

ABN AMRO ACCELERATES DIGITAL TRANSFORMATION TO AZURE SYNAPSE WITH DATOMETRY

CUSTOMER IN BRIEF



ABN AMRO

COMPANY ABN AMRO

LOCATION Amsterdam, Netherlands

PLATFORM PARAMETERS

60 TB
COMPRESSED
DATA

1,000,000
DAILY QUERY
REQUESTS

150
BUSINESS
USERS

ABN AMRO is one of the largest retail banks in the Netherlands, with over 5.2 million retail clients. ABN AMRO's wealth management has over €200bn in client assets under management, serving over 100,000 clients. With operations in 12 countries, ABN AMRO employs over 20,000 people worldwide.

A personal bank in the digital age, ABN AMRO has long been at the forefront of digital transformation in the financial services industry and an early adopter of public cloud.

STORY HIGHLIGHTS

Outperformed industry

ABN AMRO completed the full migration of their business-critical data warehouse from Teradata to Azure Synapse in under 10 months.

Preserved long-standing investments

With Datometry, ABN AMRO was able to preserve long-standing investments in their application development while, at the same time, meeting stringent regulatory requirements.

Transitioned without downtime

ABN AMRO was able to complete this migration and transition all business users completely seamlessly, without downtime or noticeable disruption.

CHALLENGE

ABN AMRO was looking to move business-critical workloads from Teradata to Azure Synapse. By leaving the legacy vendor, ABN AMRO would realize significant cost savings. ABN AMRO would gain flexibility, an improved price-performance ratio and lay the foundation for a comprehensive cloud strategy.

Before embarking on the project, ABN AMRO evaluated alternative migration approaches. The team evaluated various conventional approaches including code conversion tools that would rewrite SQL embedded in their applications.

Code converters translate legacy SQL expressions into the SQL dialect used by Synapse. However, this method is limited to a subset of SQL statements. Moreover, code conversion does not scale in that it needs manual intervention to extract, modify, and re-insert the code. In the process, application code is modified, opening it up for error-prone alterations.

A further complication was the nature of the application code itself. The applications implement sophisticated models that are subject to stringent regulation. These models are certified by a regulatory body and changes would require a time-intensive certification process before putting them into production. Based on these findings, the team decided to look for an alternative.

From their experience, ABN AMRO was well aware of the common risks that come with conventional database migrations. In the process, the scope of modifica-

tions is frequently extended as it is seen as an opportunity to get unrelated changes incorporated. The sheer volume of such change requests puts migrations at risk, especially when pursuing an aggressive timeline.

Finally, to meet their deadline, ABN AMRO could not afford any missteps in the process. The switch-over from the legacy system to Azure Synapse needed to be performed seamlessly with little to no downtime for business analysts and other internal customers. As much as the migration was a technical problem, it was also a formidable challenge in risk management and execution.

OUTCOMES

Before the formal project kick-off, ABN AMRO had a complete blueprint of their workloads through Datometry qInsight™. The qInsight report provided their team with a detailed analysis, identifying any potential challenges up-front. Equipped with this knowledge, the bank embarked on the implementation knowing there would be no major surprises.

Instead of modifying applications, ABN AMRO leveraged Datometry Hyper-Q. The Hyper-Q platform translates SQL and API calls in real-time. Through Hyper-Q, existing applications work directly with Azure Synapse. The operation is fully transparent, making changes to application code unnecessary.

Hyper-Q enabled ABN AMRO to operate with a small tactical team. By drawing on strong in-house talent the bank did not need to augment their staff significantly.

Being able to keep the size of the team small was critical to maintain agility and also contributed to the overall cost savings.

Liberated from having to rewrite a large body of applications, the ABN AMRO team took the opportunity to selectively adjust a few individual applications. These modifications would play specifically to the strengths of Synapse.

ABN AMRO completed the project on aggressive timeline. In less than nine months, the entire workload was migrated off the Teradata system. After the migration, both the legacy system and the future stack were operated for several months side by side. This enabled business users to validate data and functionality using their original applications.

“With Datometry we have delivered a successful transformation. We moved our mission-critical workloads from Teradata to Azure Synapse seamlessly. With a legacy of more than 15 years of business logic, this is a remarkable result.”

— Marcel Kramer,
Head of Data Engineering, ABN AMRO

Finally, when it came time to switch over, ABN AMRO did not schedule explicit downtime. Instead, they moved their business users to Synapse, their new core data platform, completely seamlessly.

TAKEAWAYS

ABN AMRO completed the migration of their core data platform to Azure Synapse in record time, in less than 9 months. By completing the project on such a short timeline, ABN AMRO realized considerable savings. They were able to decommission the legacy system avoiding a costly renewal and potentially a refresh of the hardware that would have come due. Leaving their applications intact, saved time and effort for rewrites. But it also eliminated undue risk and room for error those modifications would have caused, ensuring the ABN AMRO team was in full control of any risk during the project.

ABOUT DATOMETRY

Datometry is the database virtualization platform for the cloud. Datometry Hyper-Q brings unprecedented simplicity to enterprises that want the benefits of modern cloud databases—without the complexity of reinventing existing applications and business processes. Find out more at www.datometry.com