders’ – pre-built, configurable, reusable digital solutions that bring together multiple digital levers to address specific business KPIs. These solutions are easy to deploy, modular and scalable to address the varying needs of the organization. The suite’s value builders include an edge orchestrator, edge command center, and edge manager.

Benefits

By bringing data processing and storage capabilities closer to the edge of the network, TCS Edge Computing Services provides the following benefits to enterprises:

- **Hyper-personalized Experience**
  - Enhances customer experience by providing services even in intermittent connectivity environments
  - Transforms experiences of latency-sensitive applications such as gaming and online learning, with the use of AI-powered intelligent edge computing

- **Intelligent Decisions**
  - Employs streaming analytics to provide real-time insights at edge
  - Reduces operational risks and decreases equipment downtime with predictive and prescriptive analytics

- **Improved Operational Efficiency**
  - Ensures data availability for operations and remote monitoring with the use of enhanced visual inspection systems
  - Improves data privacy and security with stringent checks and control measures

- **Optimize Costs**
  - Reduces data transmission costs with focus on efficient service delivery
  - Optimizes asset usage with reduced data traffic between the edge and the cloud

The TCS Advantage

TCS is uniquely placed in terms of supporting the enterprises who wish to explore or leap into intelligent edge computing. Partnering with TCS brings the following advantages:

- **Domain Expertise**: The trifecta of contextual knowledge, a certified pool of associates in IoT edge services, cloud, machine learning, and data processing, and intense domain expertise in sectors such as manufacturing, retail, oil and gas, and telecom for over 40 years makes TCS an obvious choice for edge computing services. Our certified subject matter experts and professionals have an industry background and strong product knowledge. They are well-versed in delivering strategic solutions to fulfill the varied requirements of different customers with ease.

- **Intellectual Property**: As an industry leader, TCS brings into play its homegrown IoT and intelligent edge platform solutions such as a TCS Connected Universe Platform (TCUP), TCS Intelligent Edge Gateway, and asset tracking units. Our Machine First Delivery Model (MFDM™) focuses on automation for exponential value.

- **Strategic Partnerships**: Our extended ecosystem of powerful alliances with leading-edge vendors, such as AWS, Microsoft, Google, Intel, Nvidia, HPE, Nutanix, Dell and CISCO, helps future-proof IT operations with intelligent edge computing platform solutions at optimized costs.
Edge Computing Services
Cognitive Business Operations

To know more
Visit the Cognitive Business Operations page on tcs.com
Email: cbo.marketing@tcs.com

About Tata Consultancy Services Ltd (TCS)
Tata Consultancy Services is an IT services, consulting and business solutions organization that has been partnering with many of the world’s largest businesses in their transformation journeys for over 50 years. TCS offers a consulting-led, cognitive powered, integrated portfolio of business, technology and engineering services and solutions. This is delivered through its unique Location Independent Agile™ delivery model, recognized as a benchmark of excellence in software development.

A part of the Tata group, India’s largest multinational business group, TCS has over 453,000 of the world’s best-trained consultants in 46 countries. The company generated consolidated revenues of US $22 billion in the fiscal year ended March 31, 2020, and is listed on the BSE (formerly Bombay Stock Exchange) and the NSE (National Stock Exchange) in India. TCS’ proactive stance on climate change and award-winning work with communities across the world have earned it a place in leading sustainability indices such as the Dow Jones Sustainability Index (DJSI), MSCI Global Sustainability Index and the FTSE4Good Emerging Index. For more information, visit us at www.tcs.com.

For TCS global news, follow @TCS_News.

All content / information present here is the exclusive property of Tata Consultancy Services Limited (TCS). The content / information contained here is correct at the time of publishing. No material from here may be copied, modified, reproduced, republished, uploaded, transmitted, posted or distributed in any form without prior written permission from TCS. Unauthorized use of the content / information appearing here may violate copyright, trademark and other applicable laws, and could result in criminal or civil penalties.

Copyright © 2021 Tata Consultancy Services Limited
www.tcs.com