

# A DECADE ON, HEATHROW CONTINUES TO LEAD INNOVATION IN SELF-SERVICING

Self-service is transforming the passenger experience at airports globally. Self-service includes processes such as check-in and bag drop, and increasingly passengers are choosing the speed, convenience and low-touch options that self-service solutions offer travelers to journey through the airport. Heathrow airport has been innovating in this space for many years, optimizing the benefits self-service provides passengers, the airport and its airlines.



**Heathrow**  
International Airport



Self-service  
check-in

## GROWTH IN PASSENGERS LEADS TO A RETHINK IN SERVICING

Let's backtrack 10 years to 2012. Passenger numbers at London Heathrow were growing exponentially, boosted by a home Olympics, and the upwards trend in international air travel. At the same time, the concept of self-service passenger processing was starting to take off. There was a 'do-it-yourself' appetite from travelers who wanted to move faster through airport touchpoints, and airports themselves were keen to adopt more efficient, automated systems to cope with increased demand, particularly in terminals which had reached capacity.

# READY TO TRIAL SELF-SERVICE BAG DROP

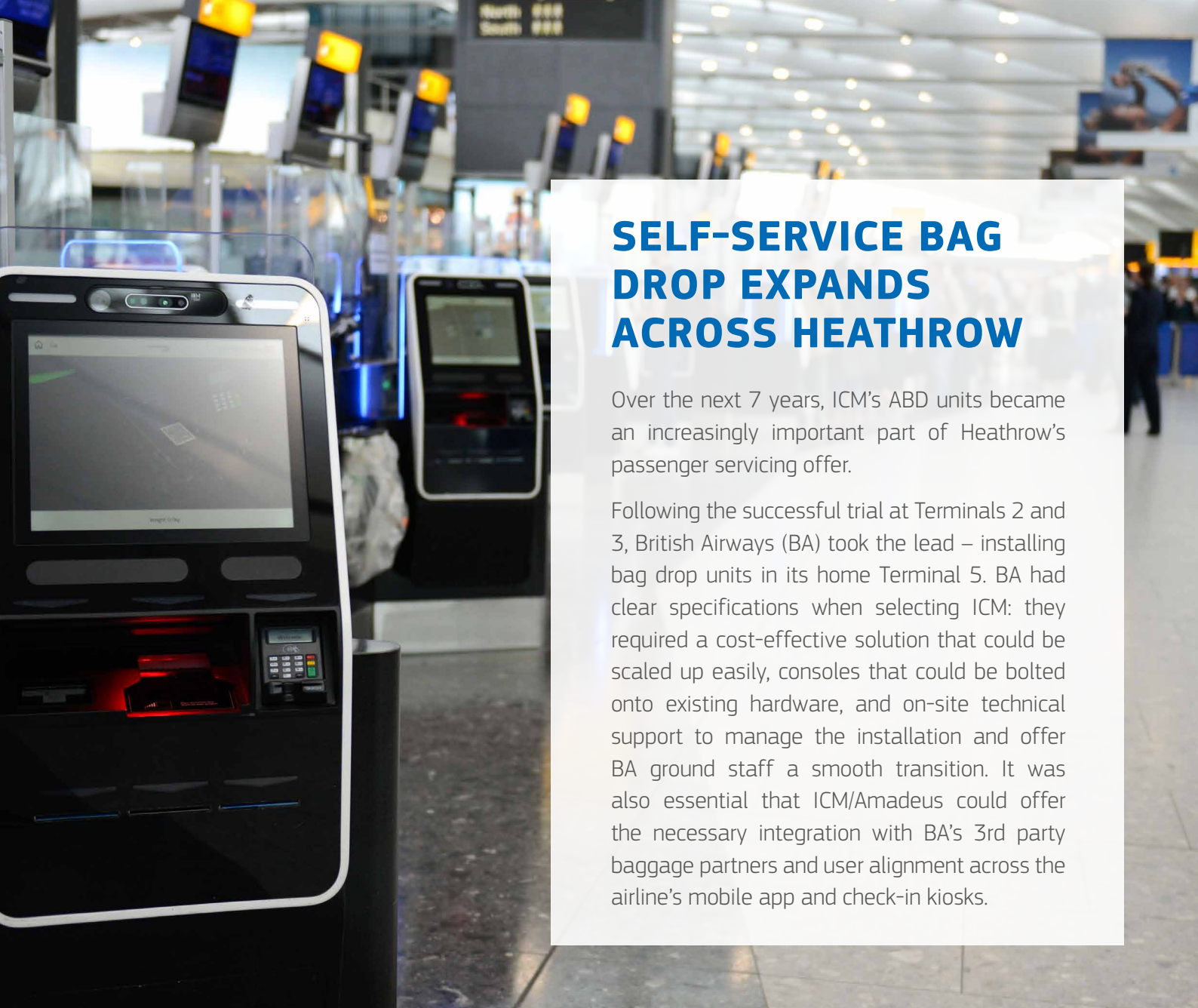
British Airways and Qantas share a close partnership as members of the oneworld alliance. So, when Heathrow was looking to pilot self-service bag drop in a live passenger environment, they sent a team to Sydney to see how Qantas was using ICM Airport Technics' Auto Bag Drop (ABD) units in airports across Australia.

