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An HCL Technologies Company

Orchestrate. Automate. Transform.

Putting Customers First:

a Single View of the Customer

CASE STUDY

In an attempt to reconnect with customers by restoring the trust and feeling of support that customers expected in the past, a Tier 1 UK Bank is using technology to create a personalised approach to customer service in a strategy that it calls "personology".

To succeed with this strategy the Bank must first of all be able to identify and understand its customers better. One of the principal ways that the Bank intends to achieve this is by maintaining a standardised set of customer data as the foundation for the management of every customer relationship.

Key facts

- Creation of a standardised data set for 4m personal & business customers
- 170m — 170 million records analysed from 12 underlying core systems
- Automation to deliver 100% of the Data Acquisition processes
- Introduction of a unique customer identifier across all Bank systems
- 360-degree view of Customer relationships in a 5Tb master data store

The challenge that the Bank faced, as happens in many large organisations, separate stores of customer data were being created and maintained by each line of business – in the Bank's case these included Core Banking, Mortgages and Investment Banking. If the Bank was to truly understand and respond to customer's needs, a single holistic view of each customer was needed.

The Bank have achieved this by implementing a Master Data Management (MDM) solution for customer information, investing in Informatica's MDM technology platform to combine and standardise customer data from the data silos where it currently resides.

Partnering with Datawave to deliver their MDM success, this data is then checked and cleansed for duplicates while selecting the highest quality values across all data sources for each master data attribute. The result is a 'single version of the truth' for the master data that can then be integrated in different ways with those remaining data elements specific to transactions and interactions in the operational systems.

The scope for delivery of MDM at the Bank

The implementation of MDM in an organisation as large and sophisticated as the Bank cannot be accomplished in a single leap. Instead the Bank identified that the programme must proceed as a series of steps that would begin with the Bank's consumer lending division.

Phase 1
Consolidation

Phase one was defined as the Consolidation phase. This involved taking data each day from the contributing source systems and building a registry of parties that deal with the Bank.

This application would:

* Define the role(s) that parties play and the relationship(s) they hold
* Establish a unique bank-wide identifier for each party
* Publish standardised party information to the Bank's Enterprise Data Hub to enrich the quality of customer data used by Analytics and Warehousing applications
* Create a publish and subscribe service for Party data that could be leveraged across the Bank in, for example, the implementation of GDPR and financial crime prevention.

Phase 2
Co-Existence

This phase expands the scope of the data mastering process. Now, instead of simply receiving extracts from key source systems, the mastering system matches and mergers those extracts and returns the mastered data back to the source systems to enable them to synchronise against a standardised set of customer data and identifiers.

Phase 3
Transactional

This phase expands the scope of the data mastering process. Now, instead of simply receiving extracts from key source systems, the mastering system matches and mergers those extracts and returns the mastered data back to the source systems to enable them to synchronise against a standardised set of customer data and identifiers.

Standardising how data is acquired

The Bank chose the EDI Platform from Datawave to acquire the source data to strategically build and manage customer information in a central location on an ongoing basis. The platform had already been proven as robust and scalable when it was used to deliver the Bank's Enterprise Data Warehouse which meant that extending it to support the Master Data Management platform avoided the pitfall of 'reinventing the wheel' and offered opportunities to reuse automation patterns, error handling processes and other capabilities already available in EDI.

The EDI Platform provides a design framework backed by software assets to acquire, consolidate, transform and publish data from source to target. Once in operation, these processes operate within Datawave's Control Framework that handles job scheduling, dependencies and error handling.

A primary aim of the EDI platform is to capture data once and use it many times; a Data Lake is the first step in data ingestion on the platform and the data there is ultimately published to many applications, not only to MDM but also to the Bank's Big Data platform, to the Regulatory reporting applications and so on, thereby maximising the return on the original acquisition effort and minimising the impact on the source systems that must provide this data.

Our Delivery Methodology

Delivery was achieved using small, agile teams working alongside business subject matter exerts to make sure that delivery is aligned with business needs and priorities.

Automation was used to deliver 100% of the normally resource-intense Data Acquisition stage of the programme. Automated regression testing is used throughout the delivery to improve the accuracy of the delivered application and to reduce test effort by up to 25%.

The delivery used a standard agile methodology across 14 two-week sprints that started with delivering a loose set of day 1 requirements through build, unit, system and UAT test phases and finally to implementation.

Delivery Prioritisation

MDM is not simply a technical 'match and merge' exercise performed at application level; success relies heavily on the comprehensiveness and quality of the solution.

Experience teaches that an early and deep understanding of the data would help the programme take decisions faster and help the delivery team to rebuild the code base as our understanding grows. Datawave's platform was able to deliver:

Rapid acquisition of data, both from on-premises and third-party sources

Visibility of source data early in the process to understand the patterns and variations and suggest required corrections

Identification of address data quality issues early in the delivery process

The application delivers:

A single view of 4 million customers based upon analysing 170 million records from 12 core systems

A 360-degree view of customer relationships built and maintained in a 5Tb Customer master data store

A published service to other parts of the Bank that provides a golden source of customer data to improve operational efficiency and due diligence

Outcome

The team successfully delivered their objectives at the Bank to:

* Create a standardised set of data for 4 million unique personal and business customers distributed across 12 core systems by analysing a total of 170 million records from these underlying core systems
* Employ a deterministic approach to apply 'exact match' techniques when merging customer data to enable suitability for use in regulatory applications
* Automate the data acquisition processes (Industry surveys estimate this phase as up to 80% of the application deliver effort)
* Implement of a unique customer identifier that would ultimately be employed across all of the systems within the Bank was implemented for the first time
* Establish a core set of standardised customer information to provide mastered data back to the source systems where the raw data was first obtained
* These end-to-end capabilities brought data quality, data integration, business process, management and visibility to bear on mission-critical requirements.

The Business processes now supported by a Single Customer View within the Bank include:

* Improved Due Diligence processes during Customer on-boarding
* Reduced operational costs of acquiring new customers
* Enabler of the Enterprise-level Data Quality programme sponsored by CDO
* Implementation of the GDPR Programme at the Bank
* Compliance with reforms proposed by UK Independent Commission on Banking (ICB)
* Enriched analytics on the Big Data Platform standardising customer information to analyse behaviour, trends and needs.

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