

# Murex MX.3 Platform Powers Banorte Digitalization

## Latest milestone achieved in Mexican bank partnership

### Self-service functionality is live as MX.3 connects to Banorte's internal banking portal.

Grupo Financiero Banorte is a leading commercial bank in Mexico by assets and loans, and country's largest retirement fund administrator.

In March 2023, Banorte aimed to enable its corporate clients to independently perform FX derivatives transactions using its internal banking portal, Cambios Banorte en Línea (CBL), as a front end. Risk management, operational controls, confirmations and settlements are powered by Murex's MX.3 integrated platform back end, facilitating complete self-service functionality. The advanced capabilities of the MX.3 integration framework provide APIs and web services that expose platform business functions to a client ecosystem. The highest security and access management standards are maintained, including support for OAuth2, OpenID and JWT tokens.

Banorte increased its FX derivatives trading client servicing, providing competitive market prices and a smooth, time-saving trade booking experience. MX.3 empowers Banorte client corporate treasuries to operate at pace with evolving market dynamics.

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*The Banorte transformation journey has involved many breakthroughs for a Mexican bank. Some of these breakthroughs are associated with innovation, new product offerings, hedging capabilities, compliance with best practices and regulations, and improved risk controls and practices. However, one of the most significant milestones has been the self-service product offering. This offering aligns closely with Banorte's digital strategy and meets the specific expectations of our client base.”*

Abraham M. Izquierdo, managing director, traded and treasury risks

### Banorte enhances internal processes and time to market and expands its client base.

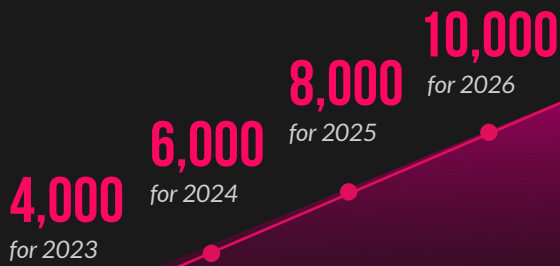
Banorte's client base has substantially increased, with a forecast doubling in 2023. Additionally, self-service product availability and real-time market quotes encourage existing clients to engage in more frequent, larger transactions. This growth is positive for market position and revenue.

The implementation resulted in enhanced internal processes for Banorte. MX.3 integration has eliminated manual capture needs. Operations are streamlined. Error and delay risk are reduced. Through automation, Banorte allocates resources more efficiently, translating to a 38 percent reduction of person-hours—over 1,200—for the users related. These saved hours are redirected toward enhancing productivity.

Banorte has seen an adaptation of culture, processes and mindset. Operational efficiency and time-to-market advantages are evident.

# Banorte digitalization journey figures

## Expected operations volume Trades forecast



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The implementation has primarily focused on internal processes and involved integrating the robust Murex engine with Banorte's banking internet portal.”

Sergio Burgos, executive director, IT



Serviceable  
Obtainable  
Market forecast  
growth for 2023

## MX.3 capabilities and functionalities in use:

- MX.3 APIs
- Pricing and valuation
- Limits checks, monitoring and management
- XVA computation: CVA, DVA, FVA
- Credit lines
- Back office, confirmations and settlements
- Accounting

