



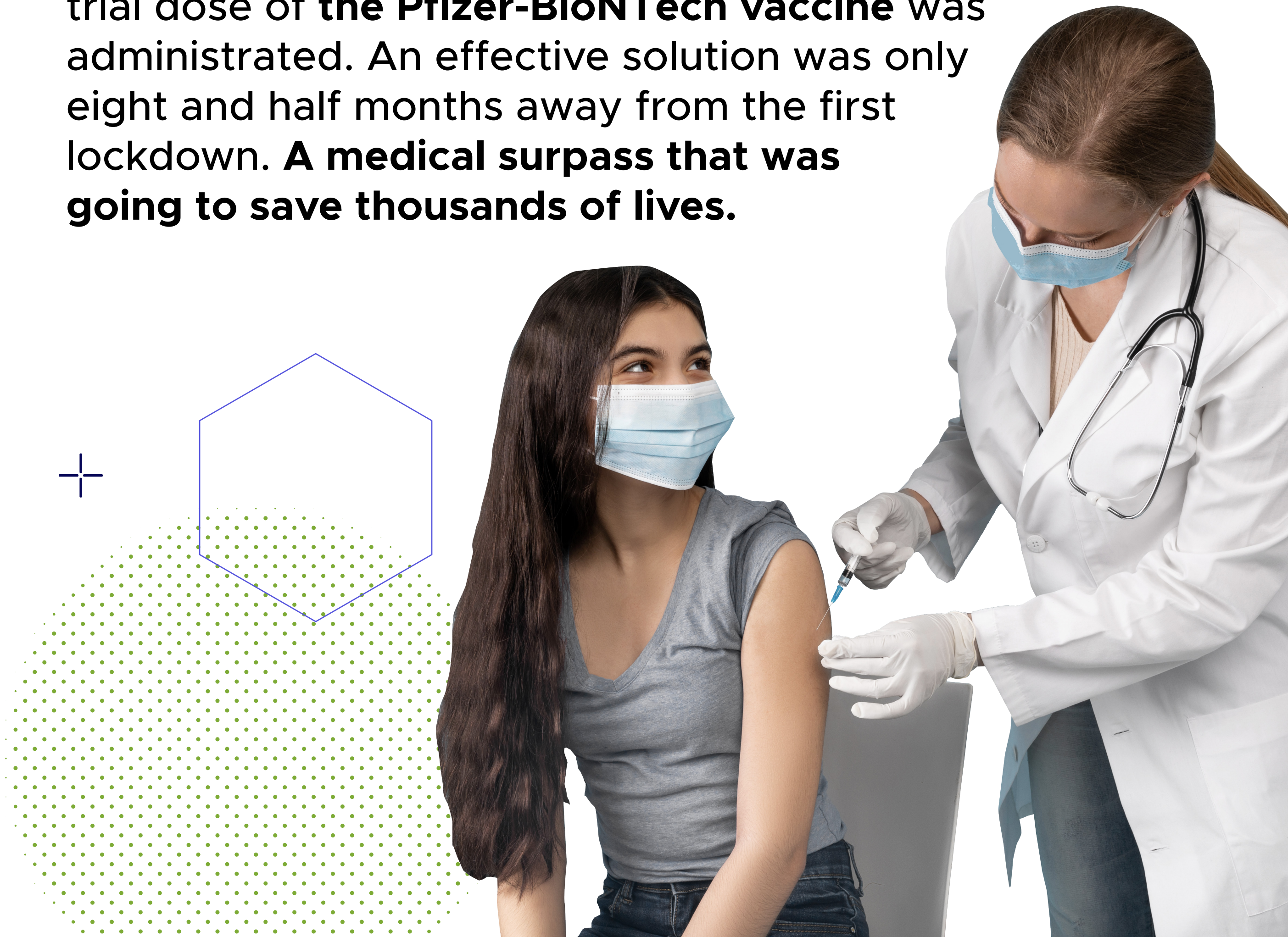
The inside
story of how
the United
Kingdom's
Covid-19
vaccination
booking
system was
built in weeks



