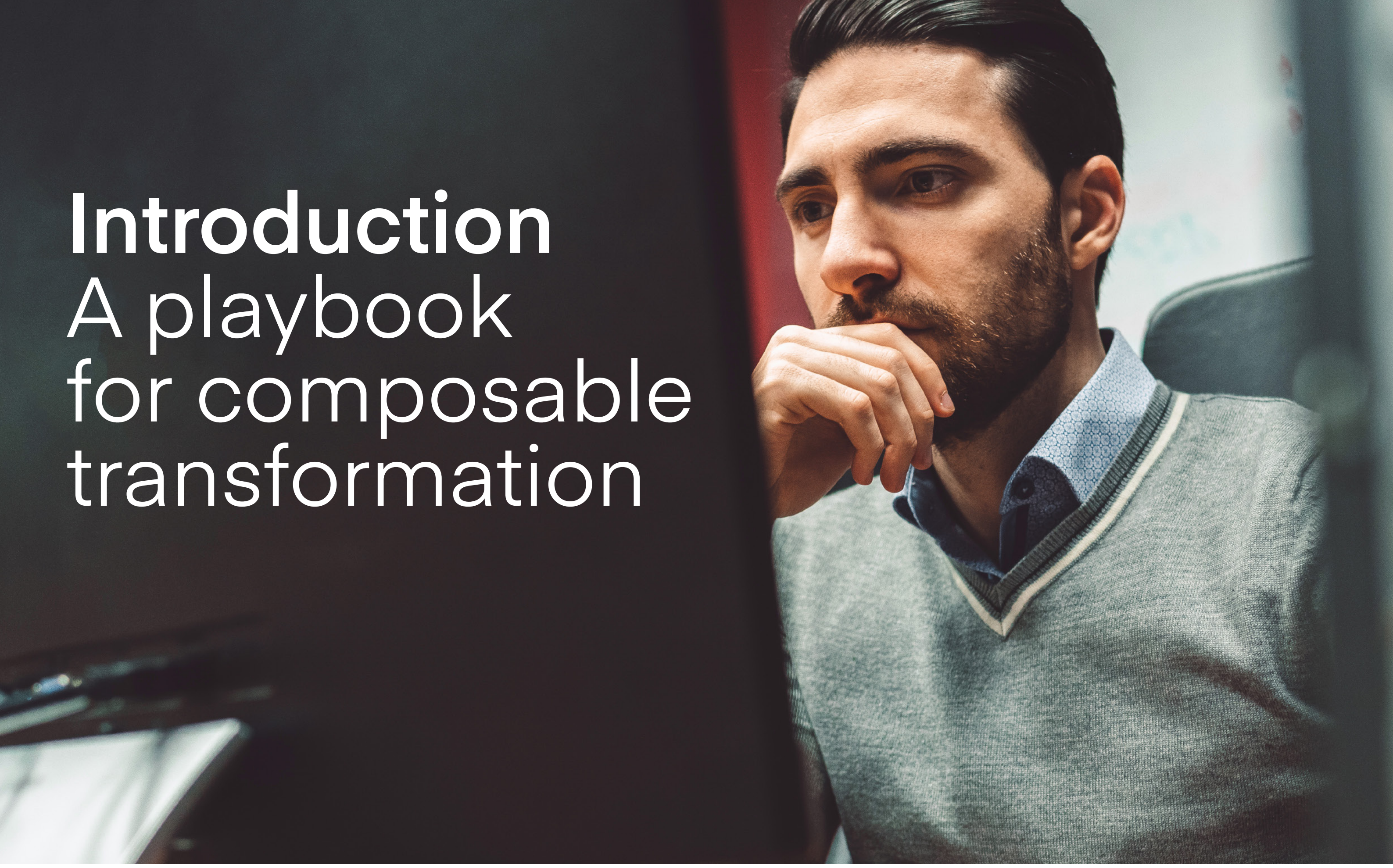
MAMBU

From legacy to composable

# The **credit union playbook** for digital transformation

A strategic guide to innovation and member value

# Introduction
# A playbook for composable transformation



**Credit unions are under mounting pressure. Many still run on legacy core systems that are up to 40 years old.[1] Even though 82% of executives say creating a fully digital experience is critical, only 9% have the tools to deliver it.[2] To protect member loyalty and fuel growth, they must boldly reimagine the digital journey.[3]**

The urgency grows even more when looking at younger generations. Digital-first Gen Z and Millennials expect seamless, mobile-driven interactions, and a large share say they would switch providers to get them.[4] For credit unions, meeting these expectations is the key to winning long-term loyalty and securing their relevance in the decades ahead.

