

NHS BLOOD AND TRANSPLANT

We Stand for Hope. We Stand for Life



AGILE TRANSFORMATION IN A HIGHLY REGULATED ENVIRONMENT

NHS Blood & Transplant's Agile Journey

- Cultural change embraced but not at the cost of quality or control
- More deliverables met with continuous refinement and improvements
- Business and IT aligned and collaborating daily

Creating **winning** teams.

NHS Blood and Transplant (NHSBT) is a joint England and Wales Special Health Authority that provides a Blood and Transplant service to the National Health Service – supplying enough safe blood to hospitals in England; tissues and solid organs to hospitals across the United Kingdom. Each year donors give approximately two million donations of blood and 3,500 organs – saving and transforming countless lives.

Safeguarding blood supply and increasing the number of donated organs involves collecting, testing, processing, storing and delivering blood, plasma and tissue to every NHS Trust in England. NHSBT also match, allocate, audit and analyse organ donations across the whole of the UK.

NHSBT'S 2020 vision will deliver:

- Enhanced digital connections with blood donors
- Improved productivity within the blood supply chain
- Higher quality service for hospital customers
- More organs available for transplantation
- Enhancements to the Organ Donor Register and our public website
- Increased income from our diagnostic and therapeutic services
- Expert support for the next generation of cellular and molecular therapies
- Broadening of our offering to the NHS
- Investment in a reliable IT infrastructure

NHSBT recognised that whilst there was an increased growth in need for its services, crucial to the delivery of safe products and services for patients is effective technology. Whilst looking to its Corporate 2020 vision, NHSBT needed to replace an ageing IT infrastructure, migrate to SaaS cloud based services and replace the critical operational applications underpinning its activities whilst ensuring they remained compliant with external regulatory monitoring.

The ambition is to revolutionise the way NHSBT interact with blood donors to take full advantage of the opportunities afforded by digital technologies. But that means careful consideration of the realities of existing interdependencies between the national databases and NHSBT services, systems, data, processes and people. Focusing on a comprehensive approach, and developing a set of principles to guide the development of overarching programs, NHSBT identified the need to improve the business processes and the supporting IT environment which will be realised by two major Programmes (ODT Hub and Core Systems Modernisation) across the organisation.

It's all about the People

“NHSBT was embarking on its most complex transformation programme ever, initially focussing on the Organ Donation and Transplantation area of its business,” noted Gary Dawson, Assistant Director Solutions Delivery. “It needed to modernise a significant percentage of its core systems, platforms and architecture along with re-aligning the infrastructure to more modern cloud-based technologies. The impact on the current business and practices couldn't be underestimated across the organisation — we were anticipating changes in how we work and how the system worked.”

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Within NHSBT, it is clear to see the value of the employees who truly care about NHSBT and its work. Dawson, working with the wider NHSBT ICT organisation felt that it was important to correctly evaluate the IT needs in line with organisational changes and be able to guide the system changes with the people using them. “We recognised that both the overarching change and the adoption of a new technical platform and architecture — the effects on the culture of the organisation — could, if

not managed strategically, create a complex management problem and have an impact not only on the core business, but also the working relationships of the people within NHSBT. We needed a system and guidance to adapt and benefit from the changes and we were clear that the waterfall methodology that we had previously relied on wouldn't support this change. We have dedicated and passionate people who work here, who really care about the cause and want to achieve the goals of the organisation, but this change would only work if everyone was on the same page and we could go through the journey together.”

Introducing a New Approach to Adopt Change

The Chief Digital Officer had set the strategy for implementing Agile into NHSBT and on-boarded Dawson specifically with this in mind. From day one he worked extensively and closely with the Business, IT and Program Delivery stakeholders to ensure cross-organisational support. After an initial meeting, they knew that an experienced consultancy like IJI would aim to understand NHSBT and work collaboratively to deliver solutions and training so that internal changes were manageable. IJI suggested NHSBT use Scaled Agile Framework (SAFe) to help support the governance and manage both the organisational and technical changes. The ICT Leadership Team immediately took the view that this was the right methodology to achieve NHSBT's goals and looked for an appropriate vehicle in which to introduce it. They decided that the Organ Donation and Transplant (ODT) Hub Program was the most appropriate place to start implementation because ODT was initialising a hands-on software delivery and its timeline aligned well with the cadence of delivery that the framework provided. In addition, funding was agreed and all the teams involved were based in one location. It would act as an ideal start and pilot for other elements of the organisation to observe.

Because ODT was the first in a series of transformational changes, it would also be the model that other parts of the organisation would take as an example. "IJI's expertise with agile transformation programmes was a perfect fit with what we were aiming to do. Because we'd be working with new team groupings, we wanted to assist employees with transitioning to new working relationships and processes and also address the naturally risk-averse elements. We had to stay within regulatory standards.

Rapid and vast change, if not done properly, has the potential to be disruptive, and actually hinder advancement," explained Dawson. They chose Ivar Jacobson International to provide company guidance, including coaching and training services, for the implementation of Scaled Agile Framework (SAFe) at NHSBT.

