

# SUCCESS STORY

## LEADING UK RETAILER

Transformation from  
Traditional to Agile



Transforming the software development and delivery of