A **38%** PERSON-HOURS

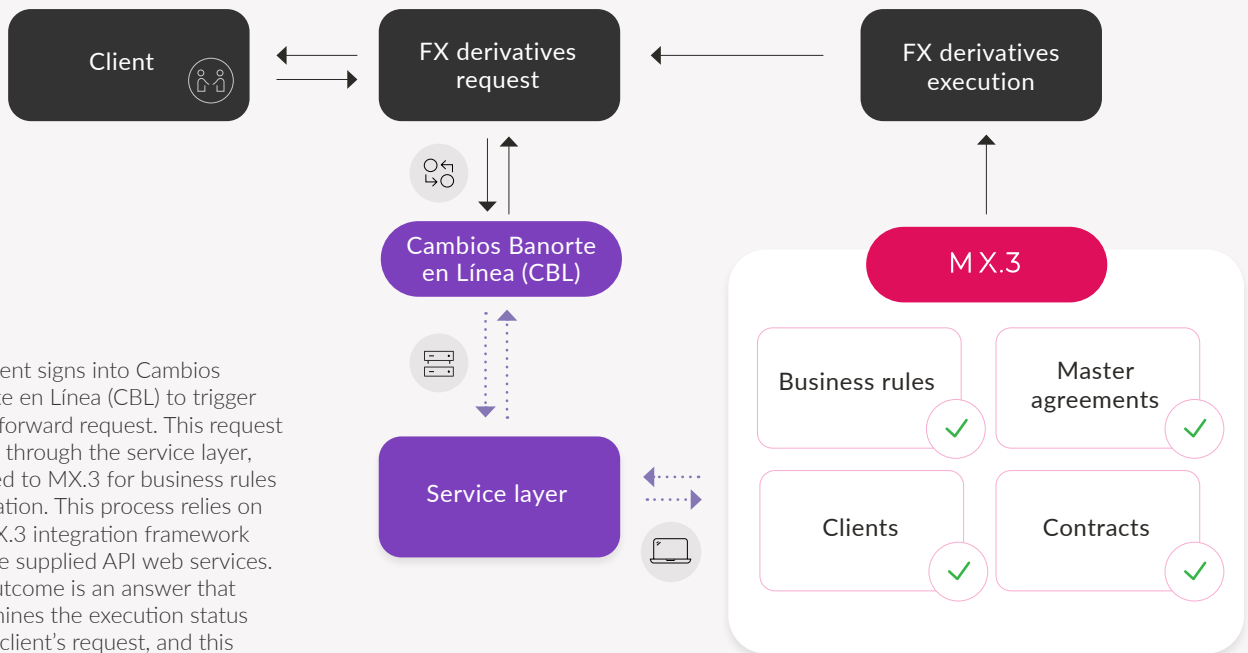
reduction translated to enhanced productivity.



## Banorte users involved during the implementation, by business function:

- 2 RISK AND COMPLIANCE
- 2 SALES
- 3 FX AND STRUCTURING DESKS
- 6 BACK OFFICE
- 8 IT TEAM

# Objective and Solution Architecture



The client signs into Cambios Banorte en Línea (CBL) to trigger an FX forward request. This request passes through the service layer, directed to MX.3 for business rules verification. This process relies on the MX.3 integration framework and the supplied API web services. The outcome is an answer that determines the execution status of the client's request, and this response is exposed in CBL.

Integration Message queues Web services

## A robust, tiered process has been implemented.

The tiered process ensures smooth client transactions and operational integrity, enforcing MX.3-executed steps:

**Credit line controls.** Banorte employs Monte Carlo simulation to construct expected collateralized exposure. Calculating consumption requires access to future market values and future collateral balance distributions. The process involves calibrating statistical models to predict FX behavior for specific lines and consumptions. Simulated computations combined with complex calibration models allow Banorte to increase trade volumes due to better, more accurate counterparty credit controls.

**Operational controls.** This involves verification of LEI codes, market prices, as well as contracts, confirmation letter generation and regulatory reports preparation.

**Financial activities.** Transactions, events and payments are recorded.

**Payment processing.** MX.3 generates flows and corresponding settlement instructions to facilitate seamless payment processing.

**Valuation.** Thorough pricing validation ensures accuracy.

**XVAs.** This encompasses the calculation of credit valuation adjustment (CVA), debit valuation adjustment (DVA) and funding valuation adjustment (FVA).

## Banorte and Murex apply a cross-team, collective effort.

Banorte brought internal functional areas together for this project, underscoring the collaboration that is part of the trading derivatives process.

**The sales team** lent expertise in understanding client requirements and translating needs into functional specifications for the self-service product. Sales provided insight into market trends and customer expectations, ensuring implementation aligned with Banorte client needs.

**The FX and structuring desks** helped shape the design and functionality of the self-service product. Leveraging FX market and derivatives expertise, defining FX strategy and collaborating with sales to implement pricing models for each client segment, these teams ensured they met the complex needs of FX derivatives transactions.

**The compliance team** ensured that the self-service product adhered to regulatory frameworks and compliance standards. Compliance provided guidance on anti-money laundering (AML) measures, transaction monitoring and regulatory reporting, and ensured compliance requirements were met.

**The credit and risk teams** and the implementation team defined and executed robust credit and risk management measures. These teams provided expertise in assessing and mitigating risks associated with FX derivatives transactions, ensuring adequate controls were in place to protect the bank and its clients.

