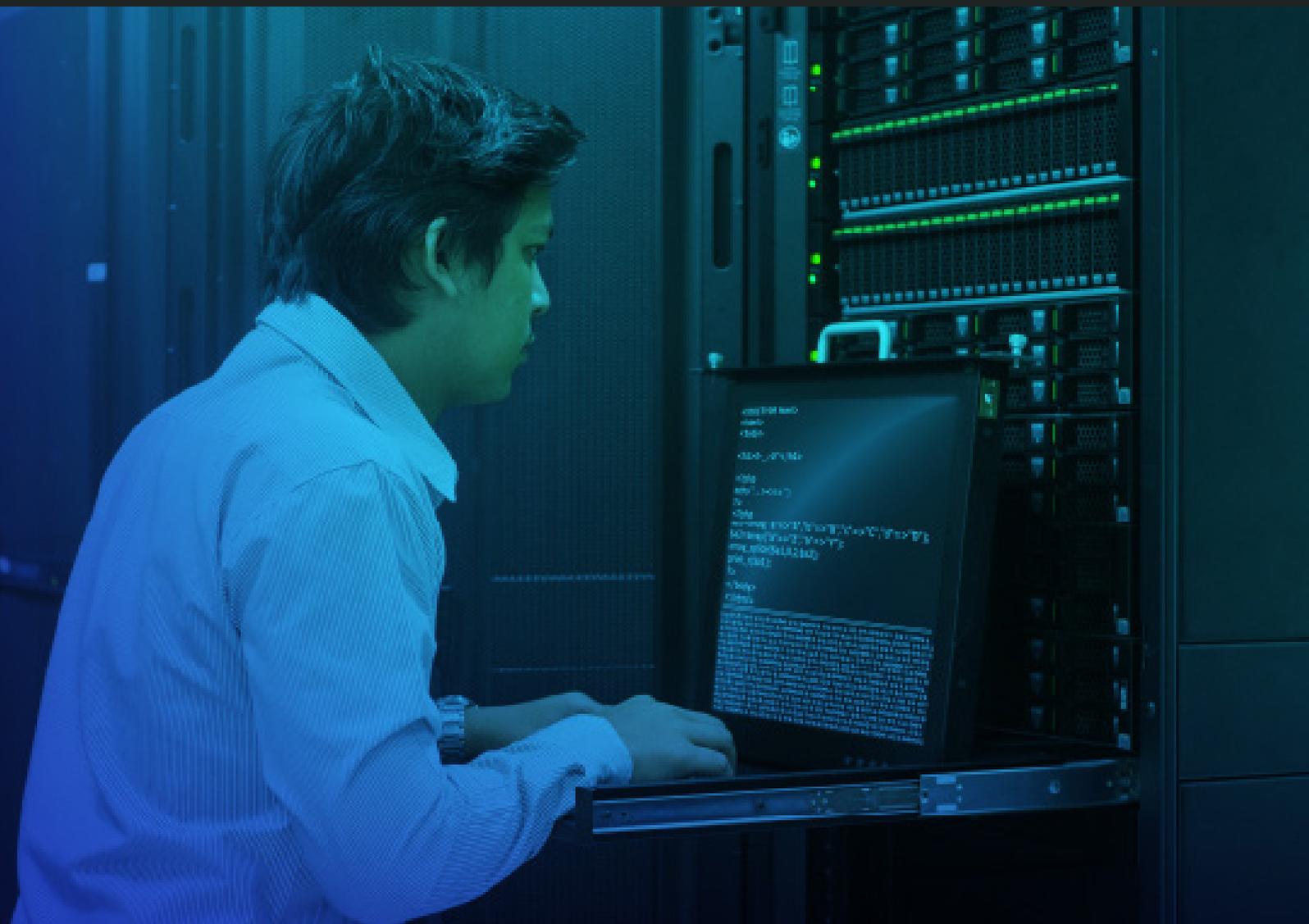


Mainframe Migration and Modernization on Azure

Microsoft Business Unit



Changing business needs have pushed enterprises to decouple monolithic applications and look at migrating and modernizing their systems based on four key tenets of Business 4.0™ – intelligent, agile, automated, and on-cloud. By doing so, enterprises can lower the total cost of operations, gain agility and improve the speed to market, while maintaining security and compliance requirements, which in turn can build a purpose-led, resilient and adaptable IT landscape.

TCS Mainframe Migration and Modernization on Azure incrementally improves and adds capabilities to migrate existing core systems to Azure cloud by leveraging a combination of adoption paths: rehost, refactor and refactor modernize. A solution that combines easy data access and artificial intelligence-based analytics tools – including business intelligence, machine learning, and advanced cognitive services in areas such as vision, speech, language, decision-making, and search – ensures digital enablement by delivering client-specific applications from Azure.

Overview

With growing and developing business needs, organizations need to keep mainframe applications updated to reduce high response times and scale as per their needs. Built on legacy systems, mainframe applications limit organizations from creating an agile environment due to limited options for real-time integration, business intelligence, and analytics, making collaboration with machines and humans inefficient. The monolith architecture of the legacy mainframe systems provides an archaic user interface and increases the technical debt of the organization leading to longer change management cycles and lower flexibility. Further, due to the increasing use of digital technologies in business operations, there is a shortage of mainframe subject matter experts (SME) and resources, adding to the higher total cost of ownership of these legacy systems.

TCS Mainframe Migration and Modernization on Azure is a comprehensive migration and modernization solution that helps enterprises move their mainframe workload to Azure seamlessly. Bundled with offerings such as TCS MasterCraft™ powered reverse engineering and forward engineering, the solution leverages the latest technologies and architecture styles like microservices and event-driven architectures to facilitate a simple movement of the mainframe ecosystem to Azure cloud with minimal changes and low costs.

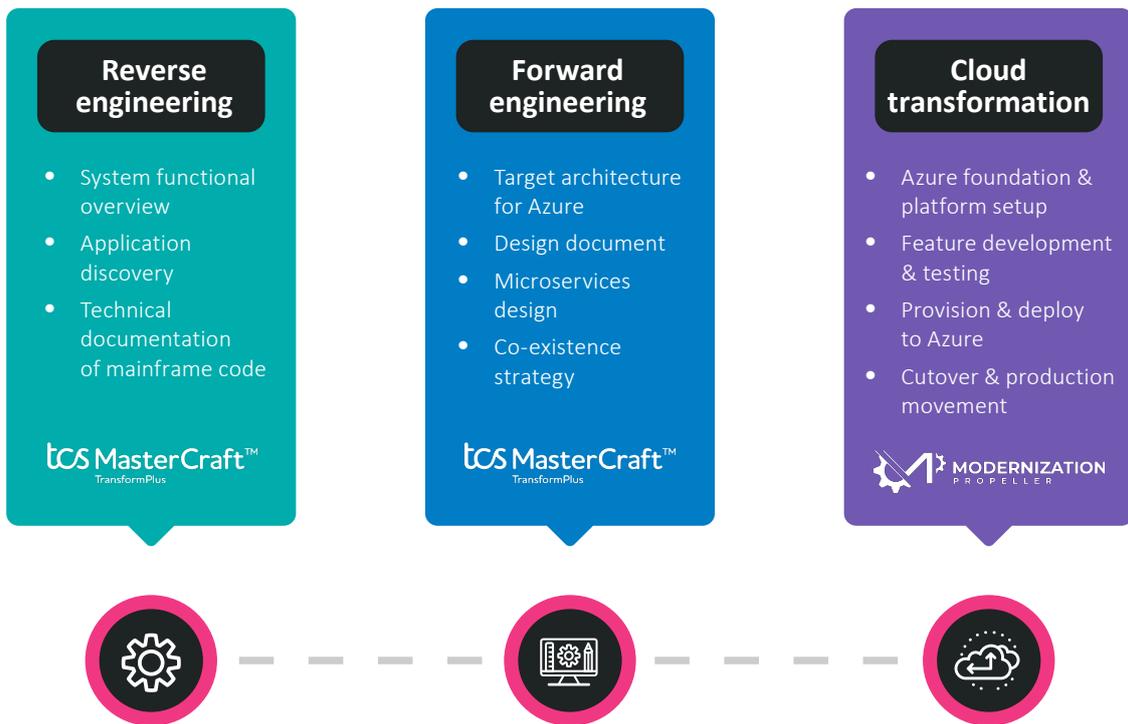


Figure 1: Key features of TCS Mainframe Migration and Modernization solution

Our solution

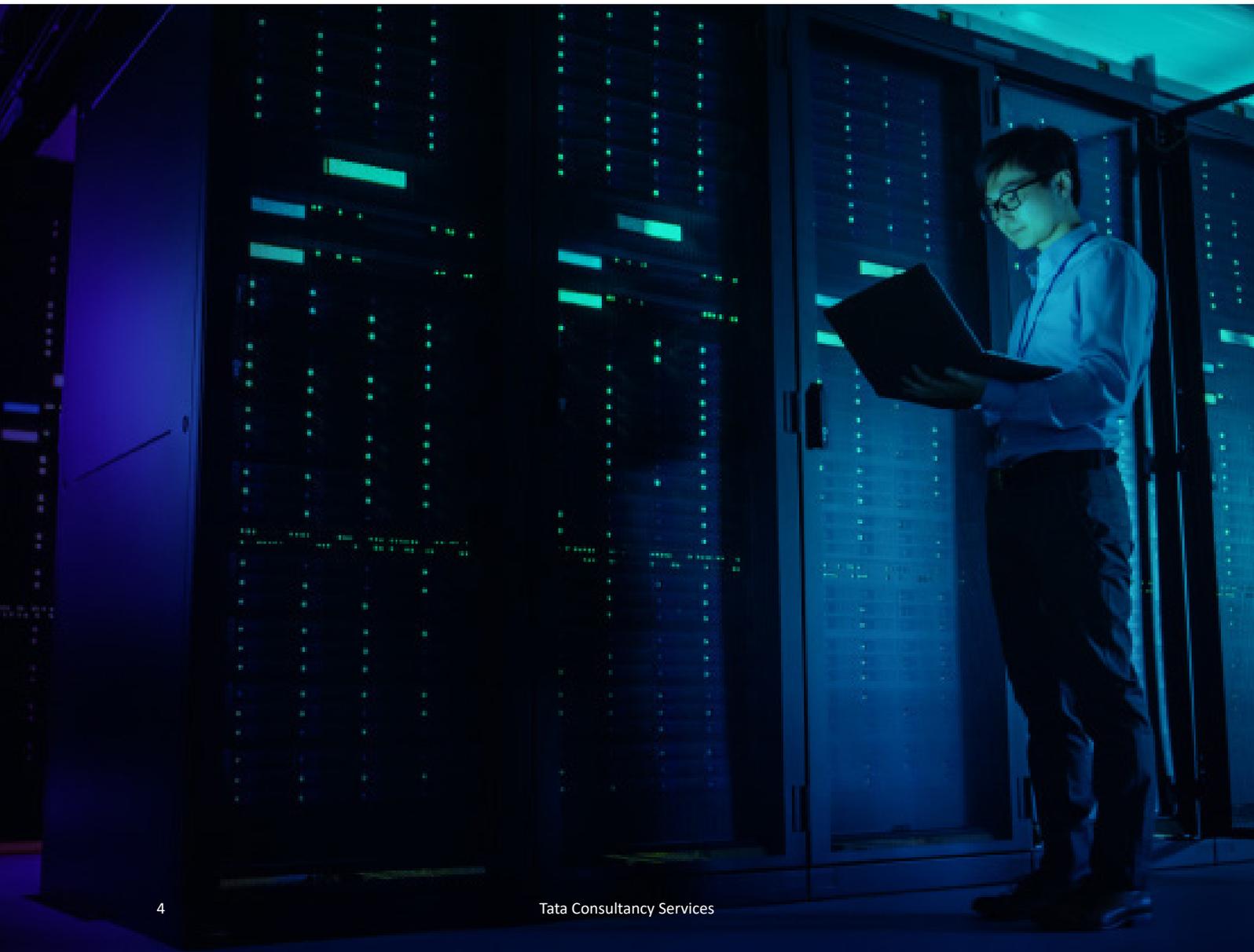
TCS Mainframe Modernization and Migration on Azure provides the following offerings (see Figure 1) to enterprises looking for legacy application modernization:

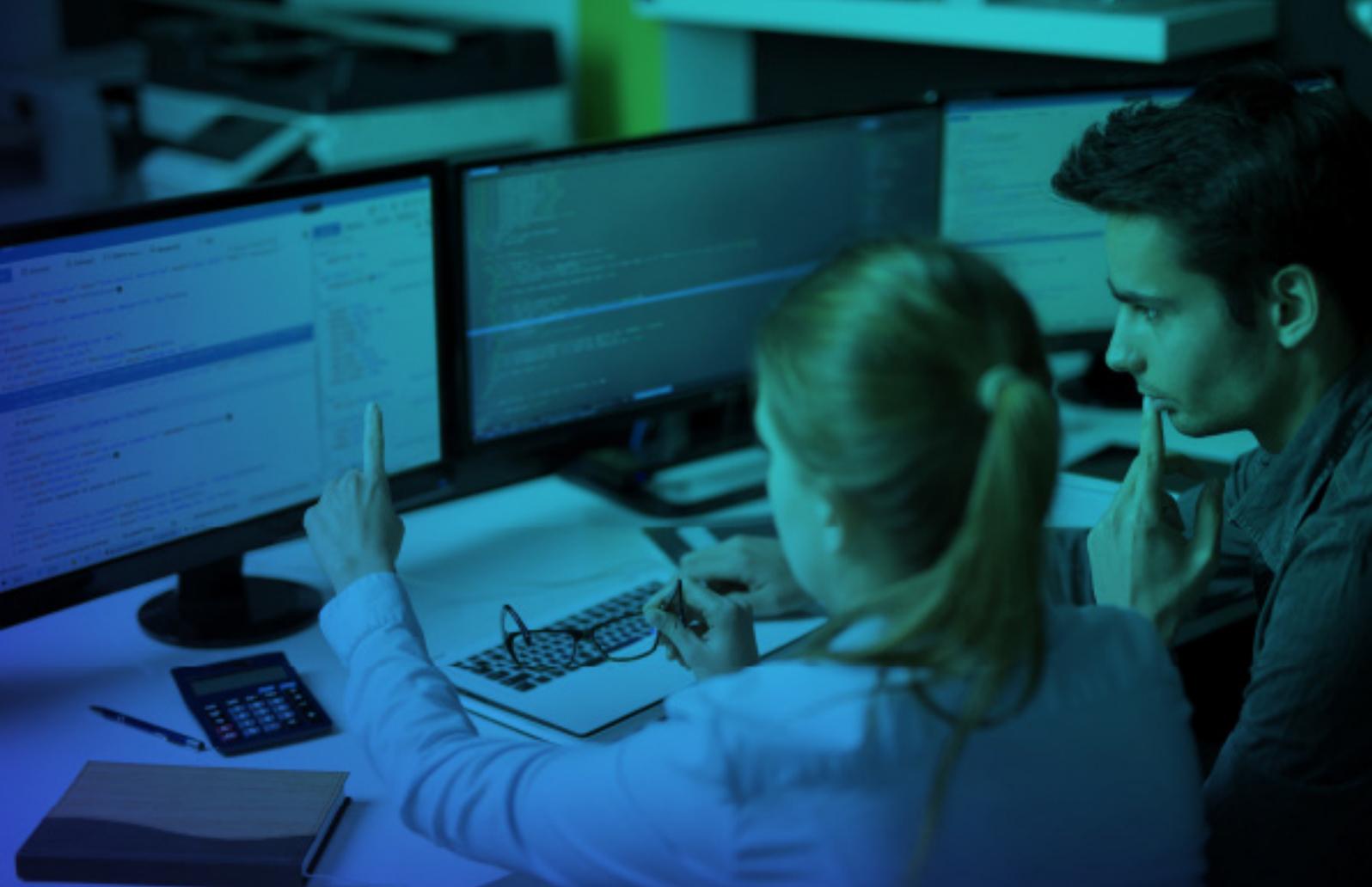
- **Reverse engineering:** Conduct an analysis of the current state of mainframe application from existing documents and codebase to identify dependencies or analyze application code and extract business logic in the absence of information.
- **Forward engineering:** Create backlog for to-be applications with high-level technical architecture and migration or microservices design strategy. Leverage forward engineering to finalize Functional Specification Document.
- **Native transformation:** Design, build, test, and deploy the application on Azure by utilizing cloud services and Azure foundation setup for detailed technical architecture and design, feature development and testing, provisioning and deployment, and cutover and production movement.

Benefits

TCS Mainframe Modernization and Migration on Azure provides the following benefits to organizations:

- **TCO reduction and enhancement of operational efficiency:** Reduce computation costs and mainframe hardware upgrade costs by up to 90% by migrating integral processes to Azure cloud. Enable new capabilities and improve the overall operational performance.
- **Increased agility:** Gain agility with reduced development and change cycles using CI/CD.
- **Technical debt reduction:** Reduce infrastructure deployment and maintenance costs by creating standardization, increasing utilization, lowering overall service life cycle costs, and meeting business needs for BI and analytics.
- **Increased workforce pool size:** Migrate to cloud and enhance the workforce mainframe skills with academic initiatives to support your mainframe applications.
- **High adaptability:** Enhance user experience with user interface modernization, data model transformation, and real-time integration.





Why TCS

A partnership with TCS can help enterprises leverage the following key differentiators:



Strategic partnership with Microsoft: TCS leverages its partnership with Microsoft to provide need-based expert guidance and research-backed solutions for seamless migrations. We work closely with the SMEs at Microsoft to provide world-class modernization services to our partners and help them derive exponential business value.



TCS' proven expertise in mainframe modernization: With decades of experience in migrating mainframe applications and our deep specialized knowledge of business domains such as financial services, retail, and manufacturing, we have analyzed more than 500 million lines of code and hold more than 250 patents. We leverage our contextual knowledge and mainframe technology resource pool to help deliver business excellence and reduce the time for reverse engineering and capturing the as-is state.



Accelerators: TCS' experience in building key accelerators such as TCS Cloud Mason, TCS MasterCraft™, Modernization Propeller, and C2J Converter helps enterprises automate and accelerate their mainframe modernization journey.



Solution differentiators: With solution differentiators such as industry-specific reference architecture and best practices on mainframe modernization in Microsoft Azure, and rapid batch processing with native Azure services like Azure data factory and data bricks, we help deploy pre-built and pre-configured development frameworks for faster development cycles.

Contact

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