Impressed by the capabilities of ABD, Heathrow selected ICM Airport Technics – now an Amadeus company – to trial self-service bag drop in Terminals 2 and 3. This was to become the start of a close collaboration between Heathrow and ICM, prompting the opening of ICM's first permanent base in Europe, right next to Heathrow airport.

In 2019, Amadeus acquired ICM Airport Technics\*, a global leader in passenger automation – specializing in the provision of self-service bag drop and kiosks. To date, ICM units have processed more than 130 million bags for airports and airlines around the world.

*\* hereafter referred to as ICM/Amadeus*





## SELF-SERVICE BAG DROP EXPANDS ACROSS HEATHROW

Over the next 7 years, ICM's ABD units became an increasingly important part of Heathrow's passenger servicing offer.

Following the successful trial at Terminals 2 and 3, British Airways (BA) took the lead – installing bag drop units in its home Terminal 5. BA had clear specifications when selecting ICM: they required a cost-effective solution that could be scaled up easily, consoles that could be bolted onto existing hardware, and on-site technical support to manage the installation and offer BA ground staff a smooth transition. It was also essential that ICM/Amadeus could offer the necessary integration with BA's 3rd party baggage partners and user alignment across the airline's mobile app and check-in kiosks.

*“ICM/Amadeus delivered on all fronts and provided first-class levels of support pre, during and post implementation. What stood out was the team's willingness and ability to address any hurdles we came up against and provide proactive solutions to our needs. On a practical level, we've been able to drive up passenger throughput, free up agent resources to focus on face-to-face servicing and capture instant baggage revenues from the in-built payment devices.”*



### **WILL RUMSEY**

Automation & Technology Manager –Airports  
British Airways

With faster bag drop times and strong passenger uptake at Terminal 5, a wider roll out of Auto Bag Drop was agreed by Heathrow's management, and Terminals 2, 3 and 4 took delivery of ICM's upgraded ABD solution. These units had larger screens, integrated payment terminals, passport scanners and biometric scanning technology, all of which would future-proof the hardware for years to come. It was also essential for the ABD units to offer common use capabilities, making them adaptable and accessible to any airline wishing to offer their passengers self-service bag drop.

By 2019, the number of ABD units at Heathrow had surpassed 270 and self-service bag drop was operating in every terminal.