With an aging member base and younger generations ready to switch for stronger digital experiences, credit unions must modernize to stay competitive. That requires moving beyond legacy systems toward true core transformation.

Most core conversions simply swap one legacy system for another—same limitations, new name. Mambu offers a cloud-native, API-first platform, built for rapid change. Backed by nearly 15 years of global experience helping credit unions, neobanks, fintechs, and other financial institutions migrate from legacy systems. We help launch new products faster, integrate seamlessly with any fintech, and future-proof your digital strategy.

Whether you are just beginning your digital transformation journey or planning your next phase, this playbook shares practical steps, strategies and lessons learned to help you successfully move from legacy systems to a composable, future-proof core.

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1. Federal Reserve Bank of Kansas City, Core Banking Systems.
2. CUSO Magazine, Industry Survey Reveals Current Digital Technologies Adoption Rates.
3. CU Management, Rethink Your Digital Experience to Retain Members and Drive Efficiencies.
4. Bank Director/Backbase, Winning the Trust and Loyalty of Younger Generations.

# Executive Summary

**Credit unions face an increasingly complex and competitive financial services environment.**

From mounting economic pressures to evolving member expectations and growing technical debt, the need to modernize is urgent.

But transitioning from legacy infrastructure to a modern cloud-native, composable model comes with challenges.

This guide from Mambu helps credit unions plan and execute that transition successfully.

It shares practical steps and proven approaches to replacing outdated systems with agile, scalable cloud-native solutions. It highlights how a composable core can unlock innovation, improve operational efficiency, and strengthen member relationships, with actionable insights across six core focus areas.

# 6 Actionable insights across **six focus areas**

1.

### Why change now

The forces driving credit unions to modernize their technology stack and the case for composable banking

2.

### Five critical planning steps

A structured, composable framework for planning your cloud migration

3.

### How to assess migration options

Using a migration scorecard to align strategic goals with technology capabilities

4.

### Common pitfalls to avoid

Real-world challenges that can slow or derail transformation

5.

### Starting with the core

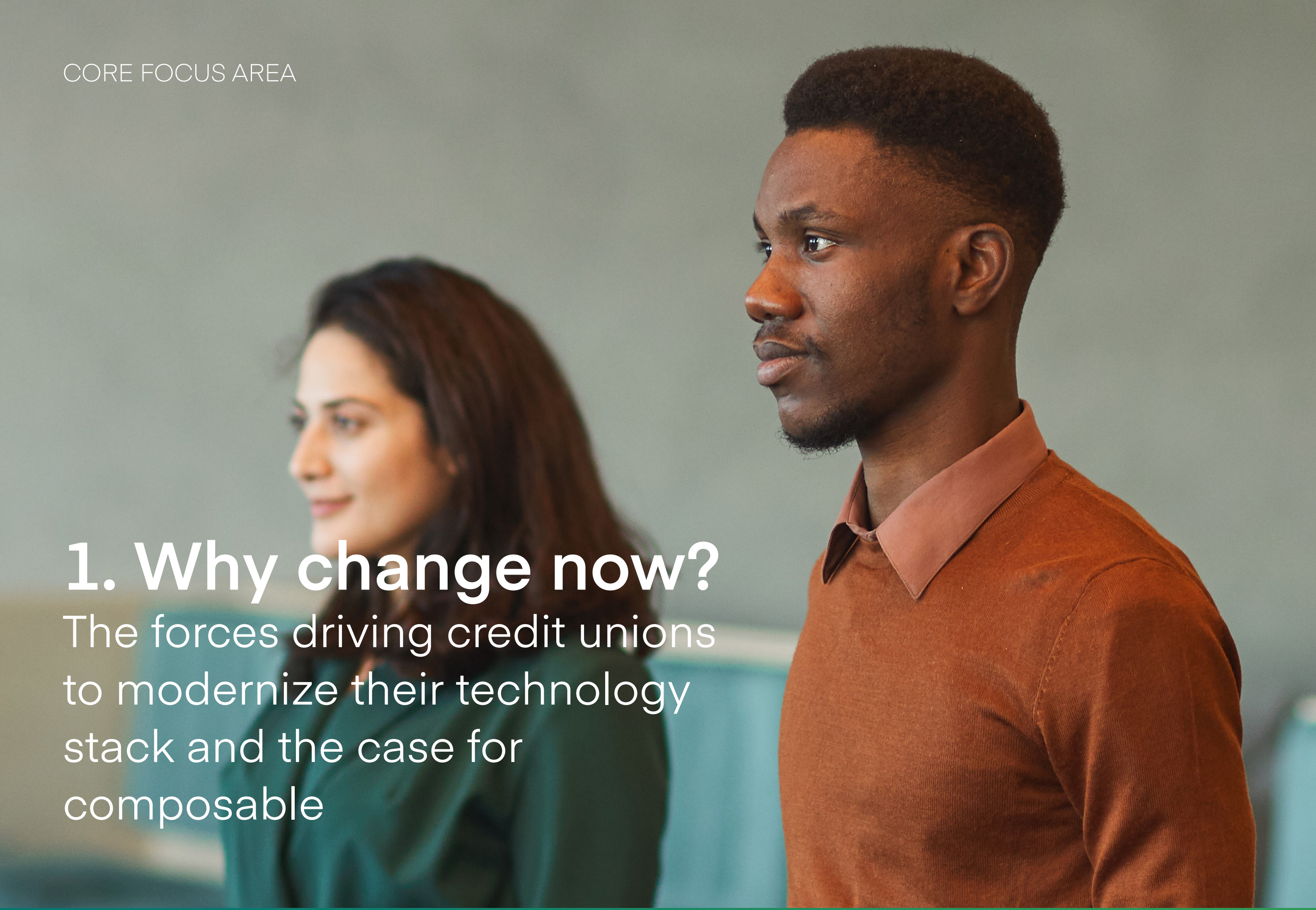
Why replacing the core with a composable, API-first platform like Mambu's can accelerate results

