



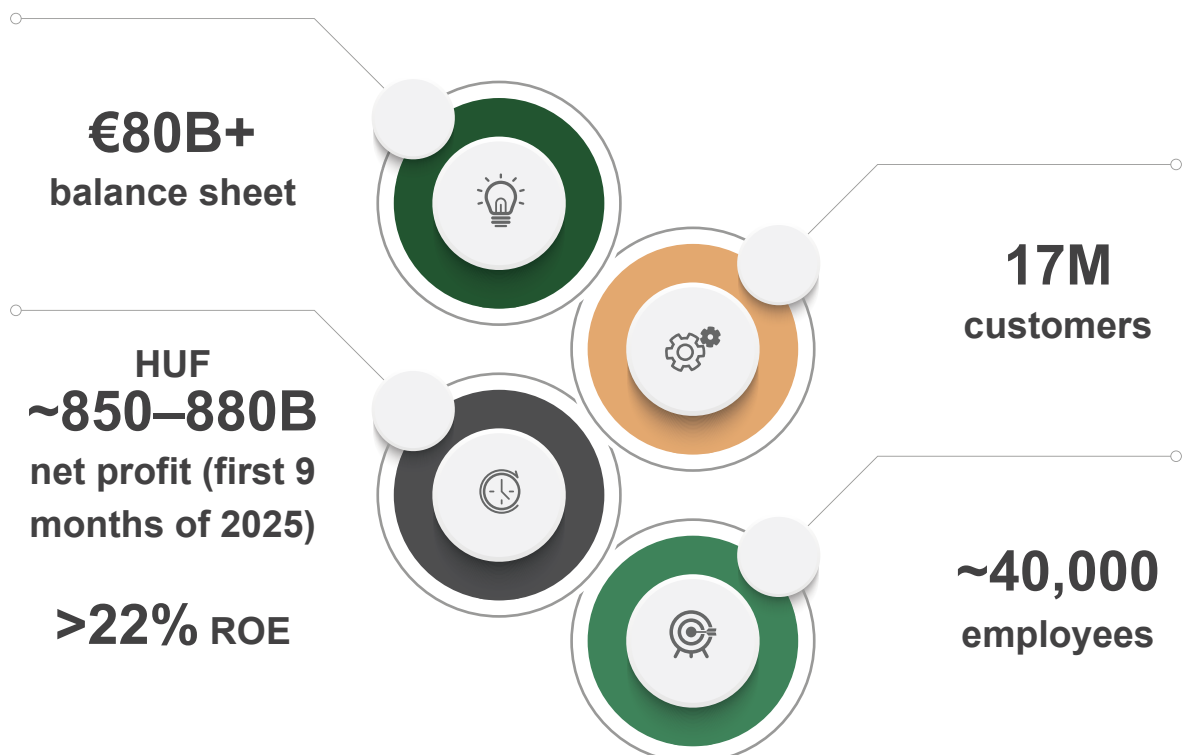
Modernising Core Banking & Lending for the largest commercial bank with Intellect's eMACH.ai

Hungary, Europe
eMACH.ai Core Banking

Client overview

As Hungary's largest financial services provider, the Group is a leading banking entity across Central and Eastern Europe, serving **17 million customers across 11 countries**. With

international subsidiaries contributing a growing majority of profits, the bank's operating model demands multi-country scalability, agility, and consistent control across diverse markets.



Background

The bank embarked on an enterprise-wide modernization program to transition from legacy, monolithic constraints to a cloud-native, API-first, event-driven banking platform capable of supporting rapid product innovation, real-time processing, and multi-country scale.

The bank's modernization program was driven by a clear set of transformation needs. Its legacy constraints—anchored in a monolithic, nearly two-decade-old mainframe stack—were slowing product launches and creating operational bottlenecks. At the same time, the shift to real-time market infrastructures demanded millisecond-grade processing to support modern payment rails and high-speed transaction expectations. Customer needs were also evolving rapidly, requiring modernization of core journeys through omnichannel servicing, faster loan turnaround, and transparent status tracking. In parallel, regulatory and governance requirements were intensifying, with higher expectations for granular disclosures, stronger risk controls, and tighter supervision. Finally, competitive pressure from fintech challengers and expanding open banking ecosystems was accelerating innovation cycles, making agility and extensibility essential for sustaining market leadership.

The bank conducted a comprehensive, multi-stage vendor selection program starting with an RFI and RFP, followed by multiple product demonstrations and proof-of-concept evaluations. The process culminated in the shortlisting of three vendors for a rigorous six-month PoC, executed through a sprint-based agile methodology across four parallel banking streams using complex, real-world use cases. Cross-functional teams from the bank and Intellect worked together throughout to clarify requirements, validate solutions, and review outcomes at the end of each sprint through structured demos and scorecards. Based on the cumulative results and performance against

defined success criteria, Intellect was selected as the preferred partner, deemed best suited to deliver a core banking transformation at the Group's scale.