ACF | TECHNOLOGIES

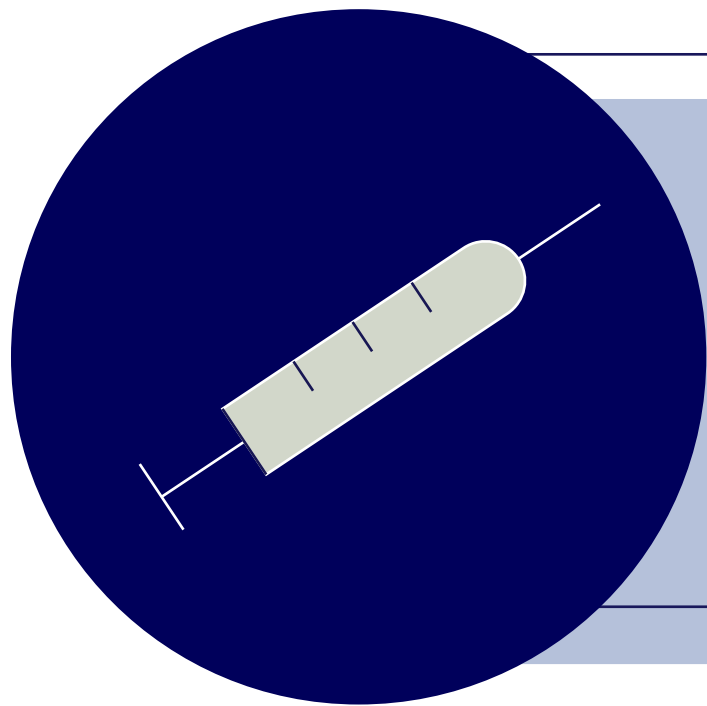
When the Covid-19 pandemic hit the world, a vaccine seemed to be as far away as the possibility of walking the streets without a facemask.

Still, on **December 8th 2020**, the first nono-clinical trial dose of **the Pfizer-BioNTech vaccine** was administrated. An effective solution was only eight and half months away from the first lockdown. **A medical surpass that was going to save thousands of lives.**



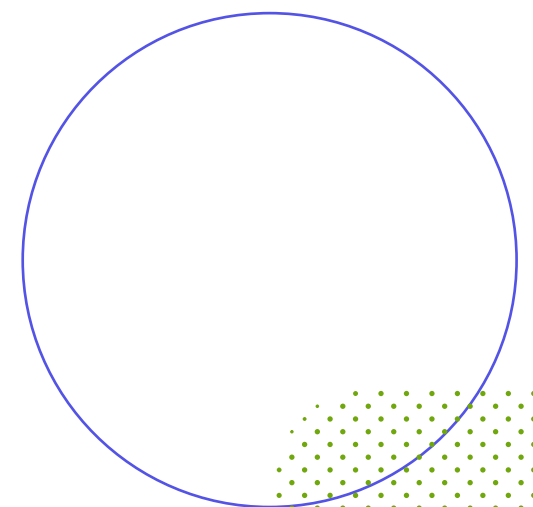
The United Kingdom's challenge:

