Ryanair Soars to New Heights with **Modern Data Platform** in the Cloud





Founded in 1985, Ireland-based Ryanair has grown to become Europe's largest airline group with more than 2,400 daily flights from 82 bases, and a fleet of over 470 aircraft. Ryanair undertook a digital transformation with a migration to the cloud, adapting to and enhancing systems to match business growth.

Exploring the Data Challenge

Ryanair's systems are rapidly growing in size and complexity. The company required a solution that could handle and process large amounts of data, consisting of over 80 sources and 70 terabytes of data, with new data added daily. Various sources have dependencies and, therefore, must rely on orderly ingestion, alongside loads being parallelisable. Ryanair emphasised the importance of managing performance and optimising operations within its solution and adopting cloud computing within Azure for their long-term strategy.

Transforming Data Processes

Ryanair wanted to migrate and enhance the existing data processes and implement a central repository for all ETL (extract, transform, load) packages. With limited expertise on the Microsoft Azure platform, Ryanair engaged with Version 1, a Microsoft Gold Partner in Data Analytics and Cloud Platform. Together, Ryanair and Version 1 designed and built a scalable and efficient big data platform on Microsoft Azure.

Data Ingestion pipelines were built utilising Azure Data Factory to ingest data from a variety of sources, including SaaS solutions, REST APIs, AWS S3 buckets, and SQL Server. Azure Data Lake was leveraged to act as Ryanair's big data store, incorporated with Azure Synapse Analytics to serve as the company's Enterprise Data Warehouse to service downstream applications and business-focused reports and KPIs.

All development leveraged dynamic content and a metadata-driven approach to ensure all components were reusable and enabled traceability via logging and auditing frameworks. This provided Ryanair with a robust and efficient platform that is extensible to further data sources for any future requirements.

Real Differences, Delivered.

By adopting a cloud platform, Ryanair has saved resources, effort, and cost. With a modern and future-proof solution, Ryanair can scale compute power to their needs as their data changes and grows. Having a centralised repository for all their ETL packages allows for easier management and maintenance with the execution of these automated and handled by Azure.

Ryanair's solution has improved the overall performance and efficiency of its operations, with the ability to keep track of processes with a system in place to handle errors and ensure no data is lost.

Adopting dynamic content into their architecture has decreased the need for hardcoded solutions, reducing the need for manual effort and ensuring data activities and pipelines are reusable and flexible for other data sources to be integrated into the systems.

Version 1 came highly recommended by Microsoft due to their status and reputation as a skilled Gold Partner in the Data & Analytics space. The highly experienced team immediately recognised our challenges, so we were confident they could accelerate the delivery of a robust modern data platform in Microsoft Azure. From the outset, Version 1 became an extension of our team, going above and beyond to deliver this crucial project, even taking the time to upskill our team to ensure we continue to get the most out of the platform.



To find out how Version 1 can support your Digital Transformation, contact us:

www.version1.com

