HALSTON GROUP

Servita

NHS TODAY, SPORTSTECH TOMORROW:
BUILDING MULTI-FACETED SOFTWARE SOLUTIONS

H B2B

TECH ORIGIN

MERCURY

SUSTAINABILITY PARTNERSHIPS

WHAT TO EXPECT

HG Servita is an international consultancy deploying a range of services to promote digital transformation, including the delivery of software. The primary market that they occupy is healthcare, utilising their expertise in providing connectivity and integration for healthcare services, alongside applying AI and machine learning capabilities to data processing. For the past 10 years, Servita has been supporting the NHS on its digital transformation journey.

Halston Group spoke to Matt Visser, Head of Product at Servita who has been helping reinvent how the NHS approaches digital builds.

NHS X
SERVITA

HG Servita has been supporting the NHS on its digital journey for several years, bringing with them a new perspective to innovate and inspire the NHS. They address problems with unique solutions making sure that the latest technology available on the market is being applied so they can operate as efficiently as possible.

SER *We have been trying to find new ways of solving long-term problems that the NHS has by utilising cutting-edge technology. The NHS as an organisation as with many public sector organisations doesn't lend itself to rapid innovation. We can't change that, but what we can do is consult with our knowledge of external solutions from other countries or sectors and how they can apply these innovations in a way they may not have considered before or not necessarily been executed with modern techniques. A good example of this would be the Patient Care Aggregator that enables secondary care appointments to be shown in the NHS app, this couldn't have happened 10 years ago, and needed a new set of eyes to come in with a renewed vision of what the current space looks like. 10 years ago, to achieve this you would have had to integrate with 260 hospital Trusts and possibly over 500 sites. Now there are many shared services from the commercial sector, and these could be used as the hook. This means that we could integrate to significantly fewer points, in a 50th of the time and achieve the same result. Not only this, the approach is much cheaper and greener.*

As per our commitment to reducing and reusing, our methodology stands on the shoulders of existing suppliers rather than dealing with reverse integration into the infrastructure after a solution has been built. We try to find novel ways of building solutions, investigating alternative areas of the market that might have been overlooked if you were taking a more centrist approach.

SOPHI
A REUSABLE APPROACH TO TECHNOLOGY

HG As part of this novel approach to working, Servita is looking to address the very common issue stemming in the NHS of duplicating digital development due to the siloed style of Trusts. Too often, Trusts are reinventing the wheel, developing solutions (with all the costs, resources, and carbon footprint that comes with it) that to a certain extent already exist in one or multiple Trusts. Servita has developed SOPHI (Servita Online Platform for Health Integration) which draws similarities to Lego blocks with each block representing common components that can be replicated and implemented into any solution.

SER *Servita is utilising the SOPHI methodology with their partners in the NHS. One example would be Health Call, a non-profit, NHS-owned organisation based in the North East. As a software supplier primarily to the NHS, its vital that we provide services they can reuse time again to lower costs to the health service. Not only this, it supports their sustainable ambitions to become net-zero by 2040 which align with our own goal to become net-zero by 2030. We have found in the NHS its common for tenders to have very similar requirements and it's much more efficient to have specific microservices which can be plumbed together, bespoke to customer needs. Were not talking about a generic platform which can be configured though, our aim is to allow for the specific requirements of an organisation by building specific microservices which do specific jobs well – which can be 'lego-bricked' together and cater for specific customer needs as their own single product.*

For example, one microservice could be a patient API that tracks admitted patients, another being an appointment API which handles bookings, or a correspondence API which handles all patient letters. Then if a Trust comes to us and asks for a patient app, we can simply wrap the existing services together with a bespoke brand interface and deliver the solution in a rapid turnaround of months or even weeks. Essentially these are components that can be reused and recycled. It already has given us so much flexibility.

We began with a single patient engagement platform but working with our partners we have been able to rapidly flex that into a Virtual Ward solution, Questionnaire service, Notification and Messaging services and Integration Engine tooling - providing a single front-door to all services. All of which are built using – where possible – reusable components which can be utilised needed.

