

Making Payments Real-Time and Invisible – TCS BaNCS for Market Infrastructure



The case for real-time is increasingly apparent

The payments industry is going through modernization the world over. Just as real-time services are now an expected norm in many activities of everyday life; so also, are faster or real-time payments. With most countries driving increased adoption of cash-less payments to drive efficiency, speed and reduce risk, the time for modernization of the payments infrastructure has arrived. Traditional payment systems were designed for corporates; the increased proliferation of mobile devices and the Internet has created a compelling need to cater to digital retail payments that are modern, fast and immediate. Apart from the immediacy, always on 24*7 nature of real-time or invisible payments as they are called today, their potential to create significant economic benefits, deepen the penetration of digital banking in a country and act as a foundation for the modernization of the payments services on the whole is fast gaining traction among countries worldwide.

Central Banks and Central Payments Infrastructures in various countries have realized this emerging need and have begun transforming their national payment systems. The TCS BaNCS for Market Infrastructure solution is well-placed to help central banks and central payments infrastructures worldwide in developing a modern, high performance, standards compliant, real-time central payments solution. Backed by TCS' experience in building the successful national payment infrastructure in India, its global presence in leading clearing and settlement organizations world and the product's track record of having been deployed at leading financial institutions across more than 30 countries, it can help central banks and central payments infrastructures give their customers a secure, predictable, speedy and flexible solution for real-time payments.

Adding Value, Convenience and Speed

To satisfy the immediacy or the invisible nature of real-time payments, a payments infrastructure would have to instantly debit and credit payers' and payees' accounts and confirm the transfer and availability, all in a matter of seconds. The focus of real-time payments solutions is to create a robust, secure, resilient and high-performance central clearing and settlement infrastructure to handle retail and corporate payments in an efficient manner. While there are solutions in place for handling corporate payments, there has been a significant shift and focus on providing a real-time solution for retail and low value payments.

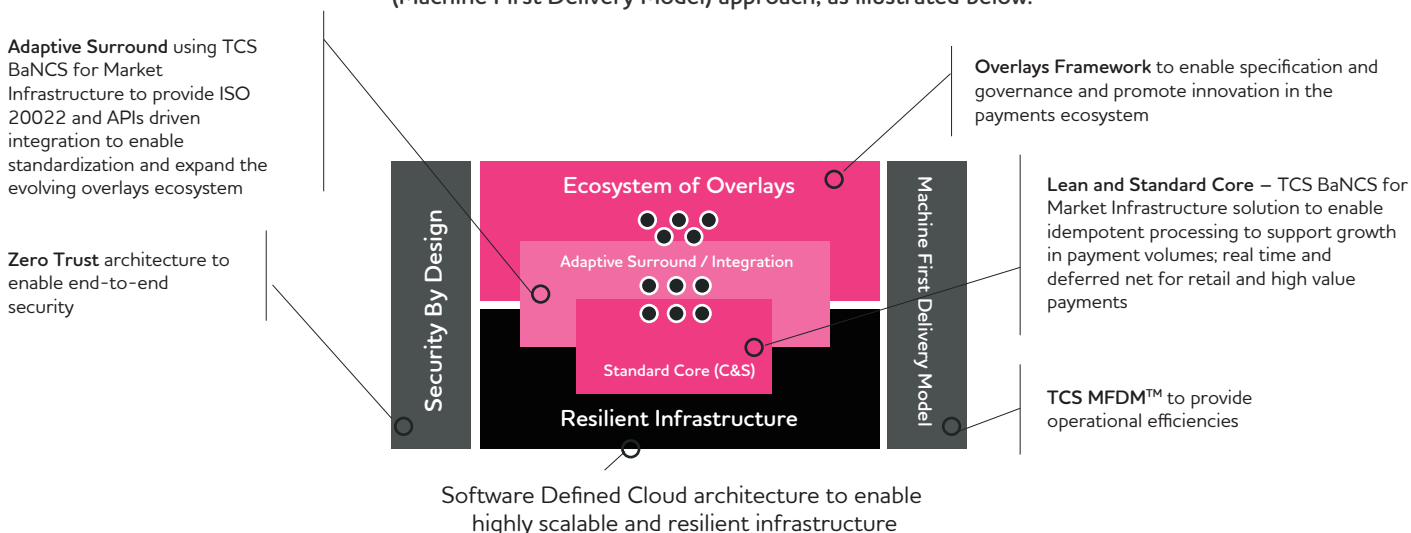
That's where the futuristic solution from TCS comes into the picture. TCS BaNCS for Market Infrastructure has been deployed at more than 30 leading market infrastructure organizations worldwide combined with our track record of working on payments businesses across the world makes us the preferred provider of choice.

