A History of Innovation at London's Gatwick Airport

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In Pursuit of the Ultimate Passenger Experience

For many years, Gatwick Airport has been successfully transforming the airport experience to help achieve its ambitious strategy to be London’s transit hub of choice. Central to this has been enabling the best passenger and airline experience for a growing number of passenger and aircraft movements and, in so doing, continuing to raise the bar as the world’s busiest single runway airport.

All this has been achieved based on a growth plan that, while constrained by the airport’s existing infrastructure, uses the very latest technological innovations to help achieve transformational results. Since 2010, when Gatwick Airport first joined forces with Human Recognition Systems to integrate the cutting-edge MFlow biometric system into the airport space, Gatwick has achieved a number of world and UK first’s in smart passenger processing and airport efficiency, firmly placing it in the top 10 most innovative airports in the world.

The fact Gatwick Airport has recently been awarded the title of Most Innovative Airport in Europe, voted for by an industry peer group of over 92 airports and airlines at FTE Europe, is proof the industry recognises the airport’s continued success.

Gatwick’s History of Firsts, in Collaboration with Human Recognition Systems

- First use of biometric technology for commercial passenger processing to enable a secure Common Departure Lounge in 2010.
- First use of iris-at-a-distance technology enabling passengers to automatically identify at scale in 2010.
- First implementation of an online pass application system for workers in 2015.
- First use of facial recognition to measure the time taken for passengers to flow through the airport in 2010.
- First end-to-end implementation of the backbone for seamless, integrated biometric passenger journey across multiple touchpoints in 2018.

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Recent announcements have detailed the world’s first end-to-end implementation of a seamless, integrated and biometric passenger journey in partnership with Human Recognition Systems. The trial is running for three months in conjunction with EasyJet and other partners, Vision Box and Materna, processing 10,000 passengers to break new ground in the automation of the passenger journey.

MFlow software underpins the core passenger workflow and identification for the trial, managing every checkpoint in the passenger journey to simplify and speed up the transit of passengers, while reducing the risk of human error.
Human Recognition Systems has also partnered with Tascent, another innovative technology provider, to supply the biometric elements of the trial, capturing face and iris information from passengers. The system verifies this information against the passport and boarding card, with the entire process lasting less than 20 seconds.

This is the first and most extensive end-to-end trial of its kind in the world, and is the culmination of years of collaboration to break new ground in the possibilities of the passenger experience. It comes shortly after another pioneering trial to share passenger information between Gatwick and Dubai International Airport on Emirates flights to help support the more effective transit of passengers through to their destination Airport. More information about this ground-breaking project with Dubai airport can be found in this article.

WHERE THE PARTNERSHIP BEGAN

Over the past decade, when faced with significant challenges in delivering an improved passenger experience, it was clear that changes had to be made across the board, making passenger automation critical and introducing the concept of the ‘digital passenger’. Gatwick Airport instigated a change in the way that everything worked within the airport, with systems communicating with each other constantly, driving a smooth, efficient and effective data platform on which to build the airport operation, with the digital passenger at the heart.

Human Recognition Systems provided its MFlow platform for both terminals, firstly in 2010 in the south terminal, and then in 2016 in the refurbished north terminal. This included both biometric queue measurement and biometric passenger verification, with both representing world-firsts in innovation and deployments at the time. This same trusted platform continues to be expanded on as the next phase of automation is implemented at the airport.

Geoff Williams, Head of Security at Gatwick Airport, said at the time of implementation: “Human Recognition Systems has worked closely with us in providing innovative solutions to deliver a better passenger experience. Already passengers are spending on average less than five minutes in security. With our new spacious preparation area and 19 security lanes, the new technology helps to increase the efficiency of the security operation and helps provide a better service.”

PROTECTING AND ENHANCING REPUTATION

Comparing passenger satisfaction survey results from 2010 to 2017 demonstrates how significant the transformation has been at Gatwick Airport. The airport’s 2016/17 annual report announced that its overall score for customer service had reached 4.37 out of a maximum of 5 – its highest point in the last eight years.

Gatwick served almost 46 million passengers in 2017 alone, up from 31 million in 2010, representing a 50% increase in total passenger numbers in just 7 years. This increase in passenger numbers has only been possible through the deployment of innovative IT solutions, such as MFlow, to better manage, automate and control key passenger processes through the airport.

The airport saw an immediate change in queue times thanks in part to MFlow’s biometric-based queue measurement capability as it moved from manual to fully automated systems and accurate measurement and, in 2016, the average queue time for security was just 4 minutes. In October
2017, Gatwick received the award for ‘Process Innovation of the Year’ at the London Construction Awards, recognising its reconfiguration of all landside areas of the north terminal, including arrivals, check-in and security. Integrating the MFlow system has enabled Gatwick to compete for such awards as the results have been so impressive.

INCREASING VALUE AND EFFICIENCY

The complexities of automation in an airport meant that Gatwick was keen to guarantee absolute accuracy and usability of the MFlow product, and worked closely with Human Recognition Systems to test the systems to ensure that everything worked within the operation of the airport – focusing particularly on the impact on passenger experience and adhering to compliance protocols. From regular business users, to holidaymakers, the solution had to suit all passengers’ needs.

Because MFlow handles a multitude of relevant data for the airport, it has also provided the management team with unmatched insight into the overall airport operation. Data around efficiencies and bottlenecks meant managers could make informed decisions about how various areas of the airport were performing, prompting swift action to implement improvements.

With MFlow being such a business critical system, the team at Human Recognition Systems fully immersed themselves into the Gatwick infrastructure to understand all the integration points and service delivery approach to provide confidence in the solution and the ongoing ‘business-as-usual’ support. This knowledge and understanding has been critical in ensuring MFlow remains the platform on which to deliver the next stage of the airport’s strategy.

Using another Human Recognition Systems product, MTrust, Gatwick turned to the company again in 2015 to implement the first online pass application system for airport workers, greatly enhancing the efficiency of the pass office. More information about this can be found here.

DEVELOPING THE BEST PROCESSES AND TECHNOLOGY

While the past eight years have been transformational already in terms of the improvements made, it is the next five years which will bring about even more change as full end-to-end passenger automation is enabled. While Gatwick remains constrained by its infrastructure, its plans for growth within its existing footprint are impressive and require investment in the ‘digital passenger’ to streamline and automate the complete journey through the airport.

As Gatwick Airport reaches its 60th anniversary this year, the strategic partnership with Human Recognition Systems continues to drive innovation, world-first implementations and a trusted relationship to drive the change required for the airport. Ultimately, Gatwick is on a mission to deliver the very best passenger experience and, by listening to its passengers and delivering the service that makes them want to fly from Gatwick at every opportunity, the airport is more than on track to achieve its goals.
FOR FURTHER INFORMATION

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MFlow®

Enabling the passenger automation revolution

MFlow is a system that allows you to biometrically digitise the passenger journey in and beyond the airport.

Using world-renowned software and hardware, MFlow enables a seamless traveller experience through the various airline, airport and authority checkpoints. Providing a personalised experience and keeping the passenger informed at each step of their journey.

Learn more about MFlow