



Adatis helps Heathrow Airport with data transformation to aid recovery in a post pandemic world

The data platform at the UK's largest airport is allowing Heathrow to be a smarter and responsive organisation, using data to improve the services it offers travellers, retailers, and cargo customers in the post-pandemic economy.

In partnership with Adatis, Heathrow Airport has access to the best data skills and a managed service that allows the business to use data in the optimisation of its cargo terminal, retail partnerships and airport operations as air travel and commerce changes according to global demands and regulations.

Situation.

Before the COVID-19 pandemic, Heathrow Airport was the world's second busiest airport by international passenger numbers and the busiest airport in Europe. Consisting of two runways and four passenger terminals, and a major cargo terminal, Heathrow is the primary hub for British Airways.

With the pandemic leading to global lockdowns and grounding many passenger flights, Heathrow, like most organisations, had to quickly chart a new course – with data playing an important role in the way the airport responded and operated in a post-pandemic economy. Andy Isenman, Head of Technology: Cloud and Data at Heathrow Airport, says the airport has enhanced its data approach to ensure that targets on passenger satisfaction, cargo movements and reducing the environmental impact are met.

Microsoft is a strategic partner to Heathrow Airport, providing the Azure, Power BI, Office365 and Windows 10 platforms. As part of this partnership, Heathrow Airport began the development of the Heathrow Universal Data Lake (HUDL) as the first development towards what today is the Heathrow Insights Platform (HIP). HIP and the partnership with Adatis provide Heathrow Airport with the data and insight to confidently change its business operations in response to the pandemic.

Approach.

The 2019 initiation of the Heathrow data lake programme began in tandem with a restructuring of the technology operations at Heathrow Airport. Together, the enhanced approach to data and a new operating model enables Heathrow to better understand the value that data and technology delivered to the business. Central to the new operating model was the introduction of technology teams working in pods. Each of these pods operates the full process from design, implementation and operation of a technology for the main business systems in commercial, operational and corporate business areas.

Microsoft developed and delivered the initial data lake in partnership with Heathrow Airport. During that journey, Heathrow discovered many data silos across the organisation. "We worked very closely with the owners of these silos and in doing so discovered a series of 'data puddles'," Isenman says of the small data lakes that already existed in teams and operational parts of the business. Each of these small data lakes contained value to both the 'data puddle' creator and the wider business.



"The objective has not been to remove these puddles, but to make sure that Heathrow gets the most value from the data; for example, these data puddles can be really good for prototyping or business innovation," Isenman says. "So, we are not actively trying to reduce them. Focusing on centralisation can lead to a reduction in value for the business."

With a data lake in place, Heathrow Airport needed data expertise that could be flexible and able to respond to the changing needs of the airport. Isenman adds that data will play a significant role in building new operating methods out of the most significant disruption the travel sector has seen.

In May 2020, three months into the pandemic, Heathrow formed a partnership with Adatis to become a key partner in the HIP programme. "A managed service provides Heathrow with the scale and access to resources that we simply cannot recruit or retain in the market. Our job is to land aeroplanes," Isenman says. He adds that a managed service partnership allows Heathrow to focus on its core business activities but ensuring the organisation has access to world-class data and analytics skills.

"We found in Adatis a partner that can share a vision and a way of working," Isenman says. The Heathrow Head of Technology says that 90% of what delivers success is the people, technology is just 10%. The flexibility, questions raised and working models provided by Adatis impressed Heathrow. "There was a very open culture right from the beginning. It is about confidence, maturity, and the ability to listen. It is all about the partnership, from a holistic set of packages to the lunch-and-learn sessions, which provide some great lessons to the business," Isenman says.



He adds that the Adatis build and run model provides Heathrow with a DevOps leader and a squad of specialists. "The accountability stays with Heathrow and my team, and Adatis respect that." Isenman also praises Adatis for how the business works well with the range of other suppliers that provide services at Heathrow.

Outcomes.

"Forecasting has become a completely different business and has to be day-to-day rather than year-to-year or month-to-month," Isenman says. Heathrow Airport now has the agility to analyse its data and derive business insight down to the granular level of a day - vital as the organisation responds to the pandemic.

Heathrow re-platformed the retail data to provide insight into the number of passengers visiting stores in the airport and analysed the impact of the re-introduction of Value Added Tax (VAT). Adatis took the existing Heathrow retail data systems and improved the data ingestion process and created a new interface, which in turn, is allowing the retailers operating from Heathrow to become data orientated organisations.

"In the cargo operations side of the business we are now able to calculate the value of the cargo held, as Heathrow is the largest port in the UK and air cargo became more important to the UK economy as a result of the pandemic," he says of increased flexibility that Heathrow now has from the Adatis developed platform. That flexibility was vital as cargo levels have increased and Heathrow is able to offer partners improved access to cargo data.

HIP has also provided the airport with the ability to analyse all areas of its operations down to details such as how colleagues commute to and from the airport, as well as how these behaviours might be impacted by more flexible working policies going forwards.



Looking ahead, Isenman says the partnership will see data management and categorisation within HIP improve, and the partnership is developing an Analysts Workbench to simplify the creation of insight and a secure area for the management of Personal Identifiable Information (PII). "We are looking to make the analysts and data scientists job as streamlined as possible, so they are focusing on delivering value to the business," he says. This continuous improvement of the management of data will provide Heathrow Airport with the ability to respond to changes in passenger behaviour, global regulations, cargo demands and international travel.

About Adatis.

Adatis are a leading Microsoft- specialist Data Analytics and Business Intelligence consultancy. We work in flexible, agile and collaborative ways to help organisations unlock the power and value from their data to enable them to improve business performance, better serve and engage customers, empower employees, find efficiencies, and remain compliant. Adatis are 120+ people across the UK, Bulgaria and India. We bring innovation and insight to our enviable customer base across various sectors, including retail, travel & transport, public sector, insurance, education and many more.



Adatis offer professional services specialising in data analytics, from data management strategy and consultancy through to world class delivery and managed services.

With offices In London, Farnham an Sofia they have been delivering innovative and successful solutions for clients since 2006.



Data Science



Data as a Service



Modern Data Warehouse



Data Architecture



Data Analytics



Data Strategy

We love helping people unlock the power and value of their data.

If you are interested in finding out more please contact us on **+44 (0)1252 267 777** or via email at enquiries@adatis.co.uk
You can also check out our website at www.adatis.co.uk or come and see us at numerous global conferences and speaking events.



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