A vaccine booking system made for everyone

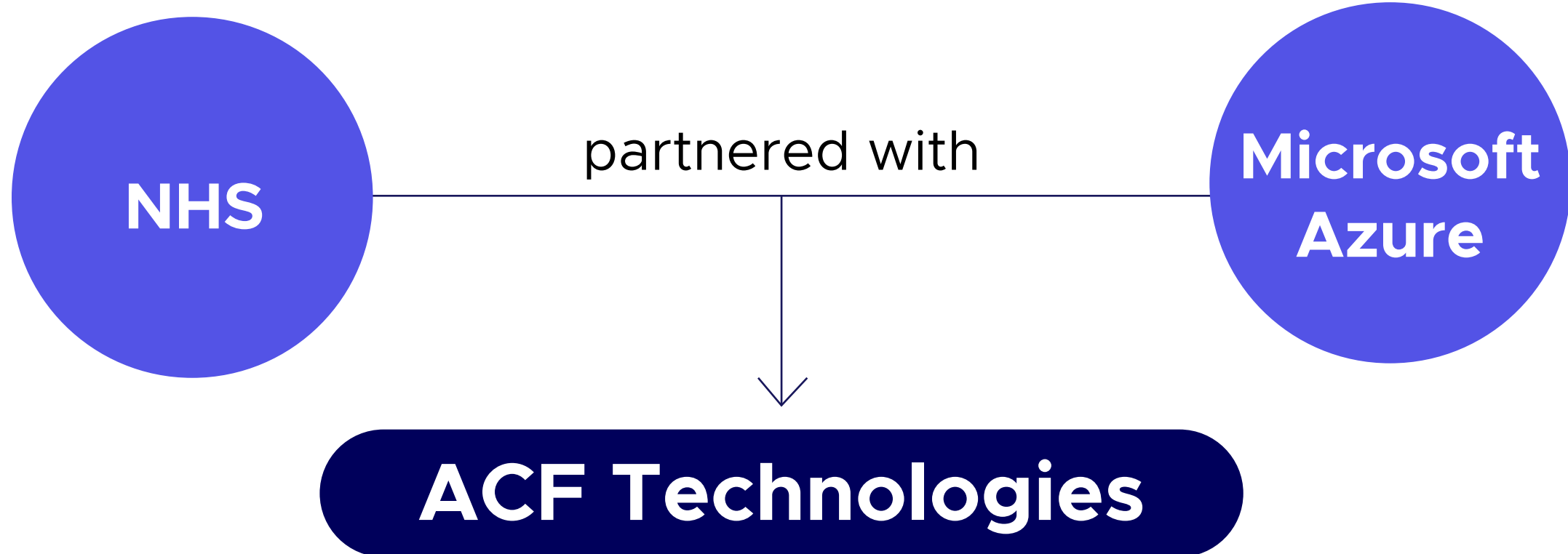


Up to date, the total number of vaccines given in the UK is **151.248.820 doses.**

A number that, when the pandemic began, seemed unrealistic, if not impossible. But now, thanks to the efforts made by the **NHS, Microsoft Azure and ACF Technologies**, is a reality that has impacted the lives of British citizens and the world.

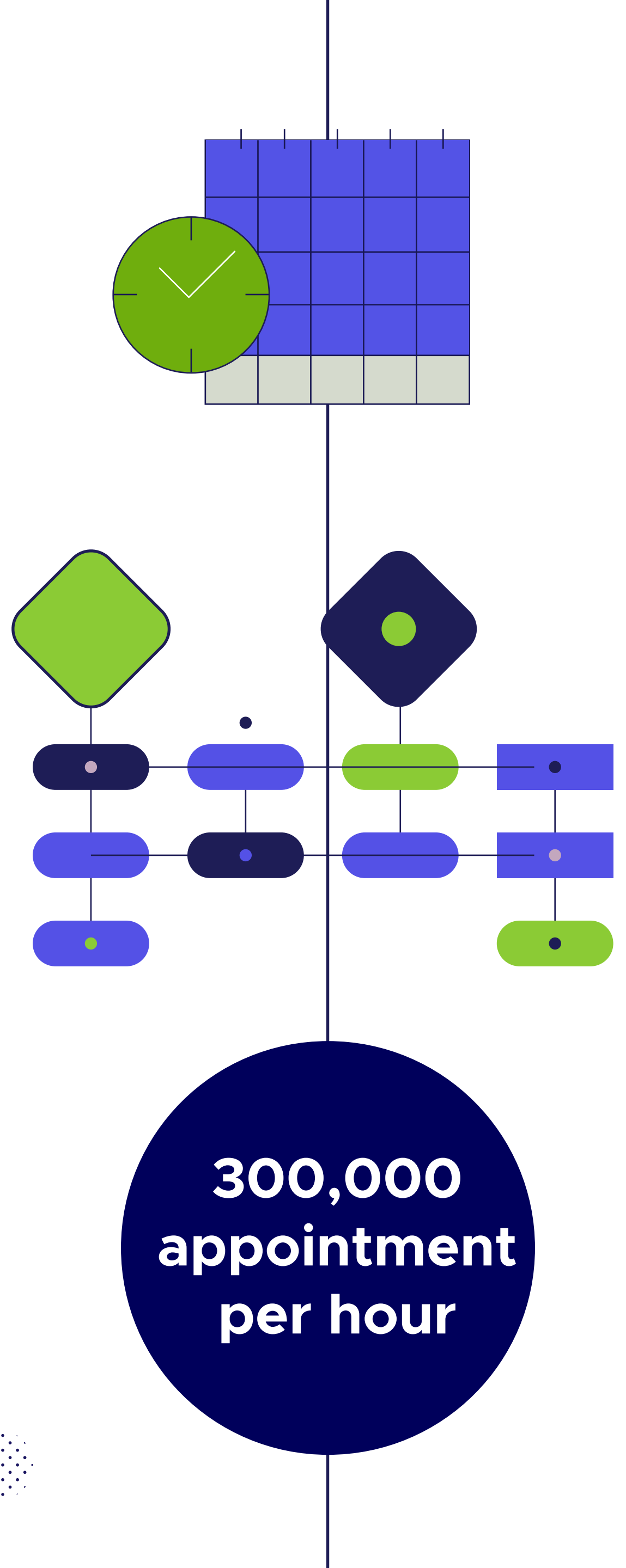


To make this possible,



to build a digital booking service to facilitate British citizens' access to a proper and agile vaccination system. ACF Technologies were selectes as the best-in-class solution provider, able to deliver at the scale and complexity required. Nowadays, it continues to work with the Department of Health and Social Care to keep improving the system.

