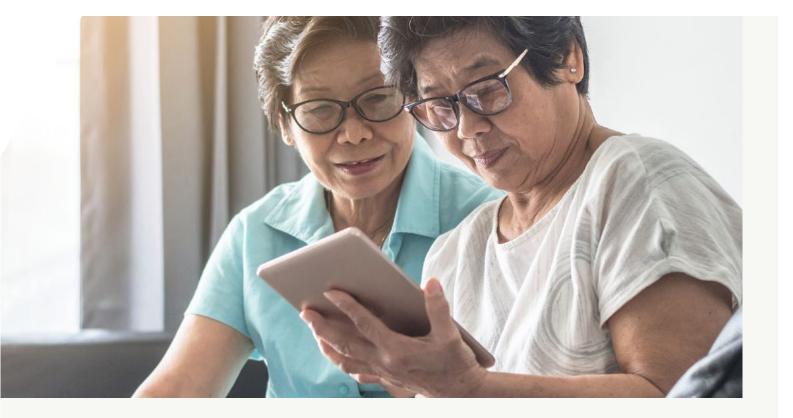DIGITAL ENABLEMENT AT AUSTRALIAN RED CROSS LIFEBLOOD

Engaging blood donors across Australia to save lives

About Lifeblood

Australian Red Cross Lifeblood is a division of the Australian Red Cross that is committed to providing life-giving essence to support the everyday well-being of all Australians. Collecting, processing and distributing blood donations is a core part of what Lifeblood does. The organisation operates about 100 national donation centres where over half a million Australians donate blood every year.

Engaging blood donors across Australia

While Lifeblood already collects and processes a large number of blood donations, Australia needs even more. With that in mind, Lifeblood set out to find ways to better engage with donors, make it easier to book appointments and to expand their reach across Australia.

Realising that their traditional ways of engaging donors were quickly becoming outdated, the organisation wanted to leverage best-in-class digital technology to deliver a better experience for their donors.

There were three critical elements to this: (1) how donors make appointments (2) how possible donors can learn more and find donation centres and (3) how donors can access their records and see if they are eligible to donate.
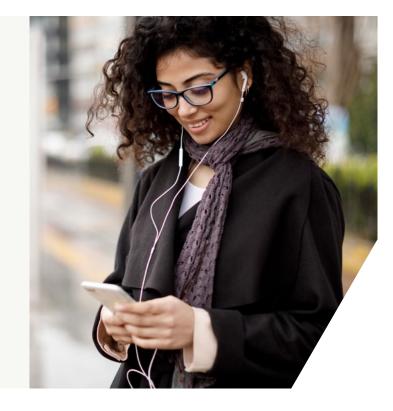
Historically, most of this was done via a web portal, the phone or directly in person in the donor centres. Lifeblood wanted to modernise this approach to make it easier for donors to engage and to streamline the process for better efficiency.

A mobile solution

Knowing that mobile devices and mobile apps are the preferred platform for many Australians these days – especially younger ones – Lifeblood approached Forge to develop a mobile app to help achieve their goal of providing a better donor experience.

The goal was to design an app that donors can use to find out if they are currently eligible to donate, find their nearest donation centre and make and manage appointments. New donors are able to register via the app while existing donors can use it to access their donation history and personal data.

Integrations

Of course, the new app would need to be more than a standalone solution. For it to work seamlessly and result in efficiency gains, the app needed to be integrated with Lifeblood's existing systems and workflows.

Forge collaborated with Lifeblood to lay the foundations of a secure and robust API architecture built on top of AWS's rich service ecosystem. The team worked together to orchestrate the requests across multiple backend systems ensuring integrity and consistency of the appointment management process. By utilising the AWS's serverless infrastructure such as API Gateway, Lambda and Step Functions, Lifeblood was able to achieve an extensible, maintainable and dynamically scalable solution to support its growing base of more than half a million active donors.

The API provides a simple and secure transactional façade to the core Lifeblood systems to manage appointment slots, give donors an indication of their eligibility and health statistics, and provide a way to view and manage their upcoming appointments and past donations. The change management is supported by the robust DevOps processes involving automated integration testing and the ability to incrementally version and update the APIs, thereby removing the need for maintenance outages and disruptions to donors.

Data security

Data security is one area that was extremely important to Lifeblood. Given the organisation is dealing with personal and private information, it was essential that data storage and sharing would be extremely secure and reliable.

The Forge team addressed this challenge by designing a middleware layer between the app and Lifeblood's other systems to make sure the access into the backend systems is as secure as possible. In addition, the two-factor authentication in the app ensures a robust authentication process is in place for users wanting to access their own information. Using this approach, every request is encrypted and authenticated using the OpenID Connect authentication standards. Secure integration with the B2C identity provider therefore ensures that the donor can only ever access their own information and must do so in a secure manner.

A holistic approach to data security extends to all layers of the solution, such as ensuring that the cloud backups are restricted, that the data is securely encrypted on personal devices and that no personally identifiable information is ever logged or retained in transit. Forge worked with Lifeblood to define metrics and alarms that would detect and alert the administrators to security and operational anomalies as soon as they occur.

Actionable Insights

While the app as such was a crucial first step, to truly improve donor engagement and activation, Lifeblood needed more than an app. They needed actionable insights that could be used to connect with donors in a meaningful way.

To achieve this, the Forge team integrated the mobile app with Lifeblood's analytics and campaign management systems in a way that captures user interactions and allows the team to send tailored communications. For example, the system captures when a user starts to make a booking but does not finish the processes. Personalised push notifications then encourage the user to complete their booking. Similar communications are being sent when someone cancels their appointment without booking a new one.

More bookings, better insights

Since launched in August 2019, over 400,000 Australians have downloaded the app to engage with Lifeblood. These users have since booked over 750,000 appointments via the app. In April 2020, over 28% of all bookings were made via the mobile app, compared to only 17% made via the legacy web portal, suggesting that the move to a mobile solution was the right one for Lifeblood and their community.

The ability to use push notifications to encourage app users to book appointments, as well as the insights into user behaviour have been particularly valuable for Lifeblood.

Plans for the future

With the app now out in the market, and feedback being very positive, Lifeblood and Forge are working together to expand the capability further. One feature that is high on the list is the ability to use push notifications to remind donors of upcoming appointments or to engage with app users who haven't donated for a while.

Making digital happen for your business

Unlock "the possible" with digital enablement from Forge. Designed to give form to your digital ambitions across cloud, connectivity and intelligent interfaces. Forge works with you, to leverage industry-leading technology stacks, intelligent digital platforms, and best-in-class capability. All as part of industry and digital business ecosystems, to make your digital transformation a tangible reality.

Forge is part of the Certus ecosystem, which for the last two decades, has been the trusted partner for the delivery of digital transformation, for more than 500 enterprises and public sector clients across Australasia. This means you can be be assured of first time, best-in-class business outcomes for your endeavour.

We turn digital ambition into reality

LEARN MORE

Forge

AUCKLAND / WELLINGTON / SYDNEY / MELBOURNE / BRISBANE