

MANAGING FINANCIAL REPORTING AND ENSURING COMPLIANCE

IMPACT

- Processing 20 million records daily
- Mitigating security risks and avoiding significant fines
- Enabling data access in days instead of weeks, creating a better customer experience

O2 is the commercial brand of Telefónica UK Limited, a leading digital communications company owned by Telefónica S.A. and the mobile network operator with the highest customer satisfaction in the UK according to Ofcom. With over 25 million customers, O2 runs 2G, 3G and 4G networks across the UK, as well as operating its nationwide O2 Wifi service. O2 has over 450 retail stores and sponsors the O2 arena, O2 Academy venues and England Rugby.

Going beyond IFRS compliance to support digital transformation

In December 2016, Cloudera embarked on a project with Accenture to create a unified data hub for the UK-based mobile network operator O2. The project was completed in July 2017 enabling O2 to comply with new International Financial Reporting Standards (IFRS 15) before the January 2018 deadline and prepare a data platform to take full advantage of the transformative power of Big Data and Digital Analytics.

Compliance challenge presents digital transformation opportunity

IFRS 15 is intended to harmonise how multinational companies report revenue and, in the UK, all telecommunications companies must be compliant. For many firms, an ability to comply with the regulations would require significant overhaul of their database systems or else risk significant fines. O2 saw the potential to go beyond basic compliance, however, to build something transformational. Deploying innovative Big Data architectures and Digital Analytics environments powered by Cloudera's HDP would deliver the foundations to operate as a truly data-driven company. It's centralized, highly-reconciled Financial Data Hub which unified all finance reporting, would deliver the following benefits:

- Optimized month-end reporting with capabilities for Working Day 1 posting and daily General Ledger views
- Enhanced analytics, business-wide, on revenue and subscriber information Data refresh and reporting available by 9 AM daily
- End-to-end data lineage
- Audited data to source systems for fully-trusted analytics; reconciled daily to match 99.9 percent of the source data
- Automation and easy management of all reference data and business rules

Hybrid big data solution

The infrastructure provisioned by Cloudera is entirely powered by open source technology and acted as the foundation layer for Accenture to run end-user applications. It consisted of Cloudera's HDP® and Cloudera DataFlow (CDF), the former providing a core repository to run various analytics and the latter streaming specific datasets to the various O2 reporting warehouses. Together with Accenture, Cloudera planned and implemented the end-to-end delivery of the new, unified Financial Data Hub for O2. It would provide consistent highly reconciled granular information, accessible by self-service, for financial regulatory reporting and business intelligence.

99.9

Meeting IFRS 15's 99.9 percent daily accuracy requirement

"The Financial Data Hub is a testament to what can be achieved when the business and IT collaborate to deliver significant results and huge steps on our transformation journey."

Stephen Devereux Head of Business Intelligence, O2

About Cloudera

At Cloudera, we believe that data can make what is impossible today, possible tomorrow. We empower people to transform complex data into clear and actionable insights. Cloudera delivers an enterprise data cloud for any data, anywhere, from the Edge to AI. Powered by the relentless innovation of the open source community, Cloudera advances digital transformation for the world's largest enterprises.
Learn more at cloudera.com

The hybrid architecture delivered the following results:

- Daily reconciliation to source systems through a bespoke reconciliation layer
- Interactive and dynamic monitoring of any issues
- The ability to ingest large data sets related to individual consumer and business lifecycle and billing events
- Use of the Accenture Insights Platform (AIP) to perform development, test and production reconciliation tests in the cloud for speed of delivery and agility

Processing more than 20 million records daily

From its launch in August 2017, the new Financial Data Hub leveraging Cloudera technology brought O2 into compliance with IFRS 15. By bringing all data together, O2 has reduced the number of separate data stores, simplifying the overall ecosystem and reducing ongoing costs.

The Hub supports posting of all O2's revenue every month, delivering so smoothly and quickly that month end revenue posting is now completed on the first working day of month end. The Hub can process more than 20 million records daily, fully reconciling each and auditing at the source to meet IFRS 15's 99.9 percent daily accuracy requirement.

"The Financial Data Hub has provided the foundation for our transformational journey — so great to see it come to fruition," said Stephen Jasper, Head of Finance Transformation and Systems.

With more data feeds than compliance required, the Hub's support stretches far beyond basic accounting and has laid the foundations for future data and analytics exploitation. The Accenture/Cloudera hybrid big data architecture is scaled to grow with the business' needs: ensuring technical and business gains long into the future.

Data availability at the right time for a better customer experience

The Hub substantially increases opportunities to explore new datasets in a controlled environment, since new data can be accessed in a matter of days instead of weeks. It will also be used to support new Machine Learning and Artificial Intelligence use cases. For example, the data will help drive a personalised, contextualized customer experience; providing relevant and targeted conversations and achieving complete transparency to give customers complete control over their information. Following the success of the project, O2 has migrated additional environments into HDP. It is now delivering the foundations needed for the company to achieve its vision of a truly data-driven organization, working with speed, accuracy and insight to improve the way O2 does business and interacts with its customers across the UK.