



Informatica®



Modern Cloud Data Warehouses and Data Lakes Are Key to Financial Services Success

Controlling analytic complexity requires intelligent cloud data management

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Introduction

Financial services firms today are modernizing analytics in the cloud to achieve greater agility, increase scalability, and optimize costs. Either they are building new cloud data warehouses and data lakes, or they are strategically moving their on-premises data warehouses to the cloud over time.

Automated, intelligent, cloud-native data integration, data quality, and metadata management are key to maximizing the value of cloud analytics projects. In order to take full advantage of the cloud's agility, flexibility, and scalability and avoid repeating the difficulties that have plagued on-premises environments, financial services companies need to take a systematic approach to data quality and data management in their cloud data warehouses (CDWs) and data lakes (DLs).

What is the difference between a CDW and a DL?

Cloud Data Warehouses (CDWs). Typically, these are relational databases that tend to be columnar in their architecture, meaning they store data by column, which greatly speeds up common queries like, "Give me the account balances of all customers who live in California." CDWs typically store and process structured data but modern CDWs now also support unstructured data. CDW tools are offered by all of the major cloud ecosystems that focus on fast ingestion and extraction of data, and facilitate their use in big data applications. Amazon Redshift, Google BigQuery, Microsoft Azure Synapse Analytics, and Snowflake are examples of these offerings.

Data Lakes (DLs). Typically used in conjunction with CDWs, data lakes are storage platforms that are designed to hold, process,

and analyze massive amounts of data. DLs initially were used to store and process unstructured data for cost and performance benefits but now DLs also support structured data. All data is held in its native format and only reconfigured as and when needed. A data lake provides the perfect environment for data scientists to create new applications and run major analytics tasks. By leveraging some of the more sophisticated data mining applications, they can help create a holistic view of each customer by combining different sociodemographic and behavioral data.

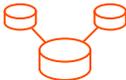
CDWs and DLs are different approaches to delivering cloud-based advanced analytics capabilities. Every project may require one or the other. Financial services organizations will determine which approach makes the most sense based on their specific needs.



What's Driving CDW/DL Adoption in Financial Services

In response to the need for modern analytics capabilities, financial services companies are upgrading or replacing their legacy on-premises data stores, data warehouses, and Hadoop clusters with modern cloud data warehouses and data lakes from providers such as Amazon Web Services (AWS), Databricks, Microsoft Azure, Google Cloud, and SnowFlake.

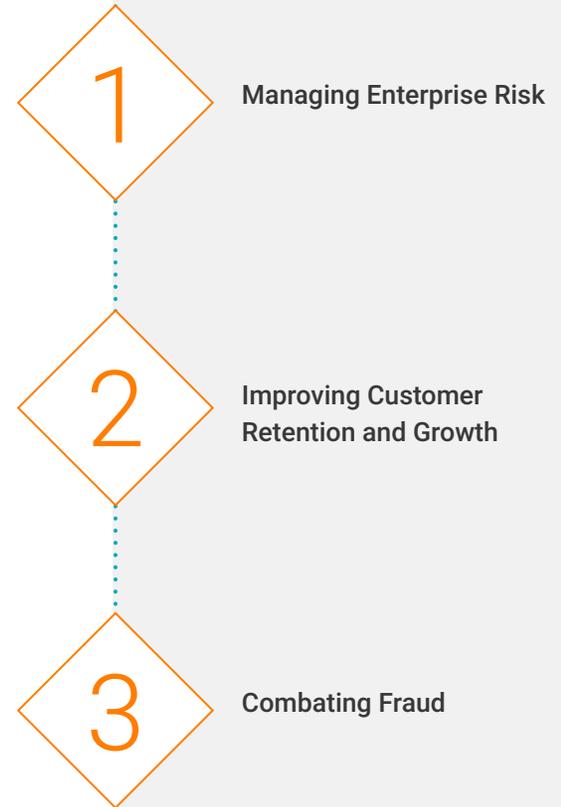
According to a [recent report](#)¹, the data warehousing market is set to reach \$34.69 billion globally, growing at a CAGR of 8.2% from 2018 to 2025. Here are some of the reasons why:

-  Lower total cost of ownership for hardware, software, and IT infrastructure.
-  Pay only for what you actually use; don't pay for unused capacity.
-  Faster provisioning of IT environments; new IT capability and capacity delivered in minutes rather than months.
-  Access to external technologies and capacity that would be impossible to host internally.
-  Cloud vendors normally offer command-line options, graphical interfaces, and APIs that are familiar to users and permit automation of manual tasks.
-  Increased focus on meeting business challenges rather than expending resources on commoditized technical problems.

Top Business Challenges in Financial Services

The aim of phasing in these modern approaches to data management is to leverage their advanced analytics capabilities and enable financial service providers to overcome the unprecedented challenges of today and the near future. Every year brings new uncertainties to quantify. Going forward, the industry as a whole will face increasing risk fueled by market volatility, rapidly emerging technologies, global interconnectedness, changing economic and jurisdictional factors, competition, and consumer demands.