6.

### Data migration decisions

How to choose the right migration approach to protect member data and ensure continuity

By putting composability at the center of your transformation strategy and partnering with the right cloud-native platform, you can achieve a faster, safer migration, drive long-term innovation, and deliver the modern experiences members expect.



# 1. Why change now?

The forces driving credit unions to modernize their technology stack and the case for composable

Baby boomers generate over 50% of credit union revenues today, but their share will drop to about 20% within a decade.[5]

To capture younger, digital-first customers and unlock a $5–10 billion revenue opportunity, credit unions must modernize and digitize their tech stacks. Legacy cores limit innovation, while digital competitors raise the bar for seamless experiences.

## Member expectations are rising

Members expect faster, more personalized, and more convenient financial services. They compare their experience not with other credit unions, but with other digital-only banks, neobanks or fintechs.

To remain competitive, credit unions must modernize by moving critical workloads and backend systems to modern, cloud-native technology that's agile, scalable, and built for seamless integration.

## Cloud hosting is not enough

Modern digital-first competitors are setting a new standard with cloud-native, composable, and API-enabled technology. This powerful combination allows them to quickly launch new products, integrate seamlessly with partners, adapt to changing member expectations, and scale their offerings efficiently.

To stay competitive, credit unions need more than basic cloud hosting. They need a true modernization strategy that creates a flexible, agile foundation for innovation and growth.

## Legacy systems are holding credit unions back

Credit unions face a growing problem: 75% still rely on outdated loan origination systems without true automation, making even simple processes slow and frustrating.[6]

Opening an account can take twice as many clicks and much longer than at best-in-class banks, leading many applicants to abandon the process out of impatience. These legacy systems drive up costs, limit innovation, and increase the risk of falling behind faster, more agile competitors.

## There is no one-size-fits-all approach

Each credit union's path to modernization is unique, shaped by specific needs, constraints, and business drivers. Success requires a clear roadmap, the right technology partners, and strong execution grounded in agility and digital leadership.

5,6. McKinsey, The digital imperative for credit unions.

# The speedboat approach
## Innovating without full core replacement

Established financial institutions often resemble cruise ships: large, expensive, and heavy, making them slow and painful to change. Staying relevant in an increasingly digital market requires transformation across people, processes, and technology.

A speedboat strategy is a targeted, multi-core approach that enables credit unions to pursue progressive modernization, a lower-risk path to transforming legacy technology.

Rather than undergoing a costly and disruptive full core transformation, credit unions can add Mambu alongside their existing core to modernize key journeys first, then expand over time.

The speedboat is a smaller, independent initiative built for agility and rapid delivery.

