

### Liberating data insights with cloud

Major financial organization transforms its data and analytics capabilities with cloud and data platforms

## Liberating data trapped in siloes

Today's organizations, public and private, live and thrive by the power of their data\*. And nowhere is this truer than in the financial system.

From financial services providers to finance ministries to central banks, finance-related organizations rely on their people having up-to-date and accurate data-driven insights at their fingertips.

For one major player in the European financial system, the need for enhanced data analytics was creating a growing challenge. Historically, the organization had been divided into several distinct

business units, with each unit gathering, processing, and analyzing its own siloed data for its own needs.

The impact? Data accessibility and consistency were suffering.

Datasets\* were locked away in business units' siloed infrastructure,
SharePoint sites or document management systems. Employees had to resort to text files and spreadsheets to share insights across the organization. What's more, data points and formats frequently didn't match up or were duplicated across different

business units.

The organization's lack of data integration was holding back collaboration and speed of analysis. It recognized an opportunity to "liberate" its data from the current siloes.

The goal? To harmonize data, make it more accessible, reduce duplication, enhance accuracy, improve efficiency, and make analytics faster and more responsive. Ultimately, this would mean upgrading the data operating model, as well as the data platform and infrastructure, in the cloud..



When tech meets human ingenuity

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The second phase of the transformation, currently underway, seeks to transform the organization's data in the cloud.

#### Adata lake and a cloud...

Accenture has been helping the organization redesign and evolve its data infrastructure over two key phases.

The first phase, which is now complete, liberated the data by migrating it into a new centralized platform. This meant building a new on-prem Hadoop-based data lake, complemented with a centralized data factory and maintenance capability, and then onboarding three petabytes of data from 60 separate datasets.

Business users were also empowered to use their own analytics solutions, such as Python-coded tools or low-code/no-code visualizations, to get faster insights out of the data lake. In fact, more than 350 data labs have already been created via this self-service functionality, improving data service and accelerating data experimentation across the organization.

The second phase of the transformation, which is currently

underway, is to transform the organization's data in the cloud by migrating the on-prem data lake to the AWS cloud, using AWS serverless architecture to build cloud-native data infrastructure. This would enable the organization to accelerate data insights, further standardize the technology stack, reduce technical debt, and take greater advantage of cloud-based services like machine learning.

## And new ways of working

The team also saw an opportunity to rethink the data operating model and avoid the potential bottleneck created by onboarding and syncing data in the centralized data lake. A new federated approach, which Accenture is helping to design and implement, will involve creating decentralized "data product" teams.

Oriented around individual data products, these teams will include business users, DevOps engineers, security experts and data analysts.

The objective is that each data product team will take responsibility for aggregating, validating, enriching, and submitting its own data to the data lake and drawing insights out of it.

To make this flexible and usercentered approach work in practice, the organization will need **selfservice capabilities** plus rigorous data governance and standardization. Accenture is enabling this by building a standardized interface layer to enforce governance and providing a team of "Data-Infrastructure-as-a-Platform" engineers. This team will offer domain-agnostic self-serve tooling and infrastructure, ensuring product teams can pick and choose any cloud platform for their needs, enabling a hybrid multi-cloud environment.



#### Unlocking insights with trusted data

With Accenture's help, this leading finance organization is undergoing an evolutionary journey to dramatically modernize and transform its data and analytics capabilities.

In implementing a centralized data lake, it has already freed data from the legacy database\* siloes. That's radically enhancing data efficiency, accessibility and governance, while also enabling more flexible and secure data storage.

Data has become a reusable business asset, with data consumers able to get access to the data they need, when they need it, to build data-driven products and make more informed decisions. And with less redundancy and duplication, data is also more trusted and can be used with greater confidence.



Data consumers will have a "one-stop shop" for quickly accessing raw data from across the organization.

# Future of data in a modern finance organization

But that's only the first part of the story. As the organization looks ahead to a future cloud-based ecosystem of data products and processes, it will benefit from a whole range of new capabilities. Data consumers will have a "onestop-shop" for quickly accessing raw data from across the organization.

BYOT (bring your own tooling) will enable data product teams to use

their preferred tools and solutions for analyzing data. Data governance will be stronger thanks to the new standardized interface layer. And because full data lifecycle management is handled by product teams and data owners themselves, data efficiency will be transformed.

What's more, the transformation is fundamentally changing this organization's approach to its data. Whereas IT was once seen as an

impediment to innovation and improved time to market, collaborative business and DevSecOps teams are now being empowered to work together in a more user-centered, flexible, fast, and efficient way. That, in turn, will enable far greater organizational speed and agility—a critical capability for a modern finance organization.

For the purpose of this case study, we define data, dataset and database as follows:

- Data are observations or measurements (unprocessed or processed) represented as text, numbers, or multimedia.
- A dataset is a structured collection of data generally associated with a unique body of work.
- A database is an organized collection of data stored as multiple datasets, generally stored and accessed electronically from a computer system that allows the data to be easily accessed, manipulated, and updated.

Source: <u>USGS Data, Tools, and Technology FAQs</u>