Skillfully Managing a Complex Service Transition

How this optical retail chain enhanced its business services and significantly lowered costs by replacing its legacy Drupal system with Azure DevOps.

KEY OUTCOMES:

- Successfully deployed Azure DevOps without any P1/P2 issues identified in production.
- Delivered with no reduction in scope and minimal disruption to business.
- Adopted a "shift left" mindset to significantly reduce costs of finding and fixing issues.
- Accelerated release cycles with our offshore team in India working during UK time zone.

Problem

In 2015, this multinational optical retail chain began a digital transformation to create a single view of each of its customers across its global business in the UK, Ireland, Australasia, and Nordic countries. The retailers, which offers optician services for eyesight testing, and sells glasses, sunglasses, contact lenses, and hearing aids, knew it had to adopt a combination of modern retail technology systems to achieve this vision.

In 2018, the company introduced its e-clinical platform and consumer mobile app, which allows customers to virtually try on hundreds of pairs of glasses before they make their way to a store to purchase them. Tablets were also introduced to stores to give sales associates an added means to serve customers faster and more effectively.

At the start of this digital transformation, these new technologies were hastily integrated with the retailer's legacy software and hardware systems, some which had been developed and maintained for over 20 years. This meant a disparate backend was created and data could not be kept in a single location, which made it difficult to scale.

Technologies that were already in-store, such as the large number of tablets digital, were also at risk of struggling with customer needs. As demands by store associates for applications and functionality grew, in-store infrastructure would also have to change to support future technologies.

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To remedy this, the retailer decided it needed a brand-new retail platform that was a combination of retail and medical, and optical and hearing. In addition to projects to redevelop all its core systems, it would reduce its current 2,500 critical platforms down to approximately five.

At the same time as the development of the new backend retail system, the retailer worked on consolidating all existing customer data, including datapoints such as online interactions, in-store sales, and prescriptions. It involved taking all that data, along with hundreds of data applications, warehouses, and storage devices, and migrating them into a single customer record.

For the retailer, having a single dataset enabled in-store staff to better manage their customer interactions, know more about the customer's past interactions with the brand online, and their activity in other stores. Customer relationship management datasets also contributed to better marketing practices, as they could tailor their strategies for marketing around individuals.

AWS Drupal was one of several legacy applications that was set for decommissioning and replacement with a newer solution. One of key drivers for this was that official support for this instance of Drupal was nearing its end.

This "Find and Book" re-platforming project was carried out by retailer to decommission its instance of AWS Drupal. In its place, they would implement Microsoft Azure DevOps and migrate all the current customer journeys to it.

Moving to a new platform would cause some disruption for the retailer, but the change to Azure DevOps also presented several opportunities to improve the customer experience and time-to-market for new features. The benefits of the new platform were:

• A modern technology stack
• Componentising of the SAS journey
• Test automation baked-in
• A single code base for all markets
• Configurable per market
• Removed dependency on lengthy release cycles

Once successfully implemented, the retailer would benefit from:

• Improved technical performance and stability
• Removed dependency on legacy Drupal platform
• Incorporation of new brand visual identity and improved design consistency
• Meet industry standard Web Content Accessibility Guidelines (WCAG) AA certification for accessibility
• Improve performance for key pages in search engines such as Google, Bing, etc.
• Functionality to remain unchanged for existing user journeys
• User journeys are more configurable, enabling the creation of new journeys
• Localisation variances are stored as configuration
• Combined audiology and optical store pages

TECHNOLOGIES:

- Azure DevOps
- Drupal
- GraphQL
- Adobe Messaging Centre
- Cloudflare
- Analytics Engines
- YextMaze

TOOLS:

- Atlassian Jira
- QTest
- JMeter
- Selenium
- MOD Headers
- Experitest
- Kali
- Security Pen

The retailer engaged several third parties to carry out the implementation and configuration of Azure DevOps, and the migration of existing customer data. To ensure the quality of this project, the retailer wanted a single, impartial partner that who could handle all the geographies they operate in, and would use a proven model backed by successful outcomes.

Solution

The retailer picked Planit to provide QA and testing services; identify the risks, dependencies, and errors at each stage of the SDLC; and impart best practice knowledge across the project. We were selected not only for the depth and breadth of our services, but also based on the successfully deliverables we have provided to them from our existing, multi-year relationship.

The objective for us was to ensure that the Azure DevOps implementation delivered on what the legacy Drupal system already did, with existing functionality and applying the same codebase to all markets without any high priority issues.

End-to-end testing was done for Azure DevOps used by the retailer's UK and Nordic businesses, and the optical and audiology businesses for Australia and Ireland. Testing was also done for its optical and audiology AMC emails in UK and Ireland.

Test automation was carried out for Azure DevOps used by the UK and Nordics businesses, and the optics business in Australia. Automation was also done for the Appointment Triage Type (ATT) optics business for the UK and Nordics.

Even though we championed and implemented an Agile approach to the delivery, a challenge we anticipated was a high chance of siloed delivery due to the third parties involved with the project. We managed this by implementation of a "One-Team" Agile team approach and "shift left" testing to ensure collaborative working between Planit, the retailer, and third-party resources.

Outcome

The successful implementation of Azure DevOps not only brought the retailer's technology footprint up to date, but it would now be well positioned to build on this foundation and increase the amount of online and in-store technology, all focused around giving its customers the best experience possible.

Our contributions to the project not only ensured that the changeover to Azure DevOps was delivered on time and budget, but also that there was no reduction in scope and they got everything they requested. Our offshore team in India also helped achieve our aims by working during the GMT time zone.

Beyond delivering Azure DevOps with minimal disruption to the retailer's business, another benefit of our involvement was that their own team has effectively adopted a "shift left" mindset. This enables the retailer to detect any issues sooner and the development team to fix them before they impact end-users, significantly reducing the overall costs involved and accelerating release cycles.

As a result of Planit's help, the rollout to initial markets happened as planned without any high priority defects being identified in production. The changeover to Azure DevOps has been successfully delivered in the UK, Norway, and Australia (Optics) markets without any P1/P2 issues identified in production, with plans to expand the rollout to other regions such as the Republic of Ireland, the Netherlands, and Australia (Audiology).