**The internal IT team** was responsible for system integration, data synchronization and security measures, ensuring seamless communication between CBL and MX.3, and providing necessary infrastructure and maintenance.

Murex client services consultants ensured design validation and offered best practices recommendations. Their collaboration extended beyond integration development, encompassing technical and business domain expertise based on successful experience in projects across the Americas.

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*Times are changing at a speed never seen before. Now, customers are challenging the way businesses worldwide are made and delivered. The question is no longer why, but when. The banking industry is not an exception to this rule. Our strategy is simple: to drastically reduce friction for our customers. In this regard, we recently launched our CBL service, allowing customers to operate these types of derivatives 100 percent digitally and through a self-service process. This is a clear example of how technology is used to make our customers' financial operations easier.”*

Alejandro Araúzo, managing director,  
transactional banking

## Banorte adapts processes and tackles organizational change management.

Implementing a new solution fully tailored to Banorte client requirements presented challenges and IT complexities.

Banorte had to adapt existing processes to accommodate the self-service product being offered to clients—internal operating manuals did not cover CBL transactions. Internal workflows were revisited. Risk management procedures were redefined.

Organizational change management was necessary. Team members needed to learn about the new product, its features and its benefits. A shift in client interactions and roles and responsibilities forced internal teams to adapt.

Banorte senior management is convinced the drive behind digitalization can yield intended objectives when delivered by the right teams with the right technology.

Banorte clients recognize significantly improved FX derivatives trading process efficiencies. Direct access to real-time market quotes has further enhanced their trading experience. Near-instantaneous decisions and transactions are facilitated.

## Digitalization strategy expansion is being weighed by the bank.

Banorte is now exploring an expansion of its digitalization strategy to more complex products and going beyond FX to include other asset classes, such as interest rate options. By innovating into asset classes and products, Banorte addresses a large, sophisticated client base.

Options and nonlinear product expansion can offer clients alternative investment opportunities and minimize associated risks. By incorporating options into the digital product offering, Banorte can provide clients with a diversified portfolio of digital investment instruments that align with risk preferences, investment goals and market trends.

Banorte and Murex's collaboration will be key to executing an expansion to new asset classes. Banorte and Murex will continue to capitalize on MX.3 capacities, its catalog of financial products and over 300 ready-to-use payoffs.

Banorte is actively pursuing streamlining and integrating the pre-deal trading process of different asset classes in its offering. This includes price construction, risk measures computation and managing the client relationship, along with compliance. Murex could once again prove a valuable partner.

Banorte's path to digitalization in capital markets continues, with many opportunities for growth and differentiation.

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*CBL implementation demonstrates Banorte's commitment and dedication to a continuous journey of innovation and digitalization to serve its clients optimally. Murex is proud to be the bank's trusted partner in achieving this significant milestone. We look forward to providing support in the next steps of the digitalization journey at Banorte.”*

Joe Iafigliola, Murex co-head, Americas

## Murex is a companion on Banorte's journey.

Banorte and Murex have worked together for more than 12 years. Banorte has consistently expanded the use of the front-to-back-to-risk MX.3 platform, incorporating new modules and asset class coverage. Banorte built a completely new XVA desk and revamped its PFE limits management. It chose Murex to support its risk and front office teams. Learn more about this in a [case study](#).

## ABOUT MUREX

For more than 35 years, Murex has provided enterprise-wide, cross-asset financial technology solutions to capital markets players. Its cross-function platform, MX.3, supports trading, treasury, risk and post-trade operations, enabling clients to better meet regulatory requirements, manage enterprise-wide risk and control IT costs. With more than 60,000 daily users in more than 65 countries, Murex has clients across the financial services industry, from banking and asset management to energy and commodities. Murex is an independent company with over 2,700 employees across 19 locations. Murex is committed to providing cutting-edge technology, superior customer service and unique product innovation. MX.3 is specifically designed and engineered to meet the multifaceted challenges of a transforming financial industry. To find out more, visit [www.murex.com](http://www.murex.com).



murex.com  
info@murex.com  
@Murex\_Group

EMEA  
Paris +33 1 4405 3200  
Beirut +961 1 356 000

Americas  
New York +1 212 381 4300

Asia Pacific  
Singapore +65 6216 02 88