

## Making smarter use of intelligence.

Helping the Home Office to design and develop a Single Intelligence Platform.





The Home Office requires a powerful, capable set of tools to deliver against its responsibilities for immigration, security, and law and order.

However, their data was distributed across a range of outdated legacy systems in a siloed ecosystem, with 16 fragmented data sources.

Recognising the benefit a more connected approach to working would bring to all departments, they asked Equal Experts to assist in the design, development, and delivery of the Single Intelligence Platform (SIP). This would allow Home Office staff to collect, check, share and access myriad intelligence data right across all departments, helping to tackle crime at the UK border and within the immigration and citizenship system, and reduce organised immigration crime.



of time saved per month by private beta users.



complex production system built over the course of eight two-week sprints.

### About the Home Office.

The Home Office (HO) is a ministerial department of the Government of the United Kingdom, responsible for immigration, security and law and order. As such it is responsible for policing in England and Wales, fire and rescue services in England, visas and immigration, and the Security Service.





#### Removing silos, improving efficiency.

Using a siloed system was detrimentally impacting HO's intelligence data, and the ability to retrieve and work with that data. This was creating artificial barriers between the various teams such as immigration, border control, and passports, making it difficult to efficiently coordinate. **There was a clear benefit to joining up these siloed intelligence systems for a more integrated service.** The Single Intelligence Platform, (known as SIP) – was designed for users to record, access, and share data across the intelligence community, enhancing the utility of gathered data.



#### Providing a technical showcase.

Simplicity was at the heart of all technical decisions regarding SIP.

Adhering to clean code principles and a minimalistic technology stack ensured the project was easy to maintain, test, deploy, and scale. Application components were hot-swappable, allowing SIP services to scale on-demand with no impact to end-users.

In addition, **SIP was also the first major Home Office project to fully use a cloud hosting provider**, in this case, Amazon Web Services (AWS). Hosting on AWS, together with the use of continuous integration/delivery tools such as containers, Kubernetes, Jenkins, and Kibana, was a key enabler of the rapid iterations. SIP is built on the Home Office "Digital Software Platform", a Platform as a Service supplied by the department's central DevOps team.



#### An unswerving focus on users.

While SIP is technically robust, the real triumph is that demonstrable user needs are woven into every element.

We engaged with users at every possible opportunity. User Researchers spent time with operational users each week, feeding back their findings to the delivery team. With over 170 hours of contextual research taking place within the private beta period alone, empirical evidence was the team's key indicator of user acceptance. Feedback portals were provided to help with feature decision making – taking user demand as our guide.

Creating a close relationship between developer and audience helped create the solution the HO really needed, at a speed that made this project a showcase for the benefits of working in an agile, user-centred way.

#### An efficient process.

Using an agile continuous delivery approach, we rapidly iterated upon the SIP product, with a co-located, multi-disciplined delivery team comprising Designers, Developers, Business Analysts, and DevOps.

The agile sprint process and the tight feedback loop with users allowed our co-located team to react to issues and opportunities within days – rather than the months, or years, the Home Office had experienced before. This all contributed to the project being to the agreed timeline and budget, with the production system built over the course of just eight two-week sprints.

This was a real achievement for a system of such complexity and importance. SIP is now a showcase project for agile and user-centred ways of working. And one of our most senior stakeholders declares it "light years ahead of existing systems and processes".



# Want to know more?

Are you interested in this project? Or do you have one just like it? Get in touch. We'd love to tell you more about it.