- By the end of 2019, Heathrow's first year of ABD operations across all terminals, the **number of bags dropped** compared to 2018 had increased by **715%**.
- When taking a snapshot of a 5-minute period in August 2019, 197 bags were dropped, that's **1.5 bags every second!**





## NEXT-GEN SUPPORT MAKES ALL THE DIFFERENCE

Key to the ongoing partnership between Heathrow and ICM is ICM's ability to provide an end-to-end support model. With a dedicated field services team on the ground at Heathrow, backed by 'follow the sun' support from the global operations centers in Sydney and London, ICM is in a great position to service each onboarded airline and provide Heathrow with pro-active, next-generation technical and functional support around the clock.

*“ICM take complete responsibility and accountability for self-service bag drop. It's their baby, they feed it, they water it, they nurture it. If it starts crying, they look after it. It's great! That ownership is what I want as I don't have to worry about it. I know they are worrying about it for me, and it works extremely well.”*



**JANIE LEE**

Senior Technology Business Partner  
London Heathrow Airport

# FUTURE-PROOFING SELF-SERVICE CHECK-IN

While the COVID-19 pandemic forced Heathrow to pause certain technology projects, one of the first to be restarted in early 2022 was the replacement of Heathrow's 10-year old self-service kiosks in Terminals 2 and 3.

Heathrow was keen to ensure that new self-service units met their requirements not just now, but could support Heathrow with their future innovation plans. That meant having capabilities to offer a common use payment system (contactless or chip and pin) as well as integrated biometrics. From a software point of view, being able to host multiple airline applications on any of the self-service kiosks would give Heathrow and its airlines the flexibility to operate from any terminal or zone. Finally, the stability of the airport's self-service system was dependent

on being able to negate firewall issues and support all types of connectivity now and in the future, with 4G, 5G and Wi-Fi enablement.

But perhaps most important of all was providing passengers with a seamless self-service experience. Having both self-service bag drop and self-service check-in from the same supplier offers travelers consistency in the look and feel of the units, as well as familiarity in how to operate them.

For these reasons, coupled with a dedicated, on-site support team, ICM/Amadeus was selected as Heathrow's self-service kiosk provider, with the first units installed in May 2022. By the end of 2022, Heathrow had over 240 units installed across Terminals 2, 3, 4.



*“We have heightened care support from ICM for the new kiosks which means that someone from ICM is on the ground each day to support ground handlers, self-handlers and passengers.”*



**HAYLEY PAGE**  
Project Manager  
London Heathrow Airport

# 5 REASONS WHY HEATHROW SELECTED ICM/AMADEUS TO REPLACE THE AIRPORT'S SELF-SERVICE KIOSKS

1

We knew we could count on technical and servicing support from ICM/Amadeus as this had already been successfully demonstrated with the ABD roll out.

2

ICM/Amadeus can offer economies of scope by having one team and one set of monitoring tools to service both solutions.

3

ICM/Amadeus are known to the airlines at Heathrow and they trust them to offer advice and expertise when onboarding self-service bag drop and/or kiosks.

4

It is aesthetically-pleasing to have matching self-service bag drop and check-in kiosks, as well as offering passengers familiarity and consistency.

5

The new kiosks offer Heathrow future innovation capabilities such as common use payments and biometrics.

*“We are delighted to see how far we have come in supporting Heathrow with the very latest technologies to enhance passenger servicing and drive operational efficiencies across the airport. Over the next few years, we expect this collaboration to expand further as common use, self-service and biometrics become the norm in major hub airports like Heathrow.”*