Modern events are providing important lessons regarding the recent global coronavirus pandemic, rising unemployment rates, and fears of a global recession, among other disruptions—forcing risk professionals across financial services to recalibrate how to model risk and reassess their capital reserves to cover future losses from underestimated exposures. Overcoming the core challenges to financial services that are outlined below will require that firms successfully adopt, foster, and implement effective modern data management strategies.



Managing Enterprise Risk

Risk, uncertainty, and rising demand for compliance requires effective data management



Risk management in banks has changed substantially since the 2008 credit crisis. Firms are looking to gain more insights and understanding of their financial and reputational exposure to everything from bad employee behaviors to sophisticated cybercrime, trade wars, climate change, and global pandemics. Across the insurance sector, companies are also operating under the increased scrutiny of an ever-changing regulatory environment. The current pandemic and growing concerns of a global economic slowdown require insurance providers to identify, define, quantify, and treat all of the risks facing an organization, whether insurable or not, across all lines of business and geographies rather than just a business silo or country.

By getting timely access to reliable, accurate, and trusted data—and the resulting insights delivered—financial services decision-makers could boost productivity and transform the efficiency and quality of their enterprise risk management activities. Risk management teams require access to all data from every system across the enterprise and the ability to easily incorporate new sources and types of data—including unstructured formats, third-party data feeds, call log data, trade reconciliation data, and other types of data that have not been looked at before in great detail. In addition, all of this data is required in an easily accessible, centralized data warehouse so that teams can analyze tendencies and relationships and report and predict thresholds and exposures.

Today, a vast amount of customer data is available and accessible to banks. Faster, cheaper computing power enables banks to leverage new information—for instance, granular customer-payment and spending behavior, social-media presence, and online browsing activity—in risk decision-making. Machine learning identifies complex, nonlinear patterns in large data sets and makes more accurate risk models possible. These models learn with every bit of new information they acquire, improving their predictive power over time.

Improving Customer Retention and Growth



Financial institutions are under increasing pressure to identify newer opportunities to refine how they market and sell to consumers, grow wallet share, and improve customer loyalty

Today's banking clients are looking for a more personalized experience across any touchpoint, from their teller to that human being on the other end of a phone call. They want their financial institutions to know who they are and the relationship that they have with them. They also want easy access to existing services on their favorite technology devices. For example, the use of messaging apps to send money has become very popular. Banks have responded to this trend by investing heavily in mobile-friendly technology, which has generated additional sources of data, both mobile and location. Banks are mining and leveraging this data to aid them in retaining customers and growing wallet share.

The average consumer has many different financial relationships. Over half (56%) of U.S. households have two or more banking relationships, up from only 36% in 2011. Affluent consumers are more likely to deconsolidate, with \$2 million-plus consumers using four firms, up 0.7 percentage points in one year. Consumers appear to seek specialization, such as integrated features or loyalty reward programs.²

Financial institutions face unprecedented challenges when it comes to retaining profitable customers while growing revenue from existing ones. In today's digitally driven and price-sensitive society, banks and insurance companies must identify, predict, and influence what their customers' needs are, offering the best product and price at the right time through the most effective channel to avoid losing customers to competitors.

To uncover ways to delight their customers, financial services firms must collect data from a multitude of sources, creating a broader view of each customer than has previously been possible. This must include untapped data from nontraditional sources like customer comments on websites, video footage from branches, mobile phone data, and call center recordings. By leveraging the automation and scale of artificial intelligence, marketers will be better able to determine what drives customers to accept offers. Financial services marketers can discover, integrate, and run analytics on massive volumes of historical marketing response data, including

customer account profile information, social media data, customer sentiments, transactions, and interactions. They can also uncover insights in nontraditional data, including competitive news feeds and call log data from call centers.

Ingesting all of this structured and unstructured data into a CDW/DL will set up financial services firms to leverage artificial intelligence (AI) and machine learning (ML)–fueled next best action (NBA) analytics. These can be used to detect patterns and guide analysts and customer-facing employees with the appropriate actions to take in order to create tailored experiences for each individual customer, rather than marketing single products through large scale and costly outbound campaigns. This approach will help financial services firms more accurately predict customer behavior and more successfully cross-sell and upsell products and services, based on the patterns detected.



Combating Fraud

As financial institutions have accelerated their shift to digital and mobile-based transaction platforms, vulnerabilities in payment services have increased



Banks lost \$16.8 billion to cybercriminals in 2017. Given the high potential financial losses and reputational damage associated with software-based attacks and payments crime, it is crucial that firms take concrete steps to ensure mobile-application integrity.³ Businesses are bracing for an increase in cyberattacks and critical breaches to occur and are constantly battling to stay ahead of fraudsters.

