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Shaping the future of clinical trials

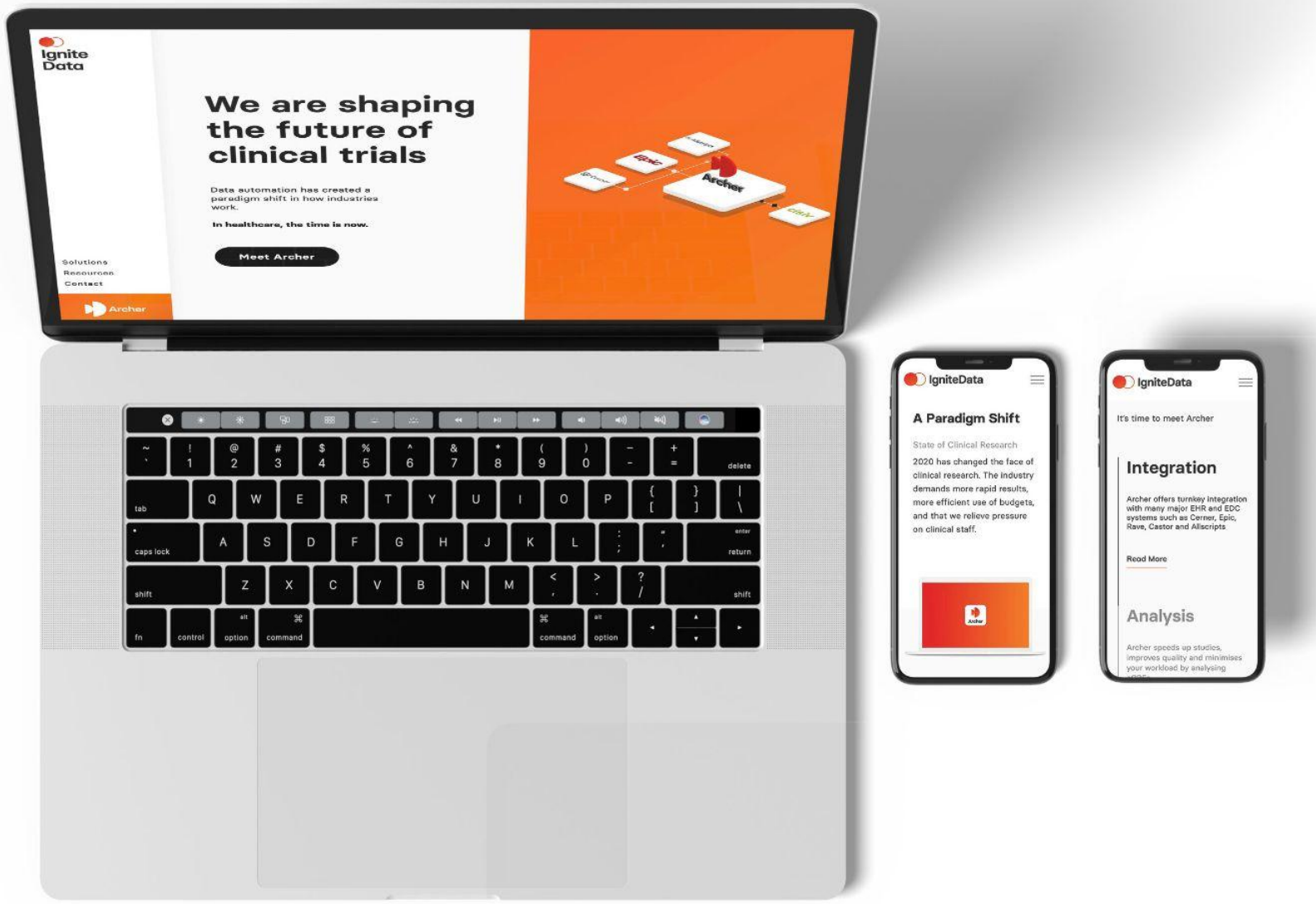
Client
IgniteData

Industry
HealthTech

Project
Technical support partner

Focus
Transform manual EHR processes

Success
Rapid clinical research creation



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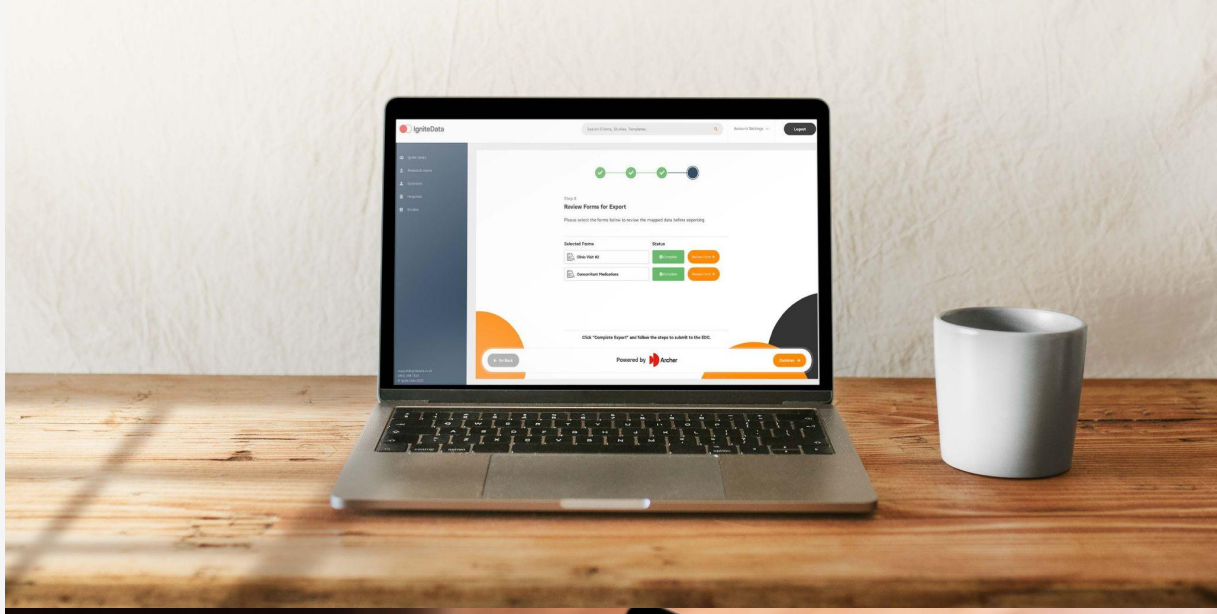
A bit of **background**

2020 changed the face of clinical research, with the industry calling for faster results, greater cost-efficiency and less pressure on clinical staff.

One Reading-based, DigiHealth start-up saw the problems – but didn't want to simply launch a solution. IgniteData are experts in their field, so they wanted to disrupt it.

Backed by government-funded Innovate UK, they planned to go to market with a new digital product that would create a true paradigm shift in the way clinical research was conducted.