In only **four weeks**, ACF Technologies managed to implement **Q-Flow**, a system that is able to handle millions of users at the same time and organise booking dates and follow-ups. Overall, Azure-based Q-Flow is also used by vaccination centres to register, open new locations, and oversee the checking-in of patients and staff logins. Up to date, this system is capable of booking over **300,000 appointments per hour**.





Your appointment
is in 5 minutes!

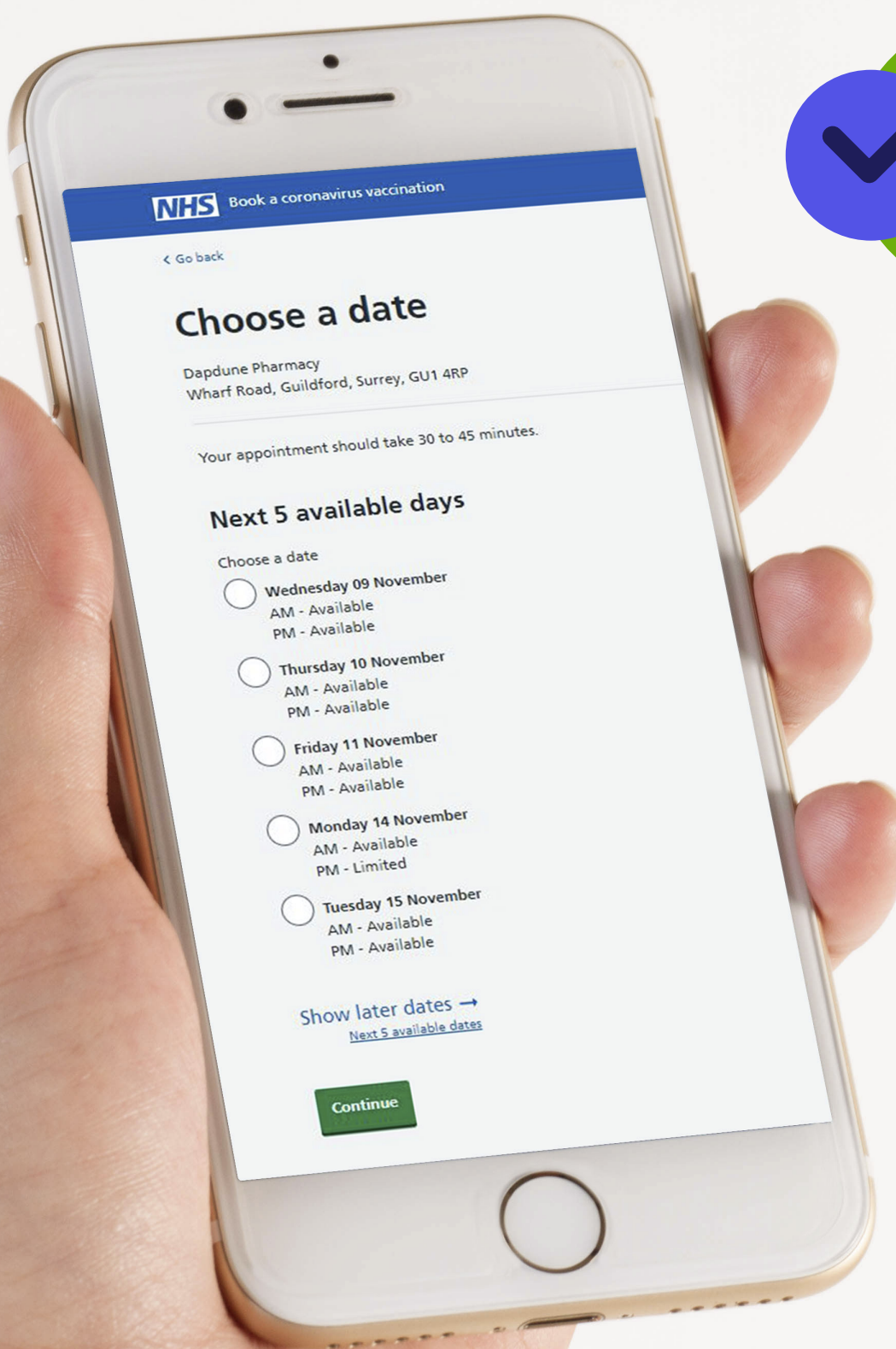


10:15 - 10:30 AM

NHS and Microsoft Azure teamed up with ACF Technologies at a crucial time, holding on to many challenges. It was not only about building a digital and fast solution for UK's citizens but building a system that would be effective no matter what. Everyone needs to get access to book their vaccination appointment, receive the dose and get to know what steps to follow. To make that possible, the National Booking Service