**YANNICK BEUNARDEAU**  
Senior Vice President - EMEA  
Airport & Airline Operations  
Amadeus

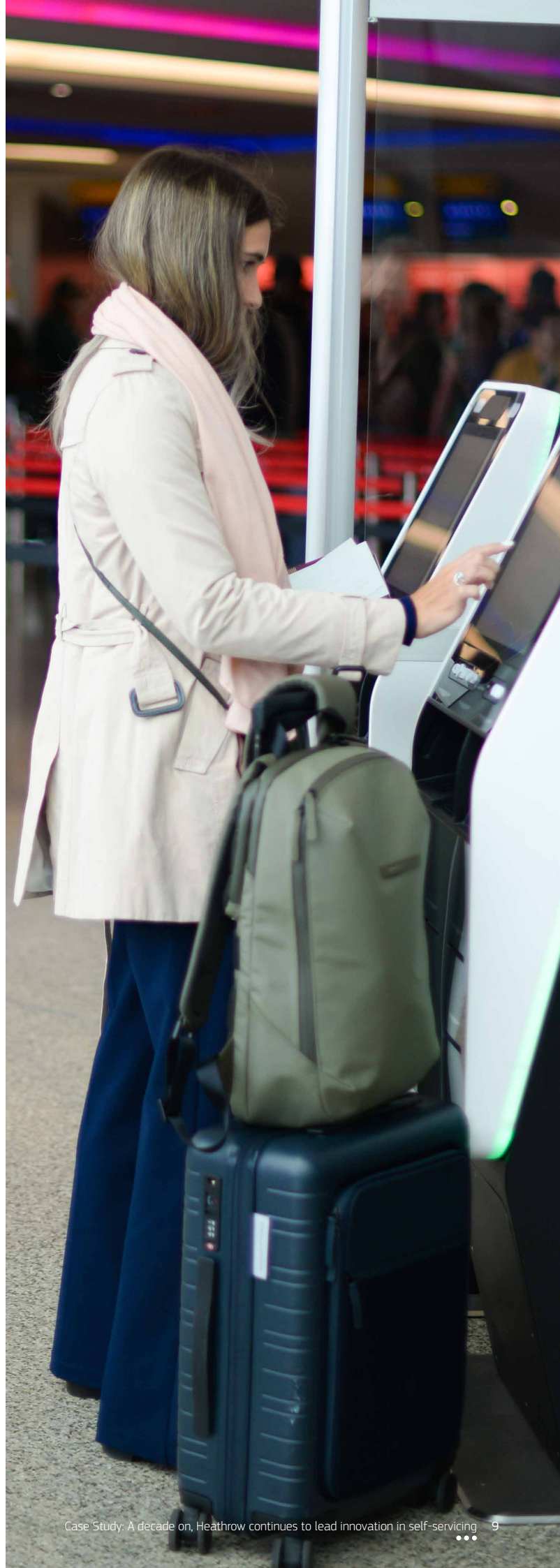
## SELF-SERVICE FOR EVERY PASSENGER

As part of Heathrow's wider strategy to 'Build back better' following the COVID-19 pandemic, is a commitment to passenger inclusivity and this has also been addressed in the self-service program. Thanks to the ergonomic design and features of ICM's self-service kiosks (e.g. braille keys and headphone jacks for the visually impaired), Heathrow can now offer passengers with accessibility issues, ease of use and independent access to self-service for the first time. In fact, 25% of self-service kiosks installed at Heathrow will be equipped with these additional features.

“ We wanted to ensure that the ergonomics of the kiosks suited passengers of all abilities, whether they be in a wheelchair or have sight impairments. Inclusivity is at the forefront of all our project work because it is integral to the values we hold.”

### HAYLEY PAGE

Project Manager  
London Heathrow Airport





## AND LESS WASTE WITH LINERLESS BAG TAGS

Sustainability is another focal point for Heathrow and forms part of a step-change strategy to cut costs, reduce emissions and increase efficiency. One area that has a direct impact on the environment is paper waste and Heathrow has found a way to reduce this with linerless bag tags which can be dispensed from the ICM units. Instead of using disposable tag ends to affix the bag tag, linerless tags use a unique self-adhesive liner which only sticks to itself. With no liners to discard, waste is reduced, as is the health and safety risk of slips, trips and falls. What's more, Heathrow expect the new tagging process to reduce passenger dwell times by 5-10 seconds, leading to faster flows at the bag drop touchpoint.

