MUREX

Case Study

# Rabobank achieving strategic transformation with Murex MX.3

## Murex's vision: technology replatforming enables business transformation

Crises throughout the last decades have led financial institutions to seek, devise and implement solutions to lower the cost of their operations, focus on their core businesses and speed up their go-to-market innovation.

This transformation is a journey, requiring long-term commitment and investment in equal measure.

**Technology replatforming** acts as a key enabler of this business transformation by:

- **Improving the cost-income ratio and reducing the total cost of ownership** through a sharp decrease of reconciliation costs and more controlled operational costs, with fewer applications and better-managed integration layers
- **Considerably enhancing time to market** by aligning business processes across asset classes, markets and treasury businesses, and by delivering standard regulatory solutions as packages with evolved deployment patterns
- **Enabling differentiation** by leveraging market best practices and building customizations or extensions that create unique business value
- **Digitizing and accelerating innovation** through agility in delivery, cloud architecture scalability and open APIs



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## Delivering technology transformation: the integrated platform model with the option for flexibility

To solve these challenges, the fundamental choice financial institutions must face is whether they should themselves build the solution they need, or whether they should buy it. Murex's vision is to leverage the business content already available in the software solution and to complement it with customizations and extensions that create additional business value and help the bank differentiate itself from peers.

From Murex's point of view, then, the choice is not whether to buy or to build. Best practice is to buy and build.

With the diversity and complexity of business processes involved in the capital markets value chain, it is critical to ensure functional completeness and keep up with evolving market structures and regulations that require a holistic view of activities. This requires the combination of the virtue of front-to-back integration in each asset class with the benefits of having transverse post-trade and risk management functions. This is the model that Murex follows with its cross-asset integrated platform, MX.3.

To reap the maximum advantage of an integrated platform, Murex recommends that customers embrace change and use new technologies as accelerators for their transformation. When deployed at all levels—from business to IT infrastructure, throughout the organization and methodology—the transformation becomes beneficially disruptive. It reveals the value of the banks' teams, too often constrained by siloed legacy systems, processes and habits.



# Rabobank shares the same vision and is successfully delivering

## Aiming for TCO reduction and strategic readiness

Rabobank's vision was to achieve a strategic readiness while sharply reducing the IT total cost of ownership. The strategy adopted was to move away from a very complex system landscape and interfaces network on legacy technologies to speed up release cycles and to support enterprise-wide collaboration.

A single integrated solution across the whole value chain combined with simplification and streamlining of the IT infrastructure and the operating model were considered key transformation enablers.

### Rabobank adopted a single integrated platform to benefit from comprehensive rationalization.

In 2016, after a rigorous selection process, Rabobank embarked on an ambitious replatforming program initiative with Murex. The program, an essential priority for Rabobank, aimed to replace 25 different systems used for capital markets and treasury activities in front office, P&L control, risk management and accounting with a single integrated platform.

Additionally, there was a need to adopt a platform able to accommodate future changes at affordable marginal costs.

These bold ambitions required the proper team and skills to execute the plan and start to reap benefits. Therefore, Rabobank heavily invested in its staff to step up its competences in technologies and methodologies. Rabobank also leveraged the Murex network of system integrator partners—Accenture is the Rabobank partner in this instance—to benefit from their experience in similar projects.

**Impact on cost-income ratio of the bank**
From Day 1, one of the objectives of the replatforming was to reduce overall operating costs for the technology supporting the business, materially improving the cost-income ratio.

With positions and business processes previously managed across 25 systems, having a consolidated activity view became exceedingly complex and costly. For example, the P&L Control team might spend more time gathering and reconciling data from various applications used across different assets traded and geographies than it did analyzing P&L figures.

All departments—Treasury, Markets, P&L Control, Risk and Finance—are now benefiting from the comprehensive rationalization and working on the same positions, which are managed centrally in MX.3 solution and shared enterprise-wide. Updated in real time across assets and businesses, the centralized position acts as the single source of truth for all teams. Figures calculated by various teams are consistent by construction, eliminating data transfers that do not produce any business value and subsequent labor-intensive reconciliation efforts.

To protect the cost-income ratio in the future, each decision is taken to control cost over the long-term, avoiding any technical debt.

> *"Sharing a single platform across the value chain simplifies the bank and makes it more efficient. It does require a strong cross-organizational alignment."*
>
> *- Anton Rutten, Chief Digital Officer, Wholesale & Rural, Rabobank*



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# What it took to deliver this program

## Management buy-in and sponsorship was essential from the start.

Deploying a large-scale replatforming program requires top management sponsorship from the very beginning—a strong alignment between the business, support and control functions and technology, along with buy-in at the board level. The substantial benefits were identified and quantified in a business case, approved by the Managing Board. A robust governance ensures these commitments are tracked and realized.

The implementation project was structured with a phased approach. It began with a foundation phase, "Alpha," that established the core platform in the bank, which now provides the basis to build further phases through smaller incremental steps.

