



Powering efficient banking at scale

A leading National Bank's Digital Core transformation with Intellect

Bangladesh, APAC | eMACH.ai Core Banking

Client Overview

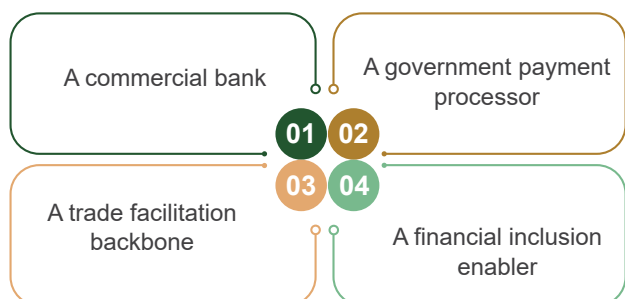
Founded in 1972 after the independence of Bangladesh, the bank Limited emerged through the consolidation of major legacy banks to become the country's largest state-owned commercial bank.

Unlike a traditional commercial bank, the bank functions as a **financial operating system** for the nation.

It executes government treasury transactions, social safety-net payments, trade finance for strategic projects, remittances, agricultural lending and public sector disbursements across the country.

In districts where the central bank has no presence, the bank acts on its behalf - effectively extending sovereign financial infrastructure to every region.

The institution therefore operates simultaneously as:



This dual mandate makes scale and reliability not merely operational goals - but economic necessities.

The bank in numbers

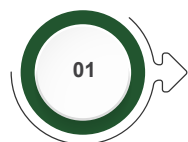
Metric	Latest Data (as of Jan 2026)	Observations
Total Accounts	~45.2 Million Active	Growing toward 79M; bolstered by mandatory govt. digital payrolls.
Daily Transactions	~5M+ during peaks	Reaches upper limit during month-end salary and pension cycles.
Bank Staff (Users)	27,000 staff users	Staffing has been optimized/reduced through automation and agent banking.
Trade Transactions	USD 6 Billion in Transactions	Remains the primary agent for the national treasury.
Loan	USD 8.5 Billion in Loans	Across segments like SME, Agriculture, Corporate, Trade.

The Challenge: Modernizing a National Financial Backbone

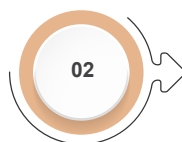
Challenges: Modernizing a 40-Year-Old Legacy

As the nation's primary financial engine, the Bank's legacy environment was more than a technical hurdle—it was a bottleneck for the nation's "Smart Bangladesh 2041" vision. The bank faced a "trilemma" of skyrocketing transaction

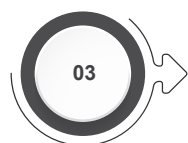
volumes, increasing regulatory scrutiny, and a fragmented technological foundation that hindered its role as an economic stabilizer.



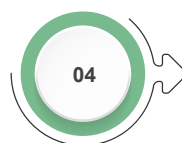
PLATFORM FRAGMENTATION
No single source of truth across four legacy systems and manual records, creating data silos across the 1,200+ branch network.



OPERATIONAL RIGIDITY
Product and scheme rollout took up to 60 days, and a USD 4.2 billion national trade business relied on spreadsheet-based processing, creating transparency gaps and operational risk.



GOVERNANCE & COMPLIANCE GAP
Regulatory reporting relied on manual consolidation, limiting real-time visibility into financial position and NPL risk.



SCALABILITY & CONTINUITY RISK
Legacy infrastructure was unable to scale to the projected 79 million accounts required for the "Smart Bangladesh 2041" vision. Migration of decades of financial data and treasury operations with zero downtime requirement.

The eMACH.ai Advantage: A Unified Enterprise Platform

The Bank partnered with Intellect to implement a centralized, real-time banking environment. The solution replaced fragmented legacy systems with a single integrated enterprise

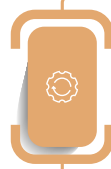
architecture covering Core Banking, Lending, Trade Finance, and Treasury.

Key Architectural Pillars

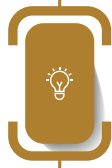
Unified Real-Time Core: Migrated all 1,200+ branches to a single centralized ledger, providing a "single source of truth" for 45M+ accounts.



iTurmeric Integration Platform: Enabled high-speed connectivity to national payment systems through an API-first framework, reducing integration complexity.



Trade Finance Digitization: Automated end-to-end LC (Letter of Credit) lifecycles, transforming the bank's spreadsheet-driven workflows into a streamlined digital process.



Automated Regulatory Reporting: Established system-driven compliance for Bangladesh Bank reporting, shifting from manual data collection to real-time operational visibility.



Strategic Implementation: The Go-Live Milestone

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UAT & Simulations: Conducted multiple rounds of business-flow simulations and UAT with migrated data to ensure zero-defect delivery.

Data Migration: Successfully reconciled and migrated records from four legacy systems and manual paper ledgers into the new centralized core.

