

# Legacy Systems Modernization for Fintech Companies

Is your core system  
**slowing you** down?

You don't always need to rebuild  
from scratch – **modernization**  
**can reduce costs by 40–60%**

Our Offer Is Designed for Companies That:

- Rely on **outdated, hard-to-maintain systems** for daily financial operations.
- Seek **better performance, compliance, and cost predictability**.
- Prefer a **low entry threshold** – we start with **code analysis** and **PoC (USD 1,250–3,800)**.

# What Problems Do We Solve in Fintech Systems?

- **Rising infrastructure and scaling costs** – millions of transactions or records per day strain systems not built for this scale.
- **Security and compliance risks** – every change can lead to instability, and legacy systems often don't meet PCI DSS, SOC 2, GDPR, or new accessibility requirements like WCAG 2.1 (effective from June 28, 2025)
- **Slow development cycles** – delivering product updates and new features takes too long, delaying product launch timelines.
- **Rigid architecture** – tightly coupled systems make integrations with banking APIs or analytics tools difficult.
- **Data and logic silos** – fragmented architecture blocks AI use cases like fraud detection or customer scoring.

## Why Trust Us?

We stand out thanks to **years of experience working with legacy systems** – we've completed over 100 modernization projects.

Instead of pointing fingers, we focus on creating a practical action plan and **modernizing your existing systems step by step.**

# How We Work,

## Without Disrupting Core Financial Operations



- **We don't start with refactoring** – we start with a conversation. Before touching any code, we talk with you and analyze your business needs. We only refactor when it's necessary – *not just because the code looks bad.*
- **We map the system and identify critical paths.** Instead of modifying code right away, we identify relationships between modules and define *critical paths* (e.g., transaction engine, risk module, APIs) that must remain functional at all times. This helps us avoid a domino effect when modernizing.
- **We don't rewrite everything from scratch.** We reuse working parts of your code that already contain *valuable business knowledge*. We apply proven techniques like the *strangler pattern* to separate new components from the legacy system safely.
- **We audit with a clear purpose.** Using *static code analysis tools*, change tracking, *and security and accessibility reviews*, including early identification of compliance gaps (e.g., PCI, SOC 2, WCAG)
- **We bring every project in line with our engineering standards.** From day one, we introduce *CI/CD*, clean up local environments, and organize documentation. This gives your project a solid structure, making further development *easier and more affordable.*

On the following pages we present selected fintech projects:

# New NTMS Interface for Novelpay

**Industry:** Fintech / Electronic Payments

**Technologies:** React, API-Centric Architecture

**Project scope:** User research and complete modernization of the GUI for a terminal management system

RESULT:

## A modern and scalable system

- **Improved usability** – a simplified interface and easier use of payment terminals by non-technical users.
- **Scalability** – a flexible system ready for future development.
- **Efficiency** – role-based design and optimized workflows for both developers and administrators.

CHALLENGE:

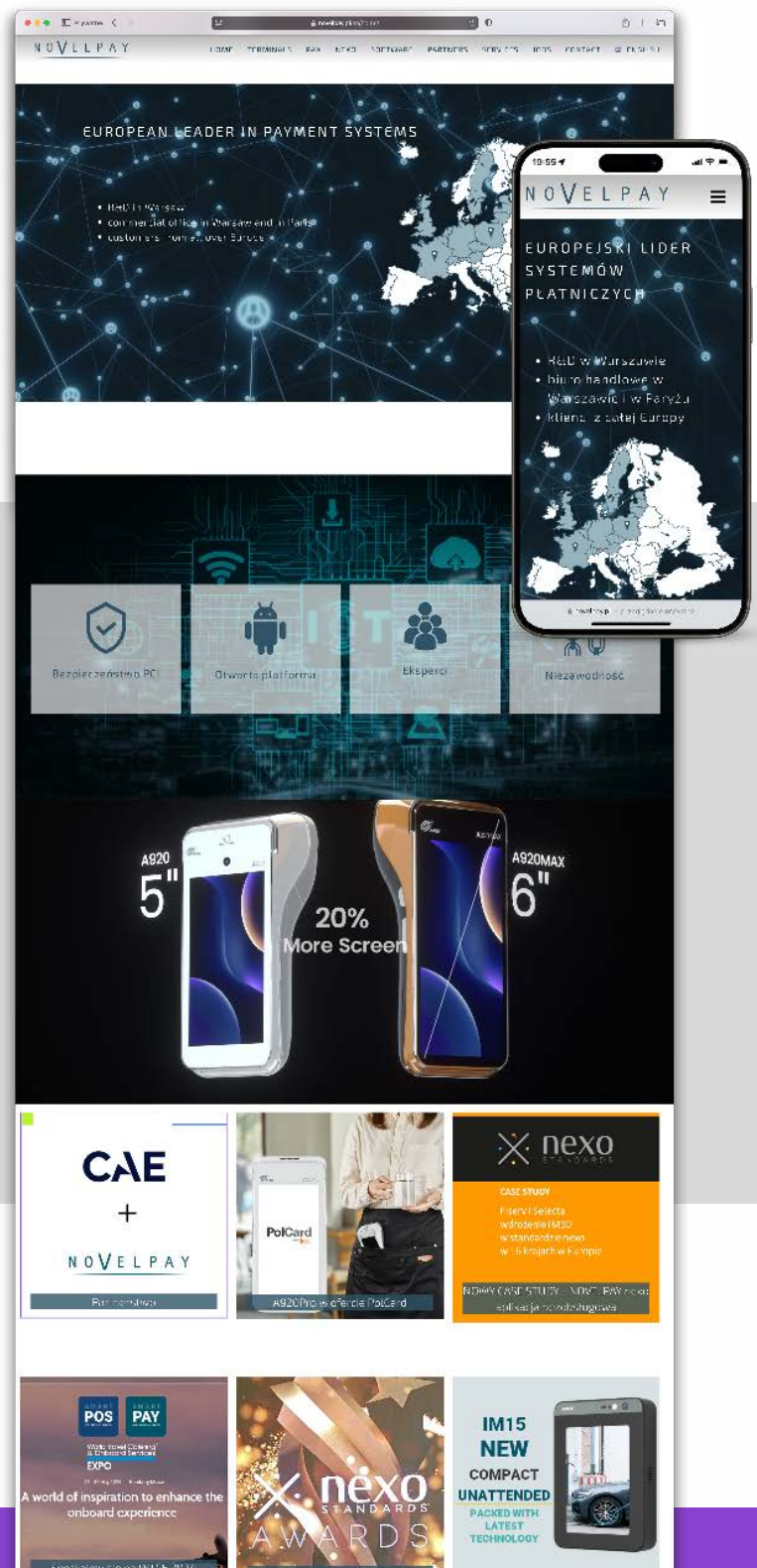
## Legacy system limiting usability

- **Tightly coupled frontend and backend** – making development and scaling difficult.
- **Unintuitive interface** – requiring deep knowledge of complex documentation.
- **No responsive design (RWD)** – limited functionality on mobile devices.
- **No role management** – limited user access control.

KEY CHANGES:

## Modern UI and usability improvements

- **User interviews** – identifying the most common pain points and use cases.
- **New GUI in React** – separated from backend using an API-first approach, based on UX research.
- **Improved app management** – dedicated views for admins and developers, app management module, and request approval workflows.
- **Usability optimization** – role-specific use cases, 165 views in an interactive prototype, and full mobile responsiveness.





# Audit & Modernization Strategy for SecureBancard

**Industry:** Fintech / Payment Processing

**Technologies:** Legacy audit, infrastructure optimization

**Project scope:** Performance audit and modernization roadmap for a high-volume payment data system

RESULT:

## Performance and planning gains

- **Improved system efficiency** – faster processing of large data sets.
- **Safe transformation** – interim fixes ensured up-time during transition.
- **Clear direction** – the client received a strategic roadmap for reliable, scalable operations.
- **Client satisfaction** – results-driven collaboration and transparent communication.

CHALLENGE:

## Legacy infrastructure overload

- **Operational growth** – millions of records processed daily, slowing down the system.
- **Outdated technology** – limited support for transaction margin analysis and fraud detection.
- **Lack of flexibility** – infrastructure wasn't prepared for scaling.

KEY CHANGES:

## Dual-track strategy

- **In-depth audit** – analyzed code and infrastructure to identify bottlenecks.
- **Short-term fixes** – stabilized performance under heavy load.
- **Long-term roadmap** – created a detailed modernization plan for scalable architecture.

