

HEXAWARE

Powering SAS to PySpark Data Platform Modernization with AI-Automation using Amaze[®] for Data and AI

Data Platform Modernization with Automated SAS
to PySpark Migration

Case study



Client

| Client

- Challenge
- Solution
- Benefits
- Summary

Financial Institute in Belgium

Our client is a prominent financial institution in Belgium, offering a wide range of financial services. The firm places a strong emphasis on making its services accessible and driving customer experience innovation, continuously adapting its services to meet the evolving needs of its diverse clientele, which includes retail clients, businesses, and public entities.



Challenge

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Statistical Analytics System (SAS) Performance Issues and Rising Costs

Our client encountered significant challenges with their SAS enterprise data system, particularly regarding performance limitations and escalating costs. These performance limitations were affecting pivotal operations. Data inconsistencies and slow processing times made it difficult to deliver the level of service their customers expect today.

As licensing fees mounted, the company began to question whether it could continue investing in technology not suited to its aspirations. They actively sought the right opportunity to modernize their data infrastructure. The combination of high operational costs and the inability to efficiently process and analyze data put the company at a significant crossroads, making it clear that something had to change to meet the demands of their customers and the market.



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Automating SAS to PySpark Code Conversion with Amaze® for Data and AI

Hexaware advised on strategic enterprise data platform modernization and executed through a comprehensive code conversion automation, utilizing its platform Amaze® for Gen AI-powered data transformation. This approach accelerated our client's large-scale code conversion from legacy SAS code to PySpark, requiring minimal manual intervention.

The AI-driven code conversion process used natural language processing, deep learning techniques, and advanced machine learning (ML) algorithms to intelligently map complex SAS syntax to equivalent PySpark constructs on Python, ensuring semantic accuracy and preserving the original business logic.

Here's what our solution assured:

Automated Code Conversion: Amaze® accurately and efficiently converted SAS code to PySpark using LLMs, minimizing manual effort and reducing the risk of errors.

Quality Assurance: Built-in quality checks ensured the accuracy and reliability of the converted code, maintaining data integrity.

Performance Optimization: Amaze® optimized the converted PySpark code for performance, leveraging the capabilities of Python's Spark engine.

Azure Integration to Support the Modernization for SAS to PySpark Conversion: Bringing in Python's Powerful Analytics Features

Building the new data environment on Azure, our client can now effortlessly interact with cloud services and managed resources for its data and AI initiatives, building scalable data-driven apps using PySpark on Python. Azure offers a flexible, developer-friendly approach to SAS to PySpark data platform modernization, accelerating innovation and simplifying complex cloud infrastructure challenges. This enables developers to rapidly prototype, develop, and deploy sophisticated AI solutions with ease.



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A New Enterprise Analytics Experience for the Financial Institute with SAS to PySpark Modernized on Azure

Reduced Costs for its Enterprise Data Estate:

Slashed SAS licensing expenses, bringing in cost-effective enterprise cloud infrastructure.

30% Improved Data Processing Performance:

Accelerated data analysis using PySpark's distributed computing, making complex data tasks lightning fast.

20% Enhanced Scalability for Innovative Operations:

Built a flexible data platform that smoothly handles growing data volumes without breaking a sweat.

Accelerated Time to Market for New Data-driven Apps:

Enabled accelerated data-driven app development with the automated code conversion with Amaze® and Azure integration, turning data challenges into rapid solutions.



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How an Accelerated Shift for Enterprise Analytics Powers Business Innovation

Python is turbocharging data and AI transformation. By connecting powerful cloud services with agile Python development, companies can now process data faster, make smarter decisions, and scale operations with unprecedented ease.

Platforms like Amaze® for Data and AI code conversion automation break down technological barriers, allowing businesses to move from complex legacy systems to modern, responsive environments that turn data into a strategic asset. It's not just about adopting new technology – it's about reimagining what's possible when innovation can be achieved faster.



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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