> *"The Alpha go-live was a key milestone that created an irreversible momentum for the Murex platform in Rabobank, with the core FX and Rates flow business moving to the new platform. This momentum has allowed the organization to evolve its delivery model and reach the benefits and agility that we have now."*
>
> *- Boris van der Saag, Tribe Lead Markets & Treasury, Rabobank*

> *"A single platform has required the organization to converge in a consistent way, improving efficiency and control across the entire value chain."*
>
> *- Tommy Flynn, COO Wholesale & Rural, Rabobank*

In the implementation phase of the MX.3 platform, the organization has aimed to stay as close as possible to market best practices, reduce exceptions, adopt future-proof design and control technical debt.

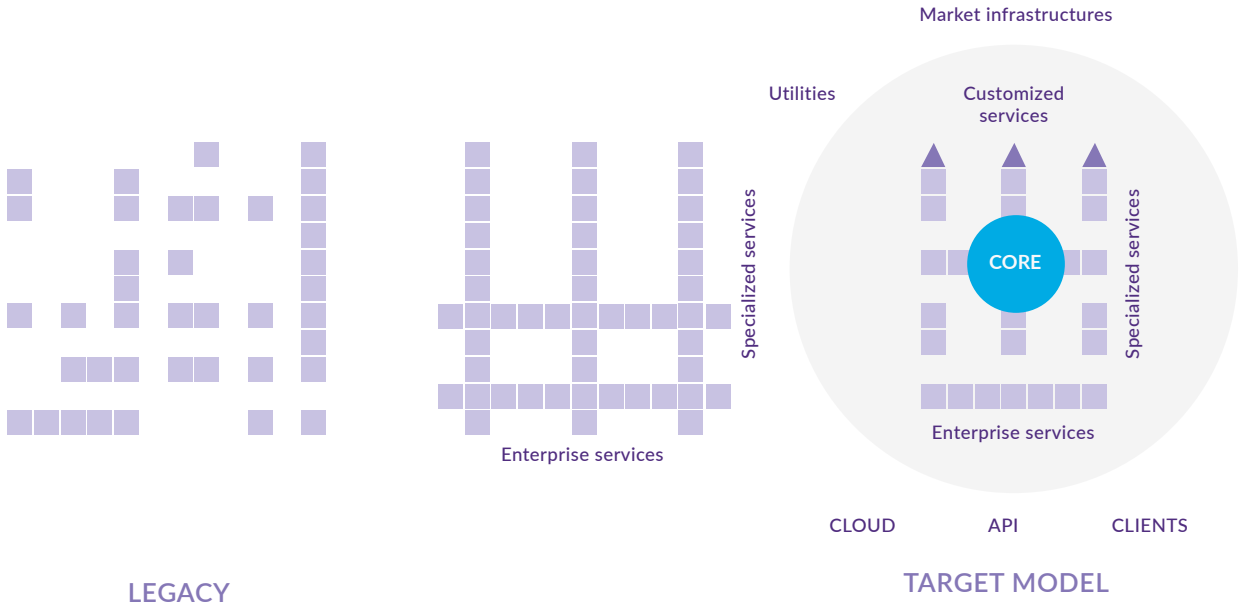
## Processes are streamlined and market best practices are fostered.

With the implementation of the Murex integrated platform, Rabobank has streamlined front-to-back-to-risk processes and fostered best practice adoption.

Although there are exceptions, the 80/20 rule applies: customizations should be limited to 20 percent of the business processes specific to Rabobank to allow the bank to focus on its differentiating factors.

Maintaining a standardization objective with such a large business scope hosted on a very flexible platform required and continues to require discipline.

### From fragmented architecture toward a unified enterprise-wide model



## Rabobank and Murex Agile adoption enables the adoption of future changes across a platform shared on the whole value chain.

One of the key challenges of using a shared platform with the breadth and width of Murex at Rabobank is to retain the necessary agility to quickly respond to future change.

The Rabobank corporate initiative **Simplify@Scale** is transforming the organization to a scaled agile way of working. This methodology provides the foundation for the further roll out of the Murex platform across products and services.

After the Alpha go-live in May 2019, Rabobank transitioned its program organization to a scaled agile way of working, accompanied by investments in test automation and continuous integration. This approach fosters cross value chain cooperation and enables execution and decision-making to be distributed across multiple teams.

In 2021, Rabobank further optimized its execution structure by fully implementing its **Simplify@Scale** methodology across its Wholesale & Rural division, with a close alignment between product management, technology and architecture teams. This will allow Rabobank to maximize the value from its IT investment and increase the speed of decision-making, while lowering its delivery risk.

Murex has also adopted Agile best practices into its organization in recent years.

First, Agile ways of working were deployed for the development of the MX.3 platform and represented a complete transformation of the way the Murex software factory operates and collaborates. Given the size of Murex's product development department, which includes more than 1,000 people, the **Scaled Agile Framework (SAFe)** was implemented and helped to reach scalability, predictability and adaptability objectives.

Then, the DevOps approach, which includes continuous testing and continuous integration, was adopted for customer deliveries. As a result, software development and deployment become a singe cycle with consistent principles and engineering standards.