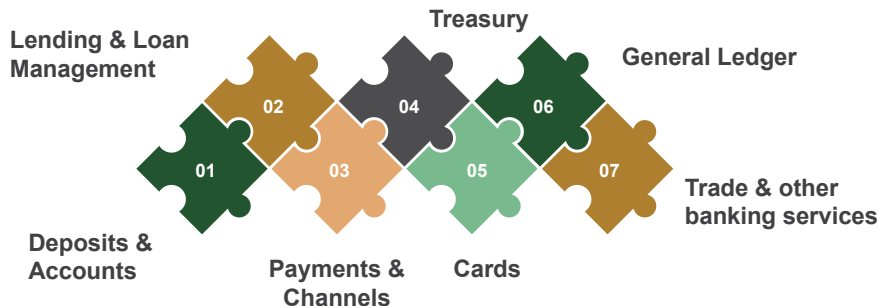
Phased Rollout: Strategically timed deployment ensured minimal disruption to national government disbursements and treasury functions.

About eMACH.ai Core Banking

Intellect Consumer Banking's eMACH.ai Core Banking is a next-generation unified banking platform designed to serve

Retail, SME, and Commercial banking segments on a single architecture.

The platform provides a comprehensive suite of banking capabilities covering:



Built on a cloud-native microservices architecture, eMACH.ai delivers high scalability, agility, and resilience, enabling banks to rapidly adapt to changing business and regulatory requirements.

The platform also embeds **AI-first customer journeys**, enabling intelligent automation, contextual servicing, and hyper-personalized customer experiences.

Its **Open Finance framework** enables access to country-ready ecosystems and marketplaces, while the **headless architecture** allows seamless integration with any digital banking, fintech, or third-party platform.

With eMACH.ai Core Banking, banks can modernize operations, launch innovative products faster, and deliver intuitive, responsive banking experiences aligned with evolving customer expectations.

The Horizon: A Strategic Foundation for Smart Bangladesh 2041

This transformation is not a final destination but a strategic foundation aligned with the "Smart Bangladesh" national agenda. The Bank is now positioned to:

Increase Straight-Through Processing (STP) to further eliminate manual intervention in government payments.

Expand Digital Ecosystems by introducing new citizen-centric mobile channels through its API-led architecture.

Scale to 79 Million Accounts by 2030, ensuring the bank remains the primary engine of the nation's economy.

The Bank has transitioned from a fragmented legacy institution into a unified national digital backbone-ensuring reliability today and scalability for decades to come.

BUSINESS IMPACT: DELIVERING EXCELLENCE AT SCALE

The transformation of the Bank has transcended a mere technology upgrade, evolving into a fundamental shift in how the nation of Bangladesh banks. By moving to a unified,

real-time architecture, the bank has achieved excellence across four strategic dimensions:

1. OPERATIONAL EXCELLENCE & VELOCITY

The transition from fragmented legacy platforms to a centralized real-time core significantly improved operational efficiency across the bank's 27,000+ users and branch network.

Processing Speed: End-of-Day (EOD) processing, which previously required more than **4 hours** of manual consolidation across branches, is now completed in **50 minutes 43 seconds**.



Closing Agility: Month-end financial closing, earlier taking **more than one day**, is now finalized in **2 hours 19 minutes 42 seconds**, providing timely financial visibility to management.



Year-End Consolidation: Annual closing cycles reduced from **2 days** to **8.5 hours** through centralized processing.



Market Responsiveness: Time required to introduce new schemes and products reduced from **over 60 days** to **one day**, enabling rapid execution of regulatory and business changes.



2. FINANCIAL PERFORMANCE & RECOVERY

Operational modernization contributed to measurable improvement in financial stability and recovery capability.

- 01

Profitability Improvement: The bank achieved an operating profit of approximately **USD 518 million**, representing a **48% increase** over the prior period performance baseline.
- 02

Asset Quality Improvement: Real-time credit monitoring and early-warning signals enabled recovery of approximately **USD 116 million** from classified (NPL) loans.
- 03

Enhanced Shareholder Value: Net profit reached approximately **USD 79 million**, while Return on Equity (ROE) improved to **8.86%**, reflecting stronger institutional performance.

3. SCALABILITY & CUSTOMER TRUST

Operational reliability at scale strengthened confidence and supported continued growth.

- Strong Deposit Base:** The bank manages approximately **USD 15 billion in deposits**, reinforcing its position as a trusted custodian of funds.
- Future-Ready Scale:** Scaled from a **15-million account legacy baseline to 45.2 million active accounts**, with architecture designed to **support 79 million**.
- Digital Adoption:** Digital wallet and corporate internet banking adoption increased significantly, shifting large transaction volumes from branch counters to secure electronic channels.

4. NATIONAL ECONOMIC ENABLEMENT

As a public sector bank, impact extends beyond operations into economic service delivery.

- Trade Facilitation:** Approximately **USD 4.2 billion** in import/export transactions are processed through digitized workflows supporting national supply chains.
- Social Disbursements:** The platform enables real-time distribution of pensions, social benefits and agricultural credit across remote regions.
- Sustainable Finance:** Around **USD 114 million** in green financing has been supported, integrating environmental responsibility into lending activities.