built a queuing system, which helps people to know their position in line, how long the operation will take, and when the appointment is taking place.

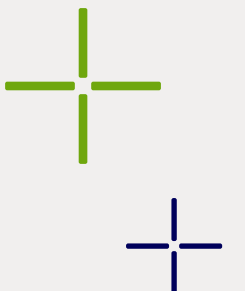


“An individual can go on to the website and book an appointment. But it’s not just about the individual going on themselves; it’s also about all of the systems and the processes that sit behind it”, points out Andy Hart, Managing Director of ACF in the UK. To provide a service without crushings or failures due to high demand, Azure and Q-Flow relied on each other and built an effective system that facilitates solutions such as:



Appointment management software engine:

Software that makes it possible to book over 300,000 appointments per hour. Has intelligent capacity management and provides automated notifications through e-mail, SMS, WhatsApp, and push notifications.





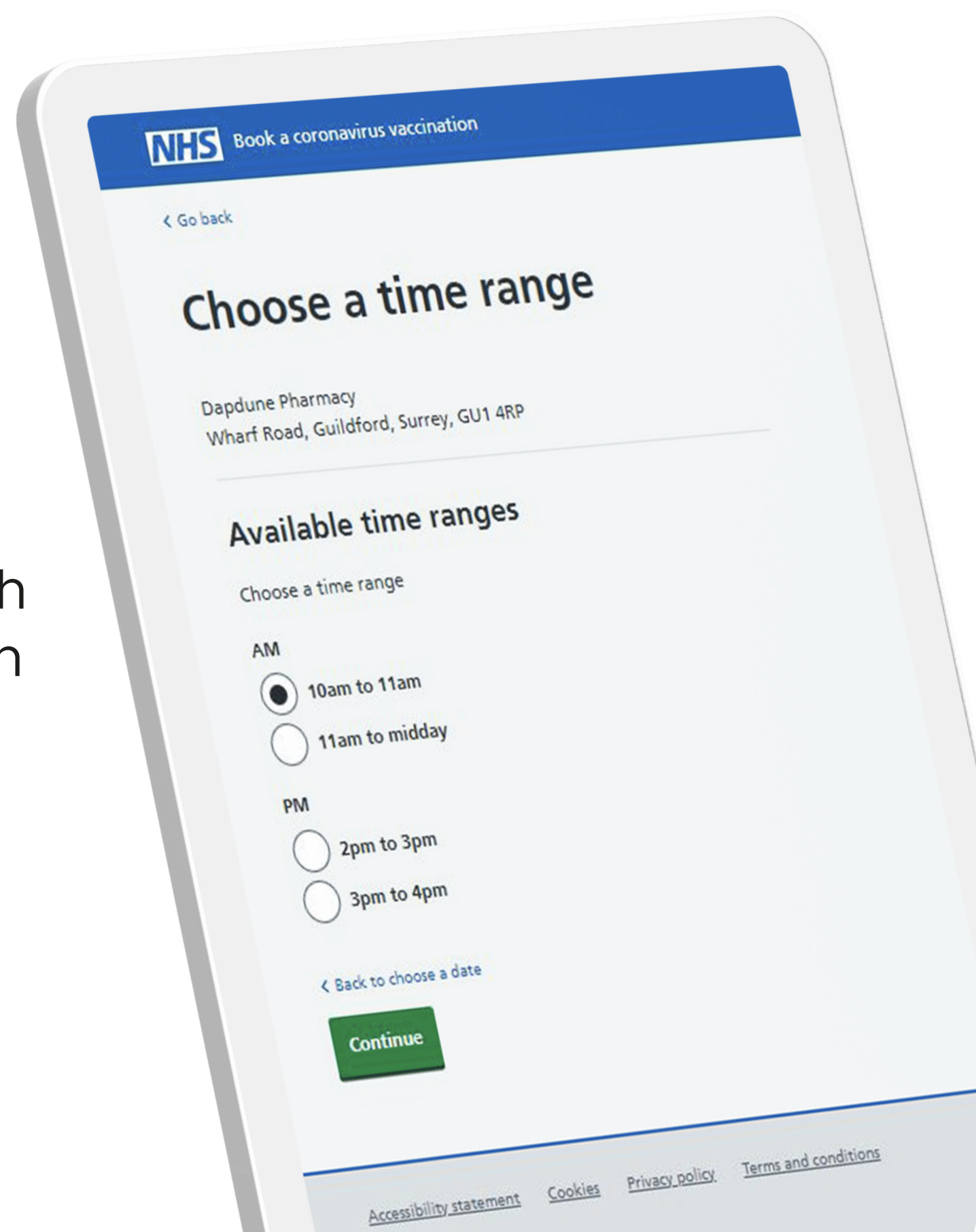
Online booking solution:

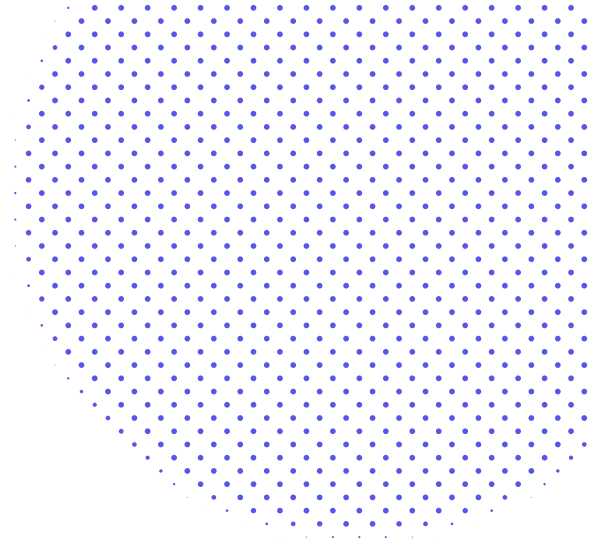
Has a responsive interface for mobiles, tablets, laptops, and desktops with a fully GEO responsive. It also captures the patient's accessibility, and both doses needed are booked in a single online journey, saving time and efficiency.



Staff check-in user interface:

Manages a responsive user interface through different devices, so both staff and patient check-in are supported. It also enables an offline mode and facial recognition when checking in.





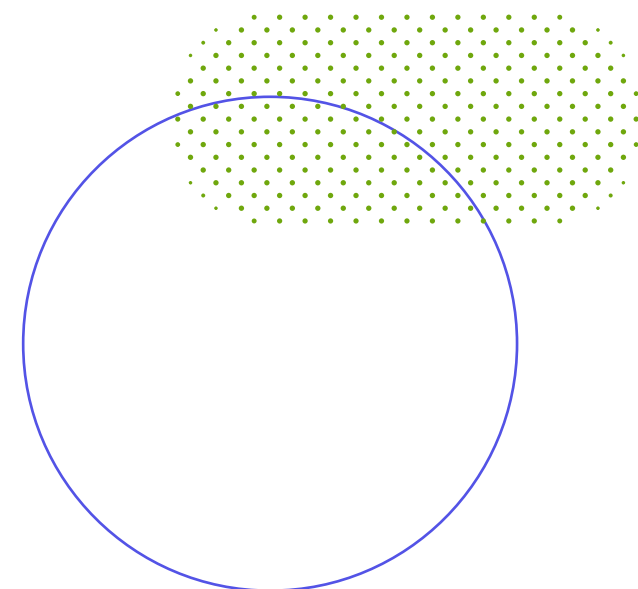
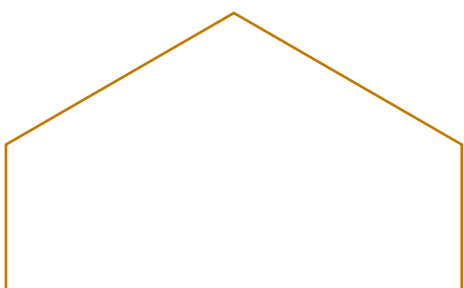
Hosting and security:

Based on Microsoft Azure's enterprise architecture, the hosting and security system is enforced by the cloud, which collects all data needed and protects it with encryption in-transit and on-rest. It also counts on GDPR compliant architecture (EU) and ISO27001 compliant.



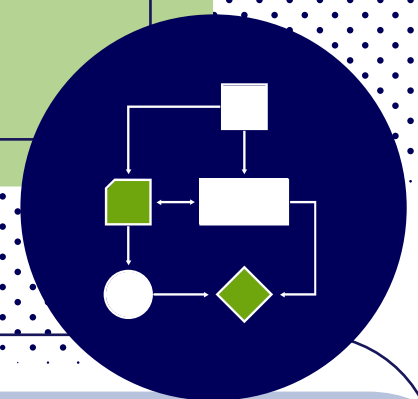
Delivery and support:

All languages are supported for better and more efficient communication. This system was thought to provide global support 24x7 with a dedicated project delivery team.



Managing data responsibly and safely

Q-Flow is built on industry-leading technologies. All the required security layers to safeguard sensitive data were tested and applied in this system, that's being monitored and improved continuously.



To prevent errors and provide a solution that works, Q-Flow was designed to deliver many business improvements in a healthcare environment and to replace old legacy or entry-level systems. It can also be integrated with existing systems to take advantage of the data already owned. So, Q-Flow is considered by ACF Technologies as an alternative solution and integrated solution.

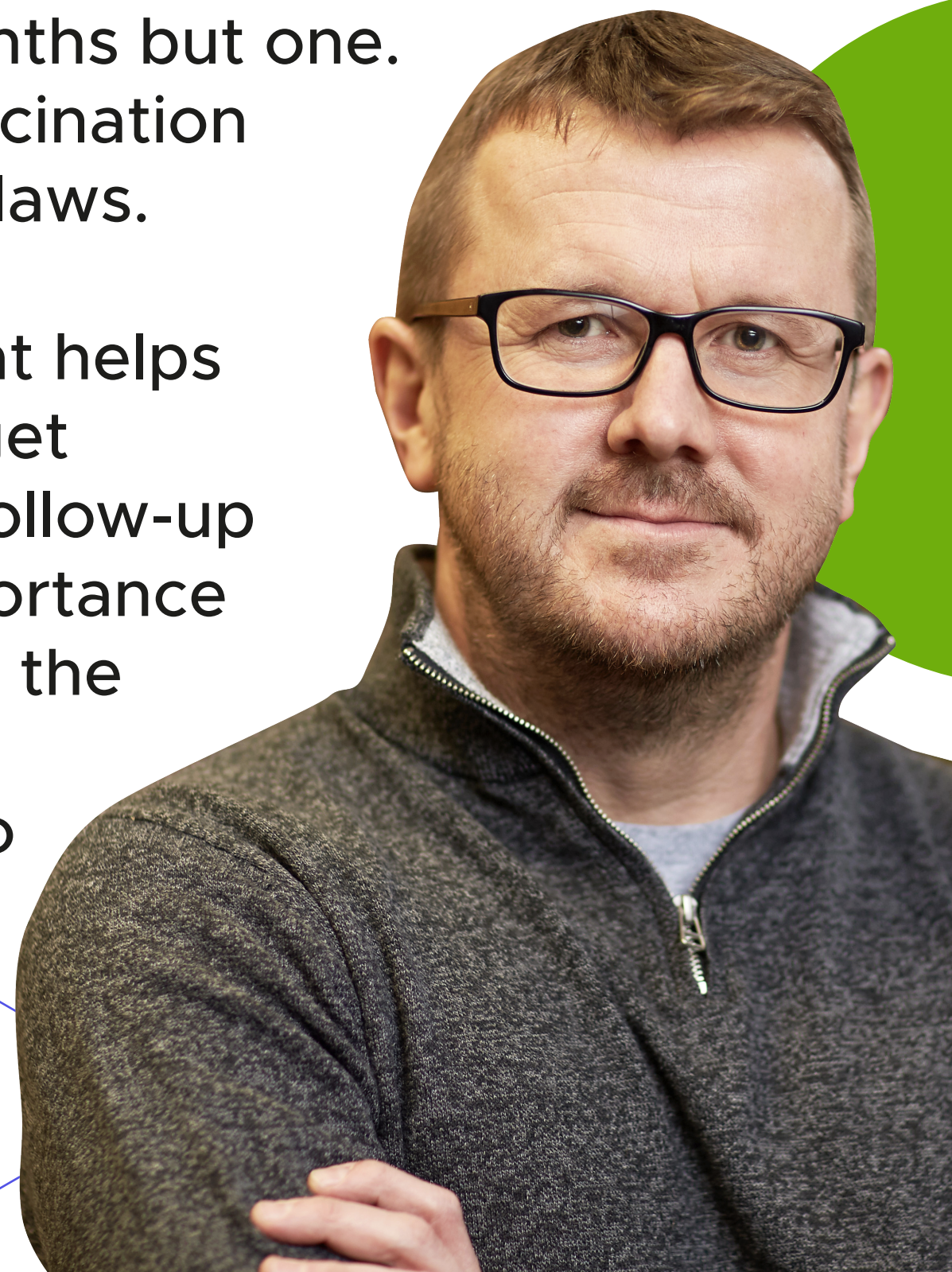
Overachieving expectations: it is possible

Simon Ronald, vice-president of business development at ACF Technologies, thought that developing this vaccination booking system would take at least ten months. But the urgency was real, and millions relied on a solution.

ACF Technologies, Microsoft Azure, and NHS made it possible, and by working long hours non-stop, the team built a reliable system not in ten months but one. And the results are tangible: the vaccination booking system still works without flaws.

By developing a booking system that helps people to book their appointment, get vaccinated, and be able to make a follow-up from anywhere, ACF shows the importance of a healthcare system that thinks in the future and the opportunities technological developments gives to the medical world.

**Simon Ronald, vice-president
of business development at ACF Technologies**



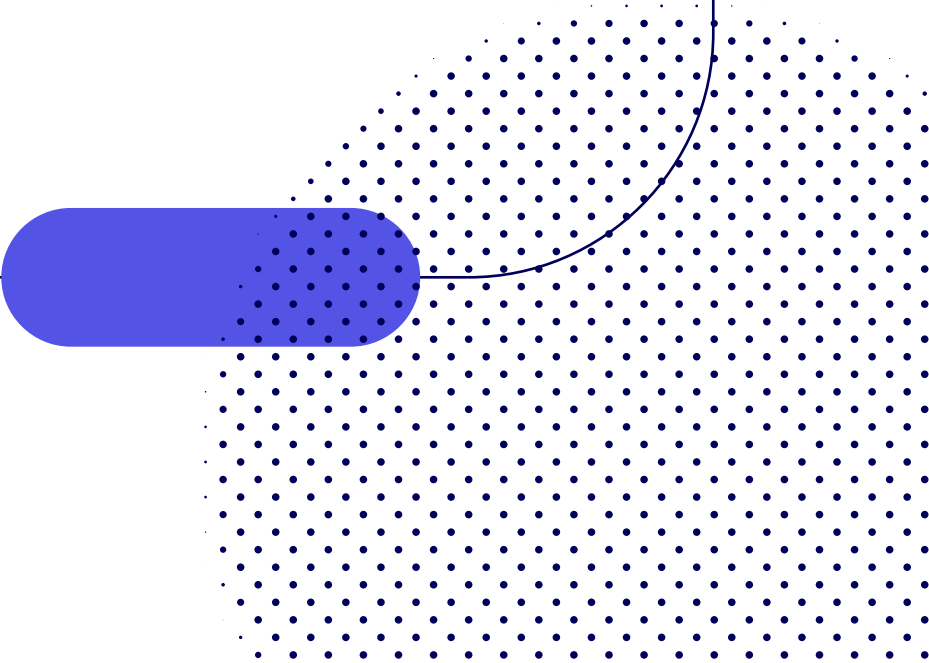


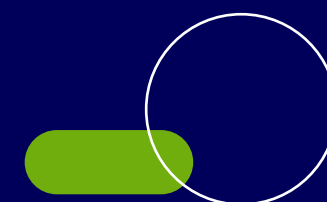
What happens next

The scenarios that **ACF Technologies** propose are real, achievable, and of great importance to patients and frontline staff who cope with the risks of Covid-19 while seeking and giving care. As a result, in ACF we want to improve appointment scheduling systems and maximise patient flow.

Nowadays, ACF provides full functional solutions tailored to all of the existing processes and security requirements.

The next step is to continue supporting a phased roll-out of more testing locations across the UK and implement Q-Flow to improve and help the healthcare system.





Get to know more about this achievement here:

