HEXAWARE

PaymatiX™ Advanced Analytics Platform with AWS for a US Credit Union

Case study

Client

Credit Union in the US

Our client is a US financial institution that helps community members with modern day financial products and services. They focus on security, career growth, and giving back through education and volunteering. With a history of trust and innovation, they aim to make a positive difference for their members and communities.

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Challenge

A Modernized Foundation for Digital Lending

For personalized experiences that put customers first, our client lacked a modern retail banking and payments platform that helped with advanced analytics across customer behavior, product performance, and risk factors.

They were using an old ADW SQL Server system that was expensive to run, hard to maintain, and couldn't keep up with their growing data needs. They had over 35TB of important data stored there, but they had no direction on how to make the data work best for their vision.

The biggest challenge was that their data was scattered or siloed. Because they relied on manual processes and disconnected tools, consistent reports or deep analytics were non-existent. They needed a single reliable source of truth to begin their journey in better anticipating the market and customer needs.

Ultimately, this slowed down their ability to act quickly and deliver the personalized experiences customers expect today — something they see as crucial for building strong, lasting relationships.

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Solution

Re-architecting Advanced Analytics with AWS for Lending

We supported our clients across several key areas to build their new platform. Right from the start, we looked to create cloud-native architecture to support a foundation for new advanced AI features in their analytics suite.

First, we worked closely with the client's data leadership to define challenges, review their current setup, and create a clear transformation plan. Our involvement went beyond just technical implementation—we helped shift the project's focus to a broader data modernization strategy with AWS.

Our deep financial services expertise ensures that everything meets compliance, risk, and customer requirements. Their data and analytics platform for lending was designed to be modular and flexible, allowing quick integration of new data sources and analytics.

For this, Hexaware's solution PaymatiX™ on Snowflake was developed using AWS services, establishing a strong foundation for advanced lending analytics.

With AWS services, Hexaware ensures scalability and flexibility. The architecture integrates key AWS components—such as S3 for scalable storage, virtual machines for compute power, DMS for efficient data migration, and SQL Server for database management—to deliver a modern, AI-supportive analytics environment with PaymatiX™ on Snowflake.

What's New for the Credit Union with PaymatiX™

PaymatiX™ is a purpose-built, cloud-native data and analytics platform for the retail banking and payments ecosystem. It uses the Paymatix™ data migration and transformation framework built for cards and payments to reduce implementation time and risk within data modernization initiatives.

What business outcomes align with the solution? Let's explore...

Fraud Detection – Burst Out Fraud

Using advanced anomaly detection and behavioral analytics, PaymatiX™ proactively identifies and mitigates fraud risks. Our AI/ML models analyze millions of transactions to:

- Detect suspicious patterns and outliers
- Score risk dynamically across channels
- Trigger alerts and automate case workflows

This has led to a significant reduction in fraud-related losses and a significantly improved compliance posture.

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Solution

Prescriptive Analytics – Actionable Insights

Beyond prediction, it delivers prescriptive recommendations that guide optimal business decisions. Examples include:

- Credit risk mitigation strategies
- Customer retention campaigns
- Operational resource optimization

These insights are embedded directly into dashboards and workflows, empowering users to make data-backed decisions confidently.

Churn Prediction and Customer Engagement

To address customer attrition, we deployed churn prediction models that analyze behavioral signals, transaction history, and engagement metrics. The system:

- Identifies at-risk customers with high precision
- Recommends personalized retention strategies
- Measures campaign effectiveness in real time

This capability has helped improve customer retention and enhance the lifetime value that led to reduced acquisition costs.

Continuous AI/ML Improvement with Hexaware's MLOps Framework

Our MLOps framework enables the seamless, reliable, and scalable deployment and management of machine learning models across the enterprise, ensuring continuous integration, delivery, and monitoring.

The comprehensive approach drives smarter, data-driven lending decisions by aligning AI/ML capabilities with business goals, improving risk assessment, compliance, and customer outcomes.

- **Automated model lifecycle management:** From training to deployment and monitoring
- **Real-time scoring and feedback loops:** Ensuring models adapt to changing data patterns
- **Scalable infrastructure:** Supporting high-volume, low-latency AI/ML workloads

This allows business teams to act on insights as they emerge, with an increased focus on proactive measures.

A Powerful Cloud Modernization-Led Migration Strategy with AWS

We set up automated processes to gather data from important sources using strong ETL pipelines. We moved 35TB of data to AWS, which improved speed and lowered costs.

This data then further powered the new analytics systems to give business teams real-time insights on customers, products, and risk through Tableau dashboards. New data management features like data cataloging, masking sensitive information, and role-based access control (RBAC) also secured these.

Our cloud-first approach makes it easy to scale analytics and use AI/ML tools. Finally, we used a fixed-price, milestone-based plan to ensure clear delivery and ongoing support.

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Benefits

Intelligent Lending Operations and More

Unified Advanced Analytics Platform:
A unified view of its data landscape, aligning advanced analytics with business strategy to drive informed, enterprise-wide lending decisions.

Improved Risk Management:
Predictive models strengthen fraud detection, credit scoring, and compliance efforts by proactively identifying risks and minimizing financial exposure.

