Why Financial Services Companies Choose Pentaho

Leading financial services institutions are constantly exploring new ways to extract value from their data to support critical business initiatives like attracting new customers or entering new markets. Although seeking the information advantage is nothing new in this industry, being able to incorporate new data sources and technologies into current workflows is incredibly important. Things like responding to complex regulations and competing with new market disruptors has become even more challenging in today's competitive environment.

Big Data Landscape

Financial and banking organizations were some of the early adopters of big data, including Hadoop, as it provided a clear advantage to cost containment and faster processing time for large data sets. However, Hadoop itself presents a number of challenges. For example, it can be difficult to ingest data at scale, it can be very cumbersome to access that data in a timely manner, and it can be challenging to make sense of the data in order to drive strategic decisions.

A large UK based investment bank started their big data strategy roughly four years ago and faced similar challenges. With over 300 key data sources that needed to be fed into their Hadoop environment, the bank struggled to keep pace with their data demands. The number of different data sources made the ingestion process very complex and slow. With it taking anywhere from six to nine months to ingest the data, making sense of that data was not possible in a timely manner. Clearly, this was not acceptable to the business.

The bank initially addressed this challenge by purchasing more software applications and tools. Unfortunately, this not only failed to alleviate their challenges, it compounded them as they were then forced to pay more money for tools that were not fit for their use case.

So they turned to Pentaho. Pentaho's model driven data ingestion capability enabled them to load new data sources into the bank's Hadoop environment in weeks rather than months. Following the initial load, Pentaho's automated capability allowed for these sources to be ingested on an ongoing basis. And today, using Pentaho's Business Analytics, the bank can now create actionable views of their data to help drive a number of business critical initiatives for the organization — from reducing cost per trade to detection of overly risky or 'rogue' trades.

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Another European client and early adopter of Hadoop had over 6,000 data sources to onboard into their Hadoop environment. By using traditional ETL processes it was taking five to ten days per source with a consultant charging roughly $1,000 per day. The cost to the bank to onboard these data sources was in the millions. So they turned to Pentaho. With Pentaho's model driven data ingestion capability, loading time for these 6,000 data sources was reduced from weeks to days.

Risk and Compliance

For years, the financial services industry has been dealing with a growing number of regulatory requirements, including the more notable Basel III reforms. This makes it difficult for the many financial services institutions who already struggle to improve their ability to respond to regulatory scrutiny, provide accurate reporting on risk exposure, and to automate the compliance process.

As a result of the fallout of the 2007-2008 financial crisis, a number of liquidity ratios were introduced as part of these reforms to avoid another credit collapse. One of those was the Liquidity Coverage Ratios. This translated to banks maintaining an adequate stock of high-quality assets that can be quickly liquidated to meet cash flow needs over a short period of time. However, determining the daily ratio could be incredibly difficult and time consuming.

A large financial institution was running 34,000 jobs that consumed data from 400 Applications across 34 countries. Hand coding was used to create these jobs which was problematic for two main reasons — 1) it took more than 24 hours to process the data and 2) their data was growing at an exponential rate, raising concern about effectively managing the data in the long-term.

So they turned to Pentaho. By automating their data orchestration process, the financial institution streamlined the number of redundant data feeds to provide the business with a more granular level of data, quicker than ever before. In fact, Pentaho processed the data up to 15x faster. With this information delivered earlier, the financial institution was able determine their liquidity ratios earlier in the day to drive a better asset allocation strategy for increasing revenue.

Another example is FINRA, the stock market watchdog, which is responsible for overseeing more than five petabytes of data that is created each day from 4,250 brokerage firms. Looking for fraud, insider trading, and compliance violations, FINRA was challenged with retaining seven years of data and maintaining a scalable architecture to accommodate a projected 6x data growth while reducing investigative search times.

So they turned to Pentaho. FINRA has been able to reduce their data processing time from hours to 90 seconds or less. In 2015 alone, FINRA detected $96.2 million in misconduct in 2015.*

Customer Centricity

To compete in a consumer-empowered economy, it is increasingly clear that banks and brokerage firms must leverage their information assets to gain a comprehensive understanding of the market, their customers, products, competition, and other channels.

ABN AMRO Clearing, provider of centralized clearing services throughout Europe, the Americas, and Asia Pacific, processes over 16 million trades each day across 85 exchanges worldwide. Their client relationship managers were sending end-of-day trade reconciliations in the form

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of raw data and tables. However, this process did not provide their clients with the insight and visibility they needed to effectively run their business. With Pentaho, ABN AMRO Clearing is empowering their clients with self-service analytics for a real-time view into their holdings in order to make better trading decisions and to optimize capital utilization. At the same time, ABN AMRO Clearing has forecasted an annual 60% reduction in costs for running and maintaining this data.

NASDAQ powers over 70 marketplaces in over 50 countries and manages over 10 billion rows of financial information every day — equivalent to 15 million trades and one billion daily messages. This data is needed for insight into customer behavior to help formulate NASDAQ's monthly pricing models — a key revenue stream.

So they turned to Pentaho. "With Pentaho, a single development team replaces the work previously done by a mix of development, system admins, and database administrators contributing to the overall cost reduction." Speed to accurate information is how NASDAQ can influence customer behavior to drive revenue for their business.

Another example is edo Interactive which targets credit card holders with personalized promotional offers. It was taking them 30 hours to process over five terabytes of data — or over 150 million records daily — which impacted their ability to deliver the right offers to the right audience at the right time.

So they turned to Pentaho. Pentaho not only reduced their data processing time by 70% but also augmented their data with sentiment information. With a 360-degree view of the customer, edo was better able to position their clients to retain the customers they had while simultaneously focusing on acquiring new ones.

Learn More

Over 1,500 customers, including the top financial institutions, rely on Pentaho to drive their strategic business decisions. Learn more at pentaho.com.

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