ENHANCING
VIRTUAL WARDS

SER *Following on the topic of prevention, further down the line we could see the NHS provide wearables to those that pose concerns either through injury or disease. These will be less reactive than virtual ward devices, which need to respond in a second and be very clinically accurate as a response could be hospitalisation. Whereas, for prevention, that level of care or immediacy is not required, as it acts more as a form of remote monitoring, providing valuable data for a GP/ healthcare provider to give more accurate advice for long-term care.*

EXTENDING THE ROUTES TO CARE

SER *Another area that we are really interested in is building out that route to care from tertiary care services, such as dentists or optometrists. This will really support that capacity management aspect. We're really keen to build on our services to consider how people's journey into care. As it currently stands, there are only two routes to care, GP or A&E. Whereas, if you had an appointment at say Specsavers, they can detect cataracts and rather than having to recommended to the patient to book a GP appointment, they could connect to the same system as the NHS to refer patients to specialist departments directly to action change quicker.*

CONVERTING MEDICAL TECHNOLOGIES
INTO SPORTSTECH APPLICATIONS

HG Now this same technology and concept that is revolutionising care can be applied to the SportsTech arena. There have been blurred lines appearing between the MedTech and SportsTech fields for many years now, and as technology develops the similarities grow closer, with the same technology being altered for different applications across the two sectors.

SER *If you consider a heart rate monitor, the thresholds for those who are ill will be considerably different to an athlete in peak performance. So rather than there being an alert once a threshold has been reached, in the sports field it would more be a long-term analysis and finding markers of change. This could indicate stress on the body or a lifestyle change. Another example would be how gyro data can be used the track athletes' gait and identify pattern changes.*

SPORTSTECH IN ACTION

HG To demonstrate the capability of converting medical technology to the sports arena, Servita has begun a project with a Premiership Rugby team. The core technology available for remote monitoring of patients has been adapted to give this rugby team unique insight into their players' performance and begin a more preventative tactic to player injuries.

SER *There are four core reasons as to why the team decided to implement wearables and apply remote monitoring with their players.*

***Injury Prevention** - Implementing wearables can be used to build out recovery scores, and track when a player may be out of a healthy state. These can be used by trainers to determine how far to push training.*

***Impact of a Match** - Ensuring there are no adverse reactions to the physical actions of a game. For example, markers can be set to identify an impact, this could include a sensor that can track velocity and when that velocity comes to a complete halt this signifies impact and can even be used to calculate the G-force of a hit.*

***Wellness & Lifestyle** - Utilising wearables will allow the team to have greater insight into how a player's lifestyle can impact performance and even begin to dictate squad decisions.*

***Squad Management** - The unique insight into players performance enables the team to determine player readiness for any match and help develop decisions on squad picks/rotation choices.*

The data for this can be pulled from any wearable device, whether that be a watch or a sensor in a gumshield. We are able to draw raw data surrounding heart rate, blood pressure, gyro, oxygen levels, atrial fibrillation, stress scores, and sleep data. All of which can generate readiness and recovery scores.

THE FUTURE OF
HEALTHCARE

HG The MedTech market is always evolving and with the rate of technological innovation and adoption, the healthcare market can expect to see immense change over the coming years.

SER *I think the market is in for a bit of a shock over the next five to ten years. The NHS contract with Palantir marks a fairly obvious moment in a shift in how healthcare may be delivered in the future of this country. There are a lot of companies that have been providing the same solutions for a long time in the UK, some of which will remain such as internal hospital management systems but where I see a real shift change is the provision of care. It's going to be a lot more AI and data-driven. Whilst AI solutions are not proficient enough yet, advancements over the years can see it reaching the same level of competence as a first response.*

In terms of data, the utilisation of apps and wearables by patients that the NHS has access to will greatly improve how the NHS organises itself and becomes proactive. I believe the innovation will likely come from exemplar pioneer hospital Trusts and be adopted off the back of successes rather than as a national programme. So, I don't think this will be an overnight change.

HEALTHCARE IS CHANGING;

IT'S BECOMING SMARTER, PROACTIVE, AND INTERCONNECTED, ALL OF WHICH IS BEING DRIVEN BY THE ADOPTION OF CUTTING-EDGE TECHNOLOGY. INNOVATIVE TECHNOLOGY AND THE WAY IT'S APPLIED IS REINVENTING THE WAY CARE IS DELIVERED.

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