Fraud accounts for 5% to 10% of claims costs for U.S. and Canadian insurers. Nearly one-third of insurers (32%) say fraud is as high as 20% of claims costs.⁴

In order to successfully combat the financial and reputational impact from these criminal activities, financial services firms will need to integrate third-party data with traditional payment, claims, and other transactional data. This will enable data scientists on their fraud detection teams to quickly identify key indicators of both false

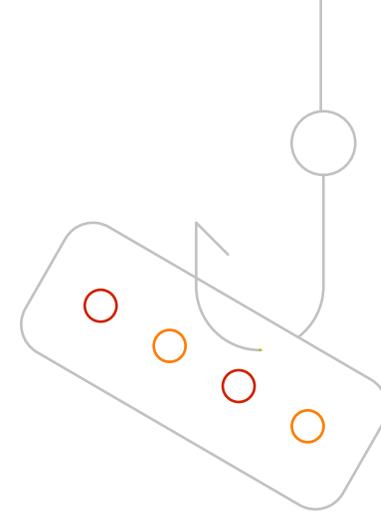
and true positives and use these insights to take preventive and offensive measures. In order to do this, most firms have already modernized their existing fraud monitoring systems, investing in cloud-based data lake solutions and adopting AI- and ML-powered predictive analytics to detect and combat fraudulent activities.

The risk of fraud in the insurance sector can be modeled by looking at historical outcomes and applying scoring mechanisms over new data sources. Thanks to a wider pool of data, insurers are now able to focus on more factors to refine the accuracy of the fraud models. Data lakes are enabling insurers to ingest and analyze more data, in more depth, using models that can be refined over time as the systems above them change to meet the demands of the market. By constantly and iteratively adding new factors and new data relationships, an insurer can spot patterns in data that would not otherwise have been detectable from a database. DLs also

provide structure and meaning to information that might not be obvious to analysts at first pass. Financial services firms can use AI and ML tools to glean insights from DLs, allowing them to analyze new fraud threats, and use NBA to determine the best way to respond.⁵

Automating and scaling the process of analyzing data in a DL for signs of fraudulent activity with ML-driven anomaly detection is the route the financial industry is taking, because there is enough data, and the amount of data is growing. ML can crunch through thousands of signals and look for probabilities of fraud, whereas a human analyst is much more limited when making a determination. A DL will improve results and reduce the time and cost associated with managing these cutting-edge fraud detection algorithms.

Examples of AI in Fraud Detection

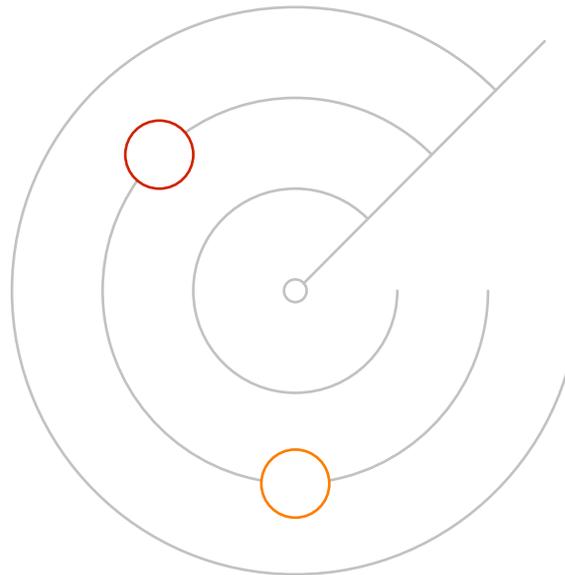


Here are three examples of how banks are using AI to combat fraud, comply with anti-money laundering (AML) regulation, and shield against cyber threats:⁶

HSBC – The bank’s IT team uses ML to identify patterns in historical data that suggest money laundering. When the algorithm is fed current payment data, it can identify fraudulent patterns and alert staff to block these payments. It also analyzes the source and destination of suspicious payments to identify deviations from normal behavior.

JPMorgan Chase – The bank developed an early warning system to identify suspicious malware before phishing emails are sent to employees. The algorithm can also identify malicious URLs by comparing them with known suspicious traffic patterns, jumbled URLs, and spelling mistakes that are common with fraudulent activity.

Danske Bank – The bank’s rules-based fraud detection system had only a 40% success rate and generated 1,200 false positives per day. It developed a deep learning algorithm that increased fraud detection by 50% and reduced false positives by 60%. The system automates many decisions while also routing some cases to human analysts for further investigation.



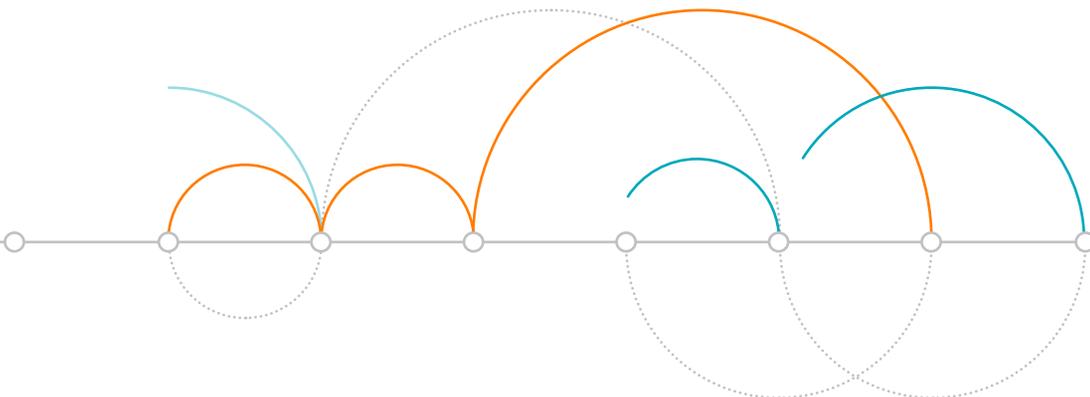
Financial Services Challenges Have Evolved—Legacy Data Stores and Data Warehouses Can No Longer Perform

On-premises systems force financial services firms to put data into fixed models that take too long to create, have limited storage and processing capacity, and are not scalable

In today's world, financial services firms of all sizes are managing complex digital technology infrastructures, modular platforms, and multi-cloud architectures, all moving vast volumes of data at unbelievable speeds around the world. Coupled with rising regulatory mandates that demanding consumer privacy and protection, this means there is simply no easy way to gain visibility into a financial enterprise's volumes of data and make that data accessible, usable, secure, and trusted.

Harnessing meaningful insights from the ever-increasing volumes of data, in order to successfully meet the challenges outlined in this eBook, has become only more complex. There is an endless flow of detailed data, structured and unstructured, pouring into the modern financial services firm today. The data is coming in from social media sites, sales systems, internal systems, and from mobile and internet of things devices. Financial services firms need modern tools and technologies that are designed to ease the discovery, ingestion, preparation, and analysis of this data at the speed of business.

Unfortunately, legacy, on-premises data warehouses are unable to keep up with the amount of data for analytics and insights, both from a compute performance and cost perspective. Financial services firms can no longer continue investing resources, hardware, and manpower in on-premises data storage solutions to address the challenges they face; it is high time to rethink the way they architect solutions to overcome these data-driven challenges.



Financial Services Challenges Have Evolved—Legacy Data Stores and Data Warehouses Can No Longer Perform

(continued)

Some of the drawbacks of on-premises data stores and data warehouses include:



Cost

Most on-premises data warehouses have large upfront costs in hardware, software licenses, manpower, and setup time; cloud data warehouses can be spun up at a much lower cost to start and can gradually grow as needed over time. As a result of these economics, it's also easier to spin up exploratory projects with cloud than it was with traditional environments.



Complexity

On-premises data warehouse and data lakes require a lot of setup configuration, tuning, and maintenance to keep the systems running at high performance and efficiency to meet business SLAs. Some modern cloud data warehouses and data lakes can run in serverless mode, with auto-scaling and auto-tuning thereby hiding a lot of the complexities associated with traditional on-premises data warehouses and data lakes.



Time to value

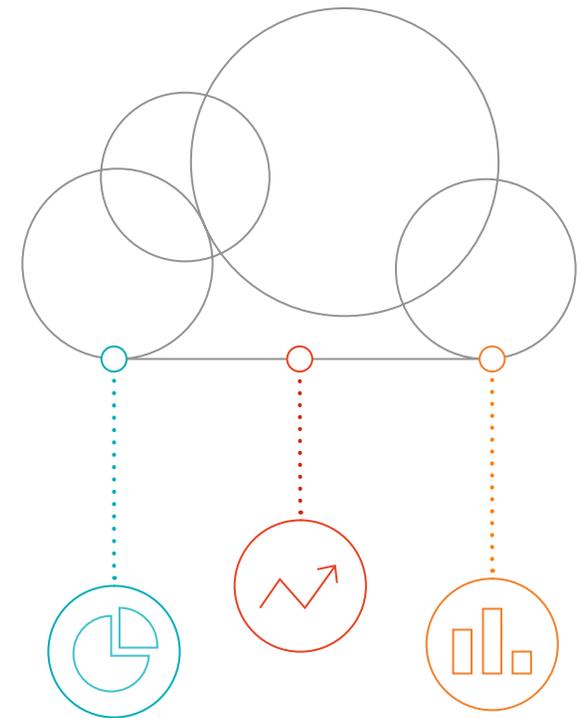
Business often complains that it takes too long to get the data they need or for change requests to be implemented with on-premises data warehouses. With cloud data warehouses and data lakes, the business has self-service access to much of the data they need.

Taking a Phased Approach to Analytics and Data Warehouse Modernization in Financial Services

Over the last five years, financial services firms have largely migrated their data from on-premises systems to cloud analytics and cloud data management aligned with strategic cloud ecosystems. Attracted by the value proposition and the tools offered by cloud vendors with data warehouses for fast ingestion and extraction of data, they also appreciated the ability to facilitate easy usage of data within big data analytics applications. Amazon Redshift, Google BigQuery, Microsoft Azure Synapse Analytics, and Snowflake are examples of these offerings. Cloud-based tools for data warehouses enable firms to get answers from their data much faster than they could with traditional, on-premises data warehousing architecture.