Through this transformation program Intellect addressed several structural challenges of the bank: high change-cost and slow release cycles driven by monolithic systems, fragmented integrations across a complex ecosystem of 100+ connected systems that increased operational risk, and the need to standardize operations through a unified yet flexible model that could still accommodate country-specific requirements. In addition, Intellect provided the Group with strict performance rigor to reliably support real-time customer journeys and event-driven interactions across the ecosystem, while also strengthening modern governance controls—ensuring auditability, compliance readiness, and end-to-end operational resilience.

About eMACH.ai Core Banking

Intellect Consumer Banking's eMACH.ai Core Banking platform offers a unified solution for Retail, SME, and Commercial banks. Its comprehensive product suite offers a complete spectrum of banking solutions, including Lending, Channels, Treasury, Deposits, Cards, and GL, amongst others. Leveraging a cloud-native microservices architecture, eMACH.ai Core Banking provides scalability and flexibility to meet market demands. Its Open Finance capabilities enable access to country-ready marketplaces, while the headless architecture ensures seamless integration with any digital banking platform. Additionally, AI-first journeys enrich customer interactions, making banking more intuitive and responsive. With eMACH.ai Core Banking, banks are empowered to deliver innovative solutions that meet the needs of today's clients.

100+

Ecosystems Integrated

200+

APIs

50+

Microservices

100+
Events

300+
User Journeys

Built to support progressive modernization at scale

- **Single Code Base** - Key differentiator is the unified single code base across both the installations with install level configurations.
- **Event Based Approach** - Entire ecosystem communicated with one another in an async fashion through event publisher/subscriber mechanism.
- **Unique Operating Models** - Using a single code base across Hungary and Bulgaria that have different operating models was an interesting problem to solve. The bank followed a Federated Balance Management architecture where RTB (an ecosystem component) is the source of truth for balance.
- **Performance Optimization** - Performance was key, where every response to API calls, event emission statistics were checked for performance and categorized as Category A, B and C models.
- **Documentation & Artifacts** - Given the size of the program, documentation and attention to details was key for the success of the project.

The eMACH.ai Advantage

Intellect delivered a full-stack modern eMACH.ai Core Banking implementation covering retail and corporate/SME banking with integrated lending capabilities, including:

- **Client Data Management** — Centralized customer information into a single 360° view, enabling compliance, personalization, and analytics.
- **Demand and Term Deposits** — Manages real-time posting, interest accrual, and flexible product structures for Current, Savings and fixed deposits.
- **Sub Ledger & Accounting** — Ensures accurate financial postings with real time GL reporting and handoff.
- **Pricing Engine** — Delivers configurable pricing rules and seamless interface with the Payment processors for computation.
- **Loan Management System** — Retail & corporate loan booking, disbursement and management with seamless integration with the core banking and other external systems.
- **Overdrafts & Limits** — Provides dynamic limit management, overdraft facilities, and real-time limits update.
- **iTurmeric Integration & Workflow** — Connects with iTurmeric for orchestration, workflow automation, and low-code configuration of new processes.

Built to support progressive modernization at scale

The project used a phased approach to minimize risk:

Pilot Launch

The "Minimum Viable Product" (MVP) launched with 5–10% of retail loan volume.



Efficiency Goal

At least 80% of retail loans must be processed automatically.



Success Criteria

The bank required a data match of 99.99% between old and new systems.



Hypercare

A 24/7 command center supported the bank for 4 weeks after launch.



Way forward

The transformation will continue in five major waves:

Wave 1: Stabilize retail lending and improve decision models.

Wave 2: Launch SME (Small Business) lending and invoice financing.

Wave 3: Introduce Corporate and Syndicated loans.

Wave 4: Roll out advanced analytics for dynamic pricing.

Wave 5: Expand into Open Banking and marketplace lending.

Business impact: delivering excellence

- **Automation of Services** – With a headless proposition, every service is exposed as an API, thereby enabling bank's digital banking channel to use every feature available in the core banking system.
- **Accelerated Time to Market** – Parameter driven configuration ensured product launch cycles to shrink from months to days, with just a few clicks.
- **Real Time Processing** – With advanced technology under the hood of eMACH.ai Platform, balance integrity is made available to customers across channels (Branch, Mobile/Internet channel). This also enables 24*7 processing with zero downtimes.
- **Future Proofing** – The bank has come out of the legacy constraints and moved into a much sophisticated cutting edge technology that provides a lot of business benefit to compete with Fintechs.
- **Risk Mitigation** – With a structured progressive modernization, the bank has mitigated the risk of mass migration avoiding the Big Crash.