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A Proven Framework from SAFe & Experienced Delivery from IJI

IJI is a certified gold partner and delivers training around the globe on the Scaled Agile Framework (SAFe), which is an online knowledge base of proven success patterns for implementing Lean Agile software and systems development. IJI have demonstrated benefits which include 20-50% increases in productivity, 50%+ increases in quality, and measurable employee satisfaction with higher levels of engagement.

SAFe offers a broad range of content and phased implementation for organisations looking to increase productivity, change system structures, increase employee training, solutions based management and develop greater efficiencies across company platforms and people. IJI's experience working with SAFe, and their direct knowledge of the successes other organisations have experienced was the reason that NHSBT chose IJI as they could offer key insights to how NHSBT could benefit from this experience.

Adopting SAFe can penetrate deep into an organisation and affect many existing structures, processes and practices. Proper preparation is critical to set the stage for smoother adoption. IJI delivered a two-day workshop that engaged managers interactively while explaining what SAFe was and how to implement it properly. Meanwhile, Dawson and IJI also began to structure team units — they identified product managers and product owners working collaboratively to define their roles within SAFe and guided them on SAFe practices. Training roll outs started with 10 or 12 courses, ranging from large room sessions of 30 - 40 people for SAFe overviews and how it could work within NHSBT. These were followed, over a two-month period by smaller and more interactively focused sessions for product managers and owners intended to further guide them and increase engagement. These sessions were set up for six to 10 people with the appropriate attendees to maximise the interaction and cross-functional engagement – even at the point of training. Meanwhile, programme managers, with Dawson, started to work on organisational components, such as planning sessions across the organisation (75 - 80 people); planning included who would be involved, as well as logistical challenges. Dawson spent considerable time explaining the roll out and SAFe implementation to all levels of employees to facilitate understanding and new team groupings. IJI was on hand at all stages of implementation to guide, coach, teach, and assist teams to transition to the SAFe

program, following a strategic PI cycle that ensured NHSBT's roll out of the SAFe program was adopted by employees with secure checkpoints and feedback along the way.

Building Success

Over the first Program Increment (PI), NHSBT's ODT program came through on most of its deliverables, "it was amazing, how we were able to do that in such a short time," Dawson noted. "Now that we've done that, we can see what we need to do for future PIs and are continually able to refine and understand the teams' velocity; it's all falling into place and people really are committed." In that first PI, they were able to develop and learn to work effectively as a team and were able to deliver a committed, finite number of product features, as well as prioritise IT operations alongside the business element of the organisation.

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During the short introduction phase of three to four months, they were able to not only on-board and train all the teams aligned to the Release Train, but they were also able to get the business component of NHSBT aligned with IT. There were challenges — such as integrating business managers into the teams and defining product owners — but once initiated, fortnightly 'show and tell' sessions and then a mid PI

retrospective helped the business see the benefits of the change process and really feel part of it. "We would never have had that level of interaction in a waterfall delivery. To achieve the levels of understanding of both the technology and deliverables – along with all the inter-dependencies would have taken months of calls, meetings and discussions. We planned the next three months in just two days and now we retain that level of engagement on a daily basis."

SAFe has become part of everyday procedures; it has a series of checkpoints and loops that ensures communication is clear and efficient between teams and individuals. IJI understood that it was important to Dawson and NHSBT that change occurs but not at the cost of quality or control, and that value to the business be equal to the ability of the organisation to cope with

the rate of change. NHSBT were able to build agile confidence across the ODT program — senior stakeholders could support the cultural change because SAFe provides the governance required to build in the needs of Quality Assurance and regulators. Dawson sees the mutual understanding between IJI and managers and the employee teams as critical. It was important from the start to work “closely with key people in teams — it made the difference that we were bringing them on the journey — rather than telling them how we were going to impose something on them. It has been a key element in NHSBT’s success.”

Successfully Scaling to New Programmes

Having delivered the first MVP (Minimum Viable Product) of the ODT Programme, it is evident that the introduction and embedding of the Scaled Agile methodology within NHSBT has begun to provide early delivery of significant Business Benefit.

Continuing on this significant journey, NHSBT have now run two SAFe Big Room Planning events for its Core Systems Modernisation (CSM) Programme which is potentially a much larger programme to replace its core blood offering system relating to blood, blood derived products and tissues. “We’re definitely not standing still. We are building momentum and will continue to run with the same rhythm that SAFe has provided us with our ODT programme. Adopting SAFe has set in motion the skill development and mind-set for successful organisational change even as we scale to new programs, release trains and people.”



About Ivar Jacobson International

IJI is a global services company providing high quality consulting, coaching and training solutions for customers seeking the benefits of enterprise-scale agile software development.

We are passionate about improving the performance of software development teams, and maximizing the delivery of business value through technology.

Whether you are looking to transform a single project or program or your entire organization with lean and agile practices, we have solutions to suit your needs.

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