> *"Our relationship with Rabobank is one we would like to have with all our customers. To deliver our best, we require maximum visibility on the bank's ultimate objectives and constraints, which Rabobank provided. Being involved so frequently at so many levels of the bank was a challenge for Murex, as well, and required our organization to accelerate its own scaled Agile framework adoption journey. We have a close cooperation where we can challenge each other. Staffing stability at every level has been key to build and maintain trust."*
>
> *- Maroun Eddé, CEO, Murex*

# Continuous integration and cloud for future-proof scalability

## Continuous integration is leveraged to enhance quality and predictability.

With an increasing number of configuration builders working in parallel across the world, establishing efficient collaboration is essential. The adoption of the configuration as code principle with continuous integration ways of working has fundamentally changed the development process. Everyone can develop customizations independently on their branch and be assured that any risk of conflict will be detected automatically during the merge process.

> *"With continuous integration, we have shifted quality to the left. Just after a developer makes a change, we now check the quality automatically. More extensive tests are run weekly and monthly to ensure quality and consistency in a framework where so many teams need to work together."*
>
> *- Erwin van den Heuvel, Domain IT Lead Systems Wholesale & Rural, Rabobank*

Continuous integration creates benefits in productivity and collaboration. Each configuration is stored in a single shared code repository accessible to all parties. It is then possible to see in real time what is being developed and hence better steer the project. Murex can reproduce what Rabobank is experiencing on its side, without the need to request and receive any dump or file. This enables quicker delivery and direct fixes for potential issues.

With continuous integration tools and methods, **80 percent** of manual processes required during a weekend release to production has been automated. Production deployments are therefore quicker and involve less risk.

The streamlined production release process has also increased the capacity of a single release significantly, with typically **400-500 product backlog increments** now being released every month, while maintaining overall stability.

> *"The overall stability we have shown since the go live is quite excellent—at a very high level. We could have never achieved it without extremely good cooperation with Accenture and with Murex."*
>
> *- Erwin van den Heuvel, Domain IT Lead Systems Wholesale & Rural, Rabobank*

## The cloud is leveraged to scale and accelerate.

The challenge was to equip configuration builders and teams with their own MX.3 environment. Infrastructure as code principles paired with AWS public cloud flexibility and scalability made this possible. Here, again, automation is key to be able to create a new development on demand, or to test a MX.3 up-and-running instance on the cloud with all the necessary components, including the database. The developer then becomes more autonomous and is not reliant on physical infrastructure delivery and on middleware installation expert.

The cloud journey continues as Rabobank aims to move production onto the cloud to further focus on its core business. This will mean leveraging infrastructure as a service for hardware infrastructure, complemented by platform as a service offerings, such as the managed service database.

> *"Rabobank is moving quickly towards its Simplify@Scale agility objectives. The combined adoption of continuous integration and cloud has shown material quality and predictability gains. By harnessing configuration as code, test as code and infrastructure as code on the MX.3 platform, Rabobank teams are improving productivity, reducing operational risk, accelerating innovation and reducing time to market for improved business agility.*
>
> *- Marwan Khalil, Lead Technical Architect, Murex*



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# The Murex and Rabobank partnership: looking forward

## Agility to adapt to market developments and regulatory change

### Keep up an ambitious upgrade timeline.

To maintain strategic readiness, Rabobank plans to upgrade once a year—this is only feasible with a high level of automation at all stages, from the deployment of a new development instance to the merging of configurations into the master branch, the testing throughout to the final delivery into production.

### Reduce technical debt.

In collaboration with a specialist external party, Rabobank introduced an innovative code review methodology to monitor the technical sustainability of the Rabobank implementation over time. Maintaining technical debt at a sustainable level improves the stability and lowers the risk in releases and upgrades.

### Regulatory preparedness has shown its value.

**FRTB compliance**

Rabobank implemented the FRTB Standardized Approach (SA) in phases since 2017, at a marginal cost that was substantially lower than would have been required in a legacy system landscape.

- The Murex FRTB SA solution included the various calculation rules and was already available within Rabobank MX.3 installation.
- Seventy percent of the volume of trades were already in the MX.3 platform, drastically reducing the complexity of having a holistic view.

> *"We have proved by preparing for FRTB compliance that a drastic reduction in the marginal change costs—especially for future regulations—was possible because of the new front-to-back-to-risk platform."*
>
> *- Boris van der Saag, Tribe Lead for Markets & Treasury, Rabobank*

**IBOR transition readiness**

As the impact of the IBOR reform is progressively clarified by authorities and industry groups, Murex is continuously developing the required new indices, instruments, models and fallback protocols, and delivering such modifications into minor releases ("patches") of the MX.3 platform and configuration packs. The bank runs a MX.3 version that includes the latest Murex IBOR transition developments. The continuous integration and frequent release management framework empower the most recent changes, such as the IBOR ones to be adopted quickly.

### Conclusion

The transformation Rabobank embarked upon in partnership with Murex is resulting in significant business benefits and has created a platform that is ready for future market and regulatory change. This is achieved through a combination of business transformation and simplification, while leveraging the continuous integration and cloud capabilities the Murex MX.3 platform offers.




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