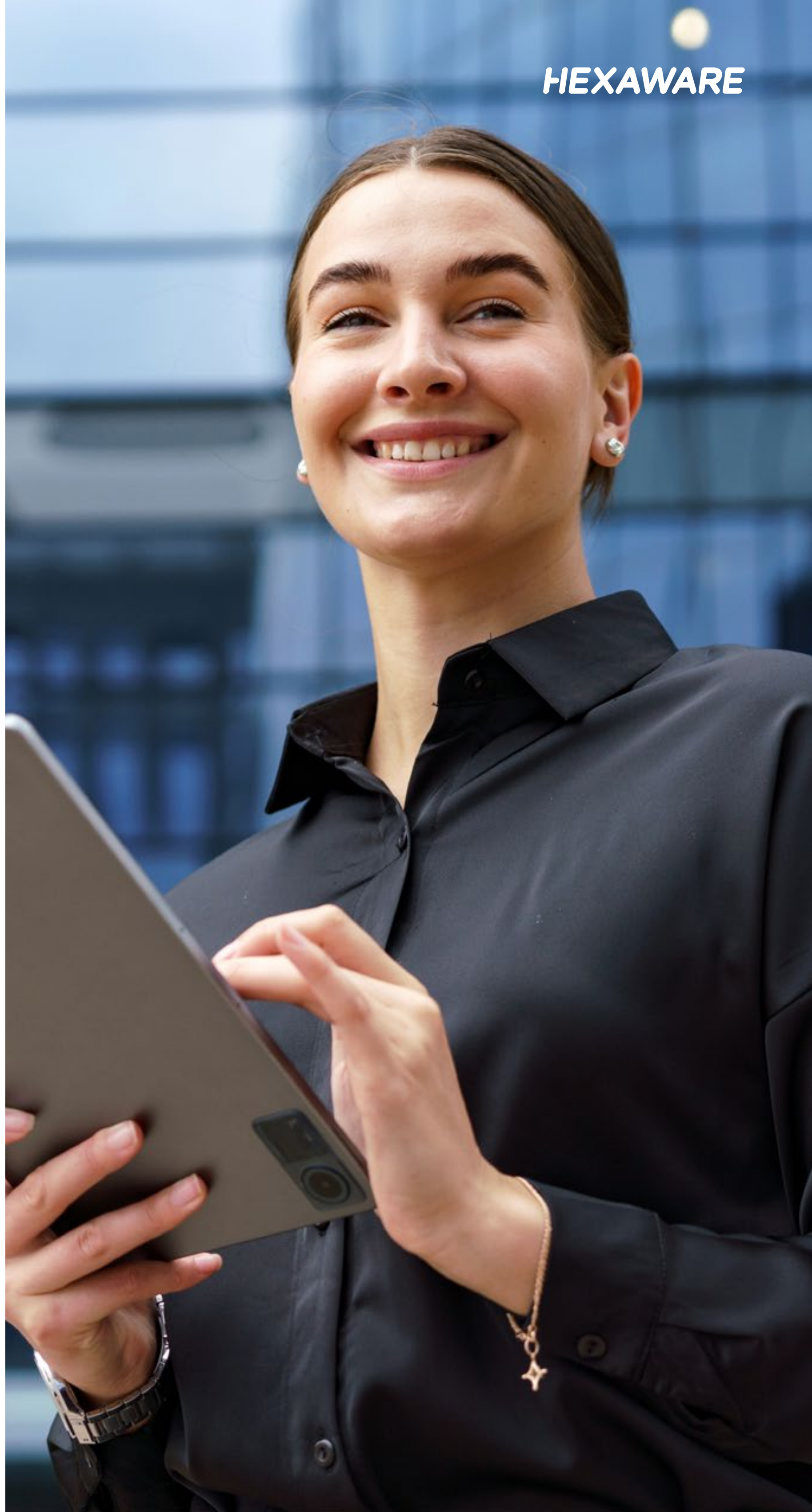
Hyper-Personalization:
Behavioral analytics delivers highly tailored customer experiences across journeys, boosting engagement and satisfaction through precise personalization.

Prescriptive Analytics in Lending:
Advanced prescriptive analytics recommend specific actions based on data insights, allowing for the simulation of scenarios and the evaluation of outcomes for optimal strategic choices.

90% Data Compression Efficiency:
The credit Union benefits from 90% data compression, dramatically reducing storage needs and operational overhead, freeing up resources for innovation.

Fast, Disruption-Free Rollout:
The cloud-native data and analytics platform won in terms of quality, speed, and zero disruption to ongoing operations.

Scalable Innovation & Cost Savings:
The platform scales new needs, improving performance and reducing infrastructure and maintenance costs, while accelerating innovation.



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Summary

PaymatiX™: Powering a New Digital Experience in Lending

We helped the credit union modernize its lending operations with PaymatiX™ as a cloud-native data and analytics platform with AWS. With the PaymatiX™ data transformation and migration framework, we reduced risks, improved cloud migration timelines, and unified enterprise AI analytics and governance.

Now, the credit union benefits from powerful AI and advanced analytics for fraud detection, churn prediction, and business insights—all delivered through user-friendly BI dashboards. The transformation enables the credit union to engage customers more effectively and confidently operate as an AI-first enterprise.

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HEXAWARE

About Hexaware

Hexaware is a global technology and business process services company. Every day, Hexawarians wake up with a singular purpose: to create smiles through great people and technology. With this purpose gaining momentum, we are well on our way to realizing our vision of being the most loved digital transformation partner in the world. We also seek to protect the planet and build a better tomorrow for our customers, employees, partners, investors, and the communities in which we operate.

With offices across the world, we empower enterprises to realize digital transformation at scale and speed by partnering with them to build, transform, run, and optimize their technology and business processes.

Learn more about Hexaware at https://www.hexaware.com.

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