Aperio CI

The Experts in Data Management

Aperio CI Case Study: O2 UK Campaign Management Database

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About O2 UK

O2 (Telefonica) UK is the second largest communications provider in the United Kingdom with over 23 million mobile subscribers. O2 UK offers their customers 2G, 3G and 4G networks as well as operating O2 Wifi.

In early 2000 O2 was suffering from a major failure of their marketing data warehouse.

- They received more than 20K feeds per day from more than 150 different data sources

- Their in-house legacy data system was unable to keep up with daily flow of data causing 6-8 weeks data latency with regular shutdowns

- Data latency, backlogs and poor availability made it difficult for marketing to deliver meaningful and competitive customer communication

- Poor data governance procedures allowed inaccurate data to be loaded into the data warehouse

- Poor data base design resulted in slow and overly complex queries making it difficult for analysts to easily gain necessary business insights

- Data inaccuracies caused the client to deliver a number of inaccurate offers to customers resulting in more than £3 million of lost revenue and declining customer satisfaction scores

- Analysts and marketing executives lost confidence in the system and put a freeze on all campaigns

The Challenge

O2 UK tasked Aperio CI with delivering a marketing data system that would provide:

- Full ingestion of all data feeds guaranteeing less than 24 hours latency on key data elements and less than 7 days latency on non essential data elements

- 24/7 availability

- Strong data governance procedures guaranteeing greater than 99% data accuracy

- A single version of the truth where all users (insights, marketing, finance and IT) could query the data and get the same answer to the same question (i.e. How many active customers do we have? What was our churn last quarter?)

- Integrate many different 3rd party tools to work seamlessly with new a data infrastructure

The project needed to be delivered in a very short time frame in a very high pressure environment

O2 UK required that the solution used the following tools and systems:

- Data System Infrastructure: Oracle

- ETL: In house job scheduler with custom ELT

- Analytics: 3 different analytics tools including SAS

- Reporting: Multiple reporting tools including Microstrategy and Business Objects

- Offer Management / Marketing: Chordiant

- 5 different billing systems and 2 different Customer Care systems

Results

Aperio CI delivered the system *on-time* and *on-budget*

- Initial system was delivered in 4 months

- All system requirements were delivered in less than 8 months

- Nice-to-have functionality including trigger campaigning were delivered in 11 months

All client groups (insights, marketing, finance, etc.) utilized the system to gain a "Single Version of the Truth". The client systematically decommissioned a number of legacy systems. The new warehouse provided consistent and accurate analytics and reporting across the organization.

Aperio CI's disciplined and focused approach changed the culture at O2 UK. Aperio CI's Project Management team and solution architects worked together with O2 to

- gather requirements and documentation
- manage deadlines and milestones
- catalogue source data definitions and documentation
- create data mapping through the data ecosystem (source, staging, atomic, presentation)

Together the strong delivery team which included resources from Aperio and O2 UK met all project stakeholder expectations by delivering the following:

- Redesigned data model based upon the data feeds and the business goals

- Developed customized ETL procedures specifically designed to meet our client's requirements and allow for full ingestion of data within the defined SLA's

- Designed and developed automated quality assurance procedures with manual audits ensuring that inaccurate data would never be loaded into the production data warehouse

- Developed 24/7 job scheduling procedures with automated monitoring ensuring that data was loaded as per schedule

- Testing: functional, system integration, compliance and performance testing

- Support for the client's User Acceptance Testing (UAT) processes

- Documentation: Data mapping, design, deployment and system operations documentation

- Training: Both Aperio and client staff

- Integration with Chordiant and other required tools

- Fully hosted and managed data ecosystem: The new system was hosted with Aperio CI's 2 data centers in New York and New Jersey. We provided fully redundant and fully replicated systems with automated failover procedures guaranteeing 24/7 availability.