The vision was Archer – but they needed a **skilled technical partner to help them deliver it.**



Our **role**

Our role was to support IgniteData as **their technical development partner**, with an agile brief stretching from the initial feasibility and scoping of the project, to the front and back-end build of this ambitious application.

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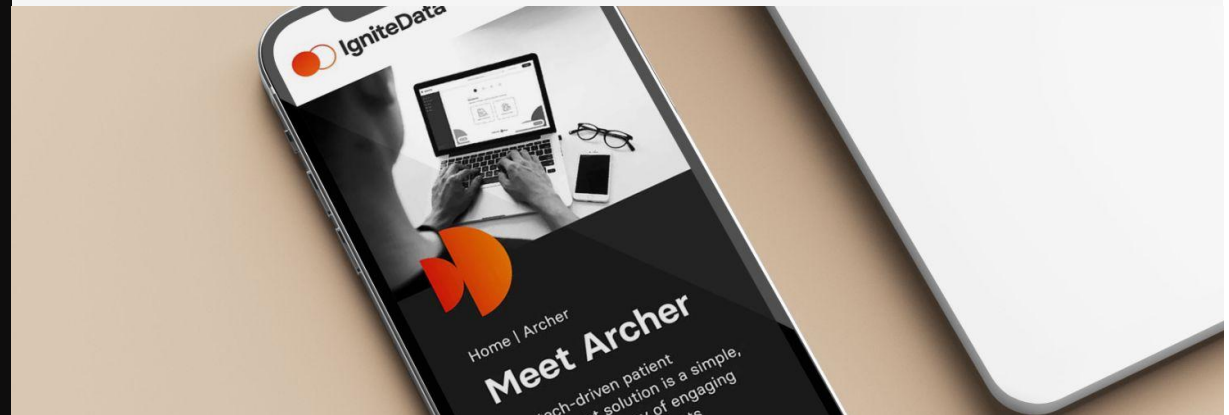
The opportunity

The main factor holding back the quick turnaround of clinical research was the huge reliance on manual tasks like data entry.

For example, imagine two screens. For a clinician to take all the data points and information they need from the Electronic Health Records (EHRs) of patients, they needed one system open on one screen for all their data capture, and a separate system open on the other screen for the EHRs.

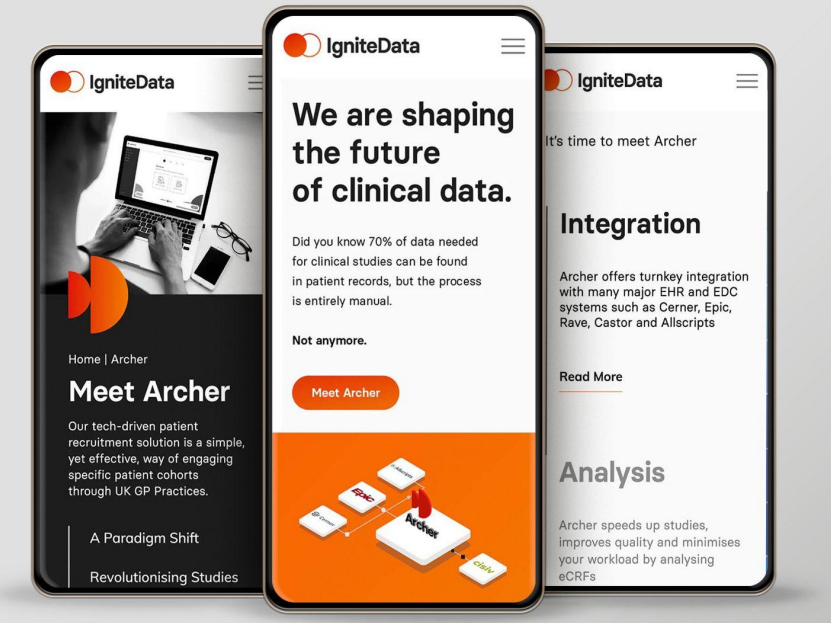
For every single data point, clinicians had to look up a patient, search for every question from their height to their medication specifics, and manually copy everything line by line into the fields in the study.

It was a lengthy, labour-intensive exercise that left a lot of room for human error – and it was the perfect opportunity for a system integration that could map one against the other, producing automated clinical studies in minutes, as opposed to hours.



The key aims:

- Innovate the process of generating clinical studies through automation
- reduce the staffing overheads for conducting a study
- improve data quality by reducing human error
- integrate seamlessly with EHR platforms including Epic, Cerner and AllScripts
- integrate with a variety of EDC research solutions to further enrich data capture



What we **did**

We had two key parts to play as the support partner to this build: consultancy and development. There were three things we kept front-of-mind to ensure success:

- We always had a thorough understanding of the user
- We maintained regular communication with key stakeholders
- We consistently delivered our input on the solution roadmap

For the build, they needed our input on the back-end of this application, which needed to incorporate a complex set of system integrations with a very specific set of requirements. For example, being able to handle data from three different kinds of EHR forms hadn't been possible – neither had the ability to select a lab when setting up the clinical trial.

Core **components:**

Audit trails
While automation does the heavy lifting in this solution, everything is tracked, as we built the product around a CFR Part 11 compliant audit database. Audit log functionality ensures that whether it's patient data entry or report generation, every action at every stage can be tracked back to the original user who authorised it.

Mapping engine
The key element that would take all those patient data points and pair them with the correct fields in the study. This was built to handle scenario simulation; custom functions can be built to meet the needs of specific studies, and push different responses back to the data capture platform depending on what data that comes through.

Robust security
Data security is an integral part of Archer; the provenance of the data transferred within Archer is built with certifications including: ISO27001, NHS Digital Toolkit, GDPR, HIPAA Compliance, FDA 21 CFR Part 11 Compliance, Cyber Essentials.

Embedded environment
We knew an intuitive experience was critical – but if it isn't broken, why fix it? For ease-of-use, the front-end of the application launches embedded within the hospital EHR system itself (like Cerner or EPIC), so the entire experience is familiar to any clinician using it for the first time.

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The **Results**

Since launch, Archer has delivered on all its promises to the HealthTech sector. Thanks to its central mapping system, it can deliver rapid, accurate answers to specific eCRF questions through the network of system integrations we built with IgniteData.

The key benefits for clinicians include:

- Improved data quality
- Increased efficiency
- Faster delivery times

"6B Digital have been an outsourced development partner for IgniteData for the past 3 years, working on **several web, design and system build projects**. Over the course of our time working with 6B Digital they have continued to grow in both size and professional maturity. This is a **testament to their ability to listen, learn and adapt quickly** – a key skill when trying to run agile development projects."

Richard Yeatman, Chief Technical Officer

Looking to accelerate your next digital project?

Let's **talk today**

Chat to our **Business Development Manager** and let's get started.

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