The Central Payments Infrastructure Solution

TCS BaNCS for Market Infrastructure's offering for real-time payments is targeted at helping central banks and central payments infrastructures in building a high-performance payments platform. Designed for high performance and low latency using the HpTM framework and deployed as microservices, the clearing and settlement solution enables real-time and deferred net settlement for retail and high value payments. The unique unified clearing approach provides for consolidation of the multiple payment rails in a single solution and yet provides the flexibility and configurability to cater to a differentiated payments infrastructure. The full ISO 20022 support enables standardization while the APIs enable easy integration with overlays, expanding the reach of the payments ecosystem

Designed and developed on the premise of TCS' Business 4.0™ thought leadership framework, it can help our customers realize true exponential value resulting in nation-wide changes to payments systems.

The solution combines the TCS technology stack for cloud, security, and business operations and employs a MFDM™ (Machine First Delivery Model) approach, as illustrated below.



TCS BaNCS Solution for Central Payments Infrastructure

This central payments infrastructure offering is augmented by:

- A co-existence approach to blockchain enabling end-to-end business functions on blockchain and other digital technologies
- A componentized microservices-based solution that makes the solution agile, scalable, and flexible
- A unique HpTM (High Performance Transaction Management) design framework built for high performance and low latency
- A rich set of APIs to help our customers integrate their infrastructure with larger payment ecosystems for developing payment overlays and new payment channels while standardizing the core clearing and settlement model
- Through TCS BaNCS Cloud and our ability to create an ecosystem for various payments providers and fintechs to integrate and launch innovative new services
- TCS Machine First Delivery Model (MFDM)™ approach that helps organizations transform to technology-led operations using Artificial Intelligence and Machine Learning to improve their business operations and optimize their costs

Benefits

With TCS BaNCS for Market Infrastructure, central banks and central payments infrastructures across the world get the following benefits:

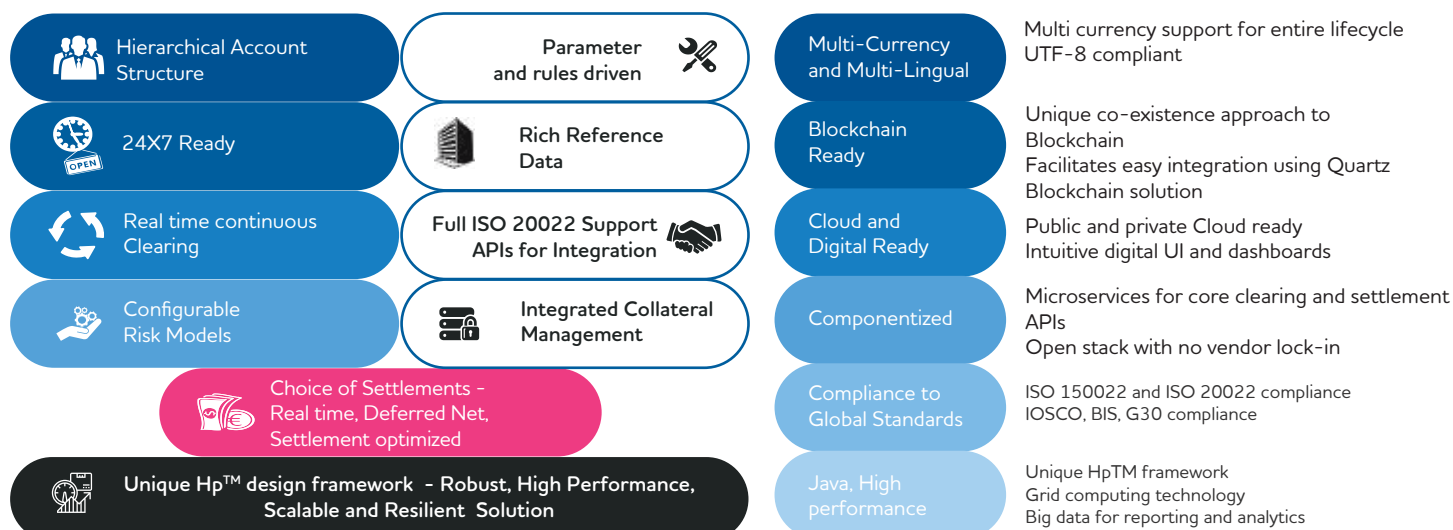
- **Rich functional coverage:** Support for direct and indirect participants, support for credit push/transfer, payee confirmation, request for pay, Integrated timer management and parameter driven workflow management
- **High performance and 24*7 ready**
- **Integrated Collateral management:** Support for funding and de-funding
- **Multi-currency and choice of settlement models:** Real-time gross, deferred net, settlement optimized with multi-currency support for the entire life cycle
- **Alerts and Notifications:** Configurable alerts and notifications, threshold management
- **Proxy resolution:** Integrated Quartz Smart Solution for Proxy resolution with support for both local nodes and distributed nodes
- **Future-ready technology:** Future-proof your central payments infrastructure for digitally connected, real-time ecosystems with blockchain-ready (with Quartz plugin) and cloud-ready solution.
- **Multilingual support:** Our UTF-8 compliant solution extends support for multiple languages throughout the customer lifecycle.
- **Compliance with global standards:** Our solution is compliant with global regulations for messaging such as ISO 150022 and ISO 20022, along with APIs support for integration

The TCS BaNCS Advantage

With experience in implementing solutions at critical market infrastructure organizations in 30+ markets around the world, TCS BaNCS for Market Infrastructure is the go-to partner for core payments consolidation, modernization, digitization, and payment initiatives.

By partnering with TCS, you can enjoy the following advantages:

- **Deep domain expertise:** As a sizeable BFSI solution provider with a range of IT services such as security, cloud, IT infrastructure, hosting, and business operations, TCS has unmatched deep domain expertise in implementing digital solutions.
- **Market Presence:** TCS experience in implementing solutions at critical national and market infrastructure organizations such as – CSDs, CCPs, Exchanges and Central Banks and our track record of working on payments business around the world.
- **Modern, standards-compliant solution:** Veteran industry operators offer solutions that are outdated and inflexible. With TCS, you get a robust, high performance and low latency clearing and settlement solution for market infrastructure that complies with all mandatory international standards and regulations.



Benefits that TCS BaNCS for Market Infrastructure offers to central payments processing enterprises globally

The TCS BaNCS advantage for central payments infrastructures organizations

About TCS BaNCS

TCS BaNCS' comprehensive product portfolio is dedicated to providing business solutions to financial institutions globally. The solution suite is designed to help financial services institutions enhance end customer experience, enabling them to embrace open and innovative technologies that embody true digital customer engagement. Deployed at more than 450 installations worldwide, it is the largest collection of components, enterprise and consumer apps for the financial industry made available through the cloud, helping firms become more agile and intelligent by leveraging the power of new and extended ecosystems.

To know more about TCS BaNCS, please visit: <https://www.tcs.com/bancs> or write to us at tcs.bancs@tcs.com

About Tata Consultancy Services Ltd (TCS)

Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other can match. TCSers a consulting-led, integrated portfolio of IT and IT-enabled infrastructure, engineering™ and assurance services. This is delivered through its unique Global Network Delivery Model, recognized as the benchmark of excellence in software development. A part of the Tata Group, India's largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

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