The image displays a mockup of the SecureBancard website and its mobile application. The website is shown on a desktop browser, featuring a dark blue header with the SecureBancard logo and navigation links. The main content area has a white background with a large heading "The alternative to big payment processors." and a "Talk to Us" button. Below this, there's a section titled "GET TECHNOLOGY, EXPERTISE, & TRUTH" with sub-points: "Talk directly to the team", "Board merchants in 30 minutes or less", "Access a customized, flexible program", and "Discover the secret sauce for ISO growth". A photo of two people is shown next to these points. Further down, a section titled "SERVICE IS OUR SUPERPOWER" includes a quote from "Shen Poyompass" and a "Learn More" button. The bottom section, "SECURE BANCARD DELIVERS THE PAYMENTS SECRET SAUCE FOR ISO GROWTH.", lists five bullet points: "Automated Platform", "Direct Access to Team", "Transparency", "Elevated Experience", and "Customized & Flexible". A laptop displaying a dashboard is shown to the right of these points. The mobile app is shown on the right side of the image, mirroring the website's design with the same heading and "Talk to Us" button.

RESULT:

## Performance and planning gains

- **Improved system efficiency** – faster processing of large data sets.
- **Safe transformation** – interim fixes ensured up-time during transition.
- **Clear direction** – the client received a strategic roadmap for reliable, scalable operations.
- **Client satisfaction** – results-driven collaboration and transparent communication.

CHALLENGE:

## Legacy infrastructure overload

- **Operational growth** – millions of records processed daily, slowing down the system.
- **Outdated technology** – limited support for transaction margin analysis and fraud detection.
- **Lack of flexibility** – infrastructure wasn't prepared for scaling.

KEY CHANGES:

## Dual-track strategy

- **In-depth audit** – analyzed code and infrastructure to identify bottlenecks.
- **Short-term fixes** – stabilized performance under heavy load.
- **Long-term roadmap** – created a detailed modernization plan for scalable architecture.

Let's get in touch: [sales@polcode.com](mailto:sales@polcode.com)

# Our Approach That Works

## REAL EXPERTISE

we specialize in technologies we know inside out: PHP, Symfony, and custom API integrations used in fintech legacy systems.

## ACTIONABLE RECOMMENDATIONS

our audit includes:



code quality, testability, and extensibility,



infrastructure resilience and cost-efficiency,



UX and accessibility compliance (WCAG 2.1)



CI/CD pipelines and release management,



AI-readiness: potential for automation, risk scoring, anomaly detection.

# Our Specialties



## Pre-modernization consulting & analysis

identifying critical elements and priorities.



## Modernizing PHP-based legacy systems

including systems built without frameworks or on older ones like Zend, Kohana, CodeIgniter, and Slim.



## Framework upgrades

e.g., Symfony <4 → Symfony 6.x, Laravel <9 → Laravel 10.



## WordPress modernization

optimizing performance and security, removing outdated plugins, refactoring code.



## Frontend modernization

migrating to modern JavaScript frameworks (React, Vue.js), improving UX and design compliance.

## How We Care for Our Code?

- **Consistent coding standards** – clean structure and easy scalability.
- **CI/CD automation** – testing, static analysis, and seamless deployment.
- **Security at every stage** – vulnerabilities are eliminated during development to minimize risk.
- **Accessibility & compliance reviews** – ensuring readiness for WCAG 2.1, GDPR, PCI DSS, and more.



## What We Don't Do?

- We don't provide quotes without **code access and clear business goals**.
- We don't work with **technologies outside our scope** or **closed systems that can't be modified or safely maintained**.

# How Collaboration Works?

## Tangible results within the first month

our QA and modernization efforts deliver noticeable benefits early on, providing a solid foundation for further system development.

**We start with a Proof of Concept (USD 1,250–3,800)**, which includes a complete cost estimate and recommendations for next steps – with no obligation for long-term commitment. This phase gives you a clear analysis to help plan your next actions and budget.





# Show Us Your Core System

Whether you're  
dealing with:

- 30,000 queries per request
- Monoliths blocking innovation
- Or legacy logic  
no one dares to touch

We'll help you modernize  
safely and smartly.

## Contact:

E-mail: [sales@polcode.com](mailto:sales@polcode.com)  
[www.polcode.com](http://www.polcode.com)



Check our reviews on:

Clutch

upwork

twilio

 Adobe  
Solution Partner  
BRONZE

# Resources

## Learn More About Modernization