## LOOKING TO THE FUTURE

During the pandemic, airlines had to perform manual checks to ensure passengers were equipped with the relevant 'fit to fly' documents. This meant self-service had to be paused, as passengers' health status was the absolute priority. However, enhancements to departure control systems have automated this process, meaning airlines can once again support self-servicing for their passengers. At the same time, most countries have removed entry restrictions which again is leading to a revival in self-service as passengers choose speed, convenience and low-touch options to move through the airport.



*“We’re working closely with our airport and airline partners to deliver solutions that help them adapt passenger services to the new environment. Whether it’s contactless bag drop, biometric boarding or off-airport check-in, we are working with airports to rethink how they can meet new traveler requirements.”*



**RICHARD DINKELMANN**

CEO

ICM Airport Technics, an Amadeus company

This vision is shared by BA and has prompted the airline to run a 6-month biometric trial at Terminal 5 in collaboration with Heathrow. The objective is to measure the efficiency of biometrics as well as passenger adoption of Amadeus' face recognition technology across a range of touchpoints.

*“We want to offer our customers all options when they check-in, drop their bags and move through the airport to boarding. Biometrics is seamless, fast and gives us the opportunity to maximize capacity and resources, while offering passengers the best possible ‘light touch,’ self-service experience.”*



**WILL RUMSEY**

Automation & Technology Manager – Airports  
British Airways



## EVERYONE'S A WINNER!

As we move into 2023, there are high expectations for self-service at Heathrow with all parties set to benefit from more automated, streamlined passenger journeys.



### HEATHROW

- Provide customers with tried-and-tested self-service solutions recognized for their quality and reliability.
- Process more passengers within the existing terminal space thanks to improved efficiencies.
- Improve passenger flow times with 24/7 self-service availability.
- Enhance the passenger experience, helping to elevate Quality Service Measurement (QSM) scores.
- Ensure Heathrow remains at the forefront of technology innovation.





## AIRLINES

- Offer passengers more choice and an improved journey experience.
- Improve passenger flows, helping to increase on-time performance.
- Process more passengers with the same level of resources.
- Deliver a service-orientated proposition by removing agents from behind desks and closer to customers.



## PASSENGERS

- Proceed through checkpoints faster, leading to more time airside.
- Make self-service inclusive and accessible to all travelers.
- Offer a low-touch environment with minimal physical contact.
- Enjoy ease of use with a consistent look-and-feel across self-service devices.

And with a ‘*nothing’s too much trouble*’ support model, Heathrow and Amadeus have their sights set on another decade of successful collaboration.

*“We need our services to operate and have really high availability and reliability. So to me, having the strongest support model is key and having support partners who really care about the service as much as I do, that’s critical. They have to care about getting it right, every day.”*

### JANIE LEE

Senior Technology Business Partner  
London Heathrow Airport



## DID YOU KNOW?

- ICM/Amadeus is the sole partner at Heathrow for self-service bag drop.
- Over **5 million bags were dropped** by passengers using ABD at Heathrow in **2019**.
- At its peak, Heathrow's self-service bag drop units processed **197 bags in 5 minutes**.
- The average **1-step bag drop** time for BA's passengers at Terminal 5 is just **80 seconds**.
- In the **first 10 months of 2022**, BA passengers dropped over **1.7 million bags** at self-service bag drop touchpoints.
- **25%** of Heathrow's self-service kiosks are Disability Discrimination Act (**DDA**) and Passenger with Reduced Mobility (**PRM**) compliant.
- ICM/Amadeus provides **around-the-clock virtual monitoring** of all Heathrow's self-service units. This ensures they can function during operational hours, without interruption.
- ICM kiosks can be fitted with embedded **biometric cameras and integrated payment terminals**, offering additional servicing capabilities.
- In 2021, **Skytrax** (an aviation rating company) placed **Heathrow** in the **world's top ten airports**.