Today, cloud is the preferred option for big data analytics in financial services because it provides the scalability required to address the industry's biggest challenges, as well as the ability to shift the cost structure. Teams can spin up compute power on the fly, without operational support from their own IT departments or the need to commission hardware or hire human resources.

Financial services firms require a modern data management architecture, approach, and strategy to actually support the agility, scale, and complexity of the data that exists today in financial services analytics to support their success. The only way to meet business demands and overcome their future challenges is to leverage the scale, elasticity, cost/time efficiency, and overall value to the entire enterprise that the cloud offers.

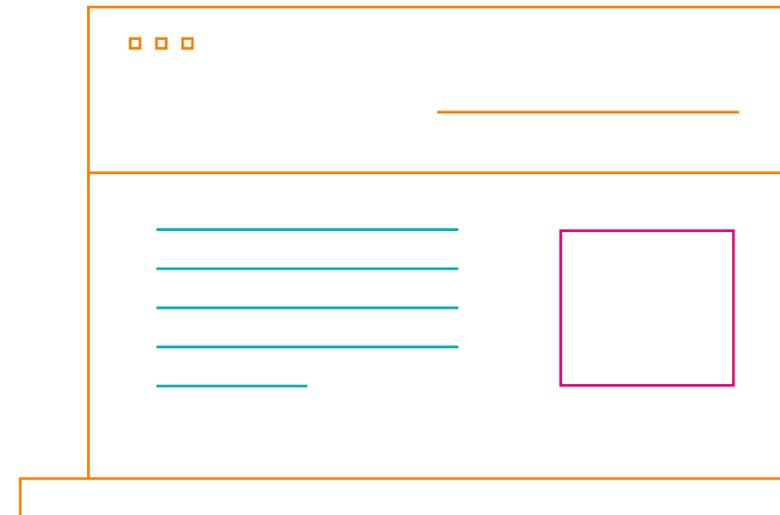


Financial Services CDW/DL Use Case Examples

At Informatica, we believe that to effectively manage risk, retain customers, and detect fraud in financial services, firms must be able to understand and use data science that leverages modern analytics technologies in order to get a broader, more holistic picture of things that are not obvious or easy to identify manually. So much of the data that is used today to overcome the core business challenges is unstructured data—and analysts don't even have the experience required to know quite how to use it yet. Therefore, expecting legacy systems to manage such unstructured data is an exercise in futility. You don't have time to architect a model for ten months or a year and then deploy capabilities. In today's fast-moving environment, requirements will have shifted tremendously by then.

To effectively manage the unstructured data discussed in relation to the core challenges, financial services firms need a CDW/DL that doesn't force a fixed architecture or data model. It should also allow your data scientists, modelers, and analysts to figure out how to use that data to deliver high-value insights as fast as possible. They need that agility, and the capability to play with all kinds of data, to arrive at value.

On the following page are two of the emerging patterns we see in next-generation data warehouses and data lakes for financial services:



Financial Services CDW/DL Use Case Examples (continued)

For both use cases, financial services firms need cloud-native, best-of-breed data integration, data quality, and metadata management to ensure that they're maximizing the value of their cloud analytics.

New Cloud Data Warehouse and Cloud Data Lake

Start small and fast, then grow as needed

Often the fastest way to meet a focused business intelligence, departmental reporting, or self-service analytics initiative is to implement a new cloud data warehouse and data lake.

Financial services firms require the ability to:

- Discover data to ingest
- Ingest data to a landing zone
- Integrate and cleanse data into any cloud data warehouse and cloud data lake
- Enable self-service business intelligence with an embedded data catalog and data integration capabilities

Cloud Data Warehouse and Data Lake Modernization

End-to-end modern data infrastructure for next-generation cloud analytics

With the modernization pathway, you rebuild everything to take advantage of the most modern cloud-based enterprise data warehouse, data lake, and lakehouse technology to end up in the strongest position long term.

Financial services firms require the ability to:

- Discover and prioritize data that needs to migrate
- Migrate clean, well-governed data from on-premises to cloud
- Catalog data wherever it exists—on premises or across multi-cloud—for quick and easy access
- Ingest data using appropriate integration patterns, including batch, real-time, and change data capture
- Leverage Spark for data processing with no time-consuming, difficult-to-maintain hand coding
- Enable self-service data preparation and self-service analytics

Case Study



Becoming Data-Driven with Cloud Analytics Modernization

Home Point Financial is a national, multi-channel mortgage originator and servicer. Its lending focuses on speed and consistency for its customers and partners, combined with superior customer service.

Challenge:

Home Point Financial is committed to a “cloud first” data strategy to achieve market disruption and to scale to meet future growth. The company wanted to stay agile and low-cost from a labor standpoint, utilize a platform that would be future-proof, and limit changes to its underlying architecture. It also needed to partner with data warehouse and integration vendors that would perform well on Microsoft Azure Synapse.

Solution:

Home Point Financial uses Informatica Intelligent Cloud Services for the delivery and integration of data while creating availability. It uses Snowflake to host and store the data, and Tableau to present and deliver data.

Results:

Informatica’s solutions help Home Point Financial achieve cost savings by utilizing a platform that does not require an enormous investment in human resources. Informatica’s Cloud Data Integration enables Home Point Financial to provision a codeless, optimized integration to hundreds of applications and data sources across on-premises and cloud.

“Informatica for the delivery and integration of the data, Snowflake for the hosting and the storage, and then Tableau for the presentation and delivery— it’s a great combination.”

— **James Newsom**, Senior Director, Data Services, Home Point Financial

Case Study



Large Nordic Consumer Bank With Cloud Architecture

A Nordic bank with a \$780 million yearly turnover and 1,400 colleagues in Sweden, Norway, Denmark, and Finland, providing loans and credit, credit cards, deposits and insurance to 1.5 million private customers and 10,000 partners across the four Nordic countries.

Challenge:

The bank was operating 12 different data warehouses across the enterprise, each with different IT configurations, resulting in a fragmented data landscape and operational bottlenecks. The customer wanted to improve time to market for its digitized consumer products and services and reduce the reporting complexity for its business users, while also simplifying internal and external access to data by enabling real-time, self-service data access.

Solution:

Using Informatica Intelligent Cloud Services to propel an event-driven data integration from multiple sources, including loan requests from its customer engagement platform on Salesforce, process requests on its core banking platform on BanqSoft, and verification of credit scoring on external providers' systems. The solution enables the customer to publish the results back to the end consumer, and also allows other internal systems to consume the data about its customers' loans and credit scoring. Informatica's Enterprise Data Catalog and Axon Data Governance are also leveraged to provide the customer with data lineage and BI and to support advanced analytics capabilities with its data.

Results:

Informatica's solutions provide the customer with one platform to control access and deliver all data from its data warehouses to consumers, resulting in less duplication of data, rapid prototyping, efficient abstraction, and quick self-service, while preserving its existing cloud architecture. The bank's data users are provided standard reporting capabilities with self-service, data exploration, and analytics.

Case Study



Australian Bank Aims to Modernize Its CDW

An Australian customer-owned bank and mutual financial institution providing services to customers through 49 branches, mobile lenders, an ATM network, internet, mobile banking, and a customer service call-center.

Challenge:

The customer struggled to modernize its CDW architecture to support its aims to become more agile, improve customer service, reduce the cost and complexity of its existing hand-coded IT solutions, and help it successfully manage risk in compliance with the mandates of the Australian Prudential Regulation Authority (APRA).

Solution:

The bank leverages Informatica's Intelligent Cloud Services and Enterprise Data Catalog solutions to discover and move data at speed in order to confidently feed internal and external reporting, which enables an enterprise-wide use of their data analytics platform.

Results:

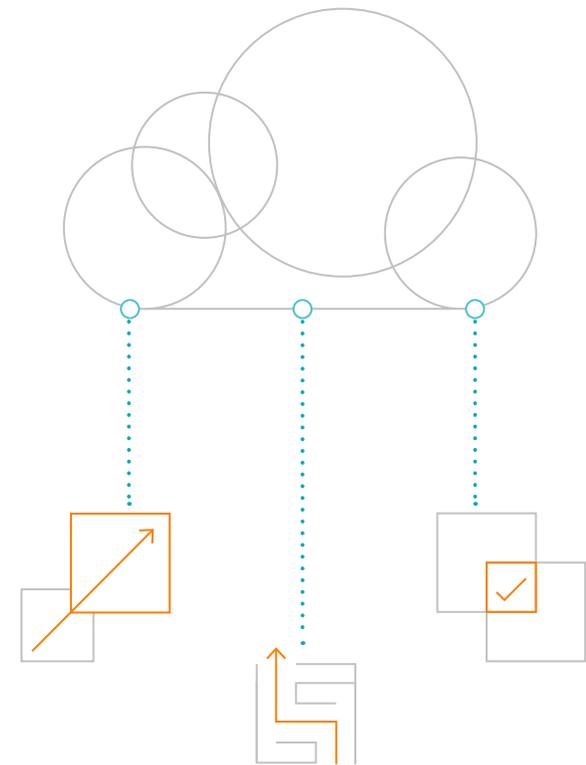
Informatica's platform-based solution provides the bank with automation, efficiency, scalability, and agility, satisfying their present data management needs and underpinning their future requirements as well.

Modernizing Analytics With CDW/DL

Moving financial services analytics platforms to the cloud will enable faster time-to-insight, the flexibility to innovate more quickly, and the operational benefits of consuming cloud-based services. These platforms often come with AI-driven and ML services to help firms identify both known and unknown risks—but it is vitally important to remember that none of that can be done without a foundation of trusted data feeding your AI and ML models. If financial services organizations want to succeed with CDWs/DLs, they will need solutions to effectively catalog, ingest, integrate, cleanse, master, and govern data.

Implementing new cloud analytics solutions, or modernizing existing on-premises analytics capabilities by moving them to the cloud, can be risky if the underlying data is not managed appropriately. In this complex data environment, financial services organizations require strategic relationships with enterprise data management, cloud platform, and implementation partners that can flexibly help manage and deploy a modern, agile analytics platform that delivers high-value financial analysis.

“High quality data is not hard to achieve any more—with AI-driven automation, it simply becomes a natural extension of the data and an expectation of the end users.”



Modernizing Analytics With CDW/DL (continued)

The following is a summary of critical data management capabilities that financial services firms should look for in a cloud data management solution, and to support CDWs and DLs.



Cloud-Native Data Integration

- Codeless integration
- Mass ingestion for files, databases, and streaming
- Push down optimization
- Serverless and elastic scaling
- Spark-based processing in the cloud
- Broad connectivity
- Stream processing
- Operationalizing machine learning (MLOps)



Cloud-Native Data Quality

- Data profiling
- Data quality rules
- Dictionaries to manage value lists
- Cleansing, standardization, parsing, verification, and deduplication/consolidation processes
- Integrated into data integration
- Data quality analytics



Metadata Management

- Data discovery
- End-to-end lineage
- Metadata – technical, business, operational, usage
- Connect and scan metadata
- Common metadata foundation

Avoiding Pitfalls On The Road to Successful CDW/DL Adoption

Financial services firms are modernizing in the cloud for scalability, elasticity, and cost savings, but there are several pitfalls in this journey

Organizations often get started by standing up a cloud data warehouse for a departmental project to pilot the solution and evaluate their cloud options. Once this is successfully delivered and some business benefits are realized, the next phase is to migrate more traditional on-premises data warehouse projects to the cloud, or add a data lake to land raw data for data science exploration and curating new data sources.

At Informatica, we have consistently found four points of potential failure when financial services organizations migrate to a new data management platform or ecosystem, which we endeavor to share with our customers. They are:

- **Data Discovery.** Understanding what data you have, what data needs to be moved to the cloud, and when to move it—are essential but daunting tasks for financial services organizations. AI-driven automation tools and machine learning are making data cataloging and data discovery more feasible in shorter time frames than ever before. Auto tagging data with searchable business terms is one

example of a data discovery solution that Informatica has implemented for customers with resounding success.

Calls to Action:

- Consider an Enterprise Data Catalog to scan, discover, and catalog assets across on-premises, cloud, and big data platforms; across BI tools, ETL, and third-party metadata catalogs; and across structured and unstructured data types.
- Ensure you have access to detailed technical data lineage information to get a complete tracking of data movement, from high-level system views to granular column/metric-level lineage, and detailed impact analysis.

- **Data Integration.** Successful cloud migration requires that all relevant data is integrated into the cloud—any data, at any latency, at any scale—in an organized, documented, repeatable, and reliable way, that keeps up with rapidly changing cloud ecosystems and storage technologies. The challenge is to build innovation with rapid agility in mind to match

the pace of technological change in the cloud. Customers need codeless ingestion solutions that are self-documenting, repeatable, and reliable to keep up.

Calls to Action:

- Consider adopting a purpose-built data integration solution designed for modern cloud data warehouses and data lakes that supports both real-time as well as bulk data ingestion. This avoids having to purchase, learn, and manage different tools, which can drive up development and maintenance costs. It enables you to easily extract data from multiple sources and join, aggregate, filter, and load the data into a cloud ecosystem.
- Invest in a solution that comes with pre-built APIs, connectors, and integrations to access, ingest, and integrate data from legacy mainframes, databases, flat files, and legacy packaged business applications to more modern SaaS and other cloud ecosystems. This avoids the cost and risk of writing custom extractors or manual steps to access, stage, and integrate data.



Avoiding Pitfalls On The Road to Successful CDW/DL Adoption (continued)

- **Data Quality.** Most shared data platform failures happen because users do not trust the data and adoption suffers. This is because data quality and lineage have been largely ignored in the rush to data ingestion. Modern, AI-driven automation tools for data quality bring robust profiling capabilities to financial services that will be essential as we migrate more and more data to the cloud. Data is cleansed and standardized automatically, without requiring anyone to write a single line of code. The result is an implicit trust in the data going forward and a significant increase in adoption rates of the new cloud ecosystem.

Calls to Action:

- Scan for errors before and after you ingest your data into the cloud data lake. Data can change or get corrupted in the data lake.
- Revalidate quality levels as data leaves the data lake to feed cloud data warehouses, apps, etc.

- Leverage and govern a common set of shared data quality policies and rules vs. building one-off rules for the same problem.
- Provide transparency into the quality of your data for data consumers and users through real-time, business user-friendly dashboards.
- **Data Preparation.** Two of the great promises of cloud for financial services firms are the democratization and operationalization of data preparation at enterprise scale, allowing more and more users to get self-service access to an organization's data assets. Success requires that data access and data prep tools are easy to use and meet the needs of both technical and nontechnical users. AI-driven data access and preparation tools enable users to easily connect, sample, blend, and visualize data while applying pre-built data quality rules, until their data is perfect for their project. With a single click, users can publish and share their data assets so that even more users can have access to it—and all without writing a single line of code.

Calls to Action:

- Avoid the hurdles and challenges of past operational data stores that siloed data—preventing business users from accessing it—by instead investing in data preparation capabilities that empower self-services access to required data.
- Make it easy for business users to search for what data is available and what it means, as well as for data policies, data stewards and owners, and more.
- Make data governance and management collaborative between business and IT departments.

For more on the requirements for successful CDW/DL adoption, [see this video](#) on how to avoid pitfalls and win in the cloud, with the right data management capabilities.

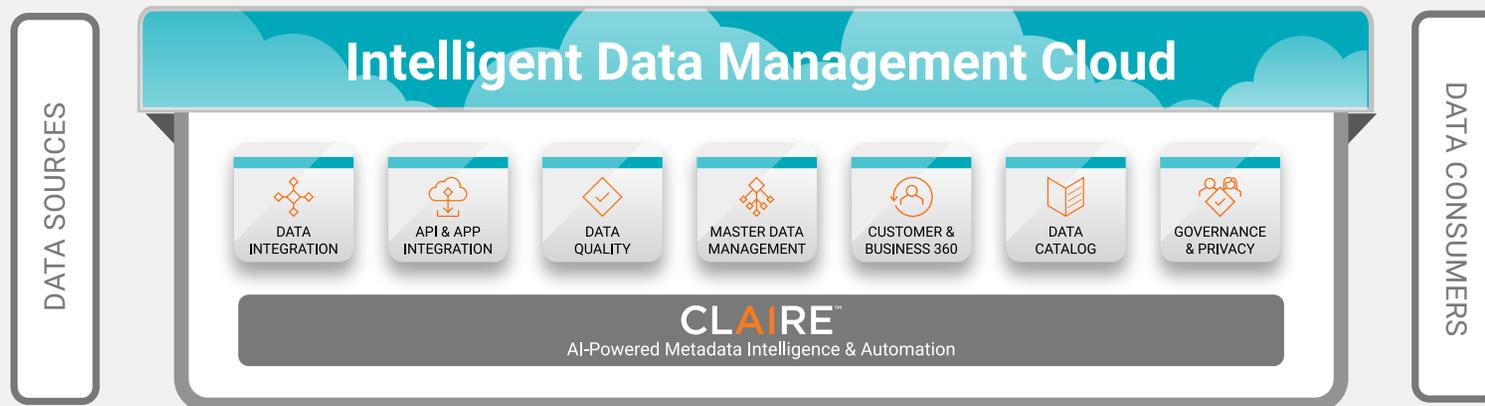


InformatICA's Intelligent Data Management Cloud™

The InformatICA Intelligent Data Management Cloud drives democratized integration, data, and application services.

The [InformatICA Intelligent Data Management Cloud](#) is the industry's most complete and modular enterprise data solution, built on a microservices architecture to help financial services organizations unleash the power and value of all data across the enterprise. The AI-driven platform spans on-premises, multi-cloud, and big data environments anywhere—ensuring data is trusted, protected, governed, accessible, timely, relevant, and actionable. This enables financial services firms to deliver faster and better data-driven digital transformation outcomes.

InformatICA's risk-centric approach to protecting data automatically classifies sensitive data and proactively detects threats associated with unauthorized data access or proliferation. Based on assessments, data can be non-intrusively protected for secure access to contextual information. Financial services organizations can better maintain and improve their cyber posture and cybersecurity efforts. InformatICA offers a cloud security certification program that teaches customers how to protect and manage their cloud environment.



About Informatica

Digital transformation changes expectations: better service, faster delivery, with less cost. Businesses must transform to stay relevant and data holds the answers.

As the world's leader in enterprise cloud data management, we're prepared to help you intelligently lead—in any sector, category or niche. Informatica provides you with the foresight to become more agile, realize new growth opportunities or create new inventions. With 100% focus on everything data, we offer the versatility needed to succeed.

We invite you to explore all that Informatica has to offer—and unleash the power of data to drive your next intelligent disruption.

Worldwide Headquarters

2100 Seaport Blvd, Redwood City, CA 94063, USA

Phone: 650.385.5000

Fax: 650.385.5500

Toll-free in the US: 1.800.653.3871

informatica.com

linkedin.com/company/informatica

twitter.com/Informatica

[CONTACT US](#)

References:

- 1 [Global Data Warehousing Market: Opportunities and Forecasts](#), 2018-2025, Allied Market Research, 2019.
- 2 Share of Wallet at Leading Financial Services Firms Drops as Multiple Relationships for Consumers at All-Time High, Hearts & Wallets, 2019.
- 3 Banks will feel the pain from mobile payment fraud, Bill Horne, PaymentsSource.com, 2019.
- 4 Coalition Against Insurance Fraud
- 5 Could data lakes hold the key to tackling insurance fraud?, John Davison, ITProPortal.com, 2018.
- 6 Artificial Intelligence for Risk Reduction in Banking: Current Uses, Raj Shroff, Medium.com, 2020.

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