### Speedboats operate on a modern, composable core like Mambu's and can:

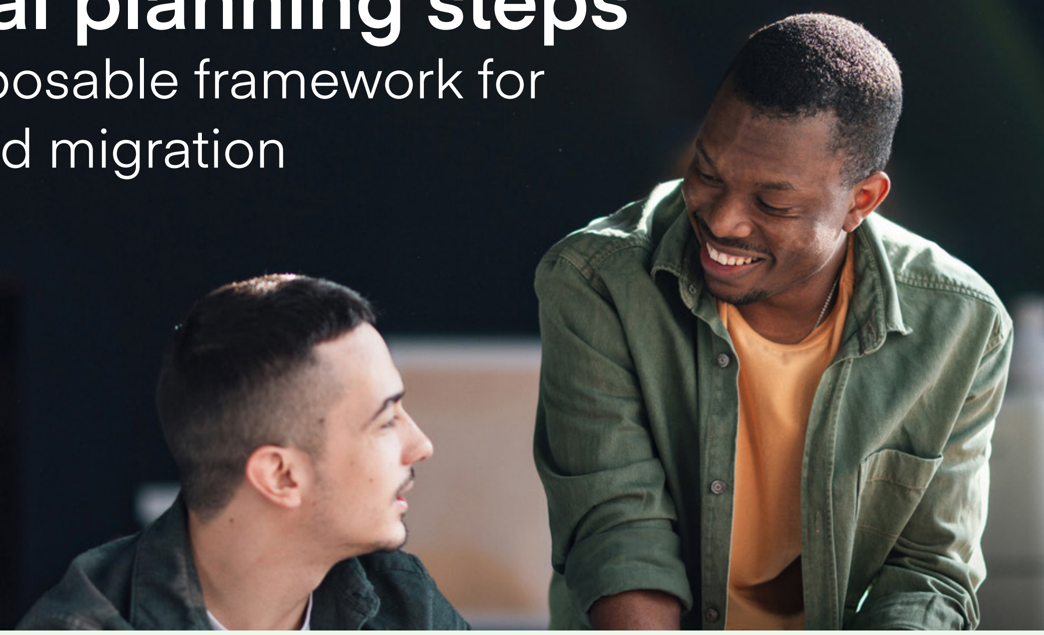
- Target specific opportunities such as launching an SME banking brand or a digital-only brand
- Go from concept to market in months, not years
- Run in parallel with the existing core while reusing complementary systems where beneficial

### This approach enables credit unions to:

- Test new products or markets with lower risk
- Serve new member segments with tailored, digital-first experiences
- Build agility without disrupting daily operations

# 2. Five critical planning steps

## A structured, composable framework for planning your cloud migration



Before embarking on transformation, credit unions should focus on 5 key planning areas:

### Define business objectives
Clarify the primary goals of your digital-first transformation. Are you aiming to reduce costs, improve time-to-market, offer new products, improve regulatory reporting, or increase member satisfaction? Establishing measurable objectives helps guide technology and vendor decisions.

### Engage cross-functional leadership
Technology change affects the entire organization. Form a steering committee with representatives from IT, operations, compliance, risk, and member services to ensure all perspectives are considered.

### Assess current architecture
Evaluate your existing systems, integrations, data flows, and business processes. Understand where technical debt exists, and identify quick wins and blockers.

### Design a future-state vision
Use the principles of composability to model your ideal architecture. Prioritize flexibility, open APIs, scalability, and interoperability.

### Choose the right partners
A successful migration depends on the strength of your technology partners. Look for proven cloud-native platforms with a strong understanding of credit union needs and an ecosystem of integration-ready fintech partners.

# 3. How to assess migration options

## Using a migration scorecard to align strategic goals with technology capabilities

Not all migration strategies deliver the same results. Selecting the right path depends on your credit union's unique goals, technical capabilities, risk tolerance, and timeline. A migration scorecard is a helpful tool that evaluates key trade-offs across several areas:

### Speed vs control

Do you need to move quickly to meet urgent demands, or is a phased, lower-risk approach better to ensure operational stability?

### Standardization vs customization

Are you willing to adopt standard, off-the-shelf product offerings to accelerate implementation, or do you require highly tailored solutions to meet specific member or regulatory needs?

### In-house vs partner-led

Does your credit union have the internal expertise and resources to lead the migration, or will relying on experienced technology partners reduce risk and increase efficiency?

### Single-core vs multi-core

Will you migrate all operations in one comprehensive move, or adopt a multi-core strategy to gradually transition systems, reduce risk, and maintain service continuity?

By weighing these factors against your credit union's priorities and available resources, the scorecard helps create a realistic, customized roadmap that balances speed, risk, and innovation potential.

# 4. Common pitfalls to avoid

## Real-world challenges that can slow or derail transformation

Credit union leaders must clearly distinguish between a **core conversion** and a **digital first core transformation.**

**Core conversion** involves swapping one legacy core banking system for another, often replicating existing processes without fundamentally changing operations or capabilities.

**Core transformation** is a strategic shift to a modern, cloud-native, API-first platform like Mambu that enables composability, agility, and innovation at scale.

Core transformation empowers credit unions to launch new products quickly, integrate seamlessly with fintech partners, and future-proof their digital strategy. However, many institutions underestimate the complexity and challenges of this journey. To set your credit union up for success, avoid these common pitfalls:

**Underestimating organizational change**
Transformation is as much about people and processes as it is about technology. Preparing teams for new workflows, collaboration models, and decision-making processes is essential.

**Insufficient stakeholder alignment**
Lack of buy-in from the board, executive leadership, or business units can stall momentum and hinder adoption.

**Overcustomization**
Trying to replicate every legacy workflow limits agility and slows future innovation. Embracing composable design supports faster evolution and adaptability.

**Inadequate partner fit**
Selecting vendors without deep experience in credit union core migrations or without cloud-native, composable platforms increases risk and limits growth potential.

**Skipping data strategy**
Delaying data planning leads to integration challenges, compliance risks, and degraded member experiences later on.

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By anticipating these challenges early and choosing a truly composable, cloud-native platform, credit unions can reduce risk, accelerate innovation, and confidently lead their digital transformation.

# 5. Starting with core

## Why replacing the core with a composable, API-first platform like Mambu’s can accelerate results

**Many credit unions begin digital transformation by upgrading front-end channels or adding digital touchpoints. While these improvements can boost member experience in the short term, the real benefits come from starting with the core banking system.**

Replacing the core unlocks the foundational agility, scalability, and interoperability needed for sustainable, long-term innovation.

For credit unions not ready to replace their main core immediately, a **speedboat approach** on a separate composable core can deliver many of the same agility benefits right away.

**With a composable core, credit unions can:**

- Launch new products and services faster
- Streamline back-office operations and improve efficiency
- Reduce time-to-market for new initiatives
- Simplify compliance, risk management, and reporting
- Leverage real-time data for richer member insights and personalization

Starting with the core creates a robust platform for building seamless digital experiences and adapting quickly to changing market demands and member expectations.

# 6. Data migration decisions

## How to choose the right migration approach to protect member data and ensure continuity

Data migration is often the most critical and complex part of core transformation. Proper planning and execution are vital to ensure continuity and maintain trust.

Key considerations include:

### Data integrity and quality

Ensure data is accurate, complete, and cleansed before migration to avoid disruptions and support a smooth go-live.

### Testing and validation

Conduct multiple rounds of rigorous testing to confirm data integrity and minimize errors before launch.

### Historical data management

Decide how much legacy data to migrate and what to archive offline while maintaining compliance and accessibility.

### Member communication

Keep members proactively informed about upcoming changes, expected benefits, and potential impacts to build confidence and reduce confusion.

Partnering with vendors who have deep experience in financial data migration reduces risk, accelerates timelines, and safeguards sensitive member information.

# Customer **success stories**

See how the established tier-1 banks partnered with Mambu to launch new products on a composable core, helping them move faster and accelerate innovation

new10 | Initiated by ABN·AMRO

## Scaling digital SME lending with a composable core

When Dutch financial giant ABN AMRO set out to capture new market opportunities in SME lending, they faced the dual challenge of competing with agile fintechs and overcoming the constraints of a slow, resource-heavy legacy core. Rather than attempting to retrofit their existing systems, they took a speedboat approach. They launched New10 as a separate, digital-first spinoff, combining ABN AMRO's financial expertise with the speed and innovation of a fintech.

Powered by Mambu's cloud-native, API-first core platform, New10 integrated best-in-class systems for origination, KYC, AML, credit scoring, and decisioning, building an agile, serverless architecture on Amazon Web Services (AWS). This composable approach allowed them to **go from concept to market** in just 10 months, **delivering 15-minute credit decisions** and **two-day loan disbursals. Within six months,** New10 had **acquired over 2,000 accounts, attracted 65% new-to-bank customers,** and **achieved an NPS above 60.**

By starting fresh with a composable core, ABN AMRO circumvented the limitations of its legacy core, rapidly launched a competitive product, and proved how speedboat transformations can accelerate innovation without disrupting existing operations.

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iberCaja

## Powering Ibercaja's new personal lending spin-off

When one of Spain's largest and most established financial institutions set out to modernize its consumer finance offering, Ibercaja Banco faced the challenge of meeting growing demand for faster, fully digital lending while operating within the constraints of a traditional legacy core. Rather than trying to retrofit their existing systems, they took a speedboat approach, launching Presto, a dedicated digital personal lending spin-off aimed at reaching 200,000 new customers within five years.

Powered by Mambu's cloud-native, API-first core platform and underpinned by Amazon Web Services (AWS), Presto enables both customers and non-customers to arrange consumer loans directly in commercial establishments, with the process completed entirely online. The phased rollout began in vehicle dealerships and will expand to other point-of-sale use cases and features over the next year.

**From concept to market in just eight months,** Ibercaja is now positioned to scale its digital lending reach across Spain. By starting fresh with a composable core, they've accelerated time to market, enhanced their value proposition for retail and commercial companies, and laid the foundation for a full transition of their consumer finance operations to the cloud.

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BancoEstado desde 1855

LEAGUE DATA

## Moving from mainframe to next-gen core

**BancoEstado is the largest financial institution in Chile by customer base.** Its flagship product, CuentaRUT, is a digital account linked to Chile's national ID system offering Chileans a basic account with access to debit cards, electronic transfers, and other financial services to people without traditional credit histories. As a result, it has a dominant market presence in the country, with **over 14.9 million accounts, covering over 90% of the country's banking population.**

However, while its customer and usage growth has been strong, the challenge for BancoEstado was that it relied heavily on **a bespoke mainframe-based core banking platform that was originally built over 40 years ago using COBOL and COBOL CICS.** While reliable, its mainframe-based legacy core platform was becoming increasingly difficult to maintain and too expensive to service strong market transaction growth. As customer demand for digital banking grew, accelerated by COVID-19, BancoEstado struggled to deliver new products quickly due to its rigid, monolithic legacy architecture.

To address this, the bank adopted a phased migration approach, shifting 14 million customers over a few years to Mambu's cloud-native composable core. It ran both platforms in parallel without impacting customers—a massive undertaking.

BancoEstado is on track to **reduce reliance on mainframe for its main product system by 90% by 2027.** It can now launch new products and iterate rapidly, compared to the six-month standard on its legacy platform. **Technology transaction costs are a fraction of cost on the mainframe.**

## Transforming 37 credit unions to composable core banking

League Data is a cooperative fintech with the mission to help its customers, 37 credit unions across Atlantic Canada, adapt to an evolving market through sustainable innovation, leadership and support.

While its cooperative model delivered scale and unified governance, League Data learned that its outsourced legacy core banking system, running on mainframe hardware, would reach end of life within a few years.

To address this, League Data adopted a phased migration strategy, selecting Mambu's cloud-native composable core on AWS as the foundation for its new platform. The approach integrated more than **20 ecosystem partners,** including MuleSoft for API orchestration, while running legacy and modern systems in parallel to minimize disruption. **Migrations were executed in under 48 hours per credit union, enabling rapid onboarding without impacting day-to-day operations.**

Within three years, League Data had successfully migrated the majority of its credit unions to the new platform and quickly **scaled to over 35 institutions.** With its modern, API-first core, the cooperative can now launch products and adapt services far faster than before, at significantly lower infrastructure and maintenance costs compared to its legacy mainframe.

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# Why Mambu?
# A long-term growth partner

**Mambu is the leading cloud-native core banking platform built for composability, agility and scalability. We empower over 260 financial institutions worldwide, including credit unions, to modernize operations, launch digital-first services, and drive sustainable growth.**

### Composable architecture

Seamless integration with best-in-class fintechs and partners, enabling personalized and innovative member experiences.

### Trusted expetise

A proven track record in successful core migrations tailored for credit unions and diverse financial institutions.

### Global scale and security

A SaaS platform designed for high performance, regulatory compliance, and future readiness.

### Faster time to value

Rapid, low-risk implementations powered by cloud-native deployment and agile delivery methodologies.

# Ready to start your digital transformation journey?

With Mambu as your partner, your credit union gains the technology, strategic guidance, and long-term support needed to thrive in today's digital financial landscape.

Our commitment to composability and customer success makes us the ideal choice for credit unions ready to embrace the future of banking.

TALK TO OUR TEAM

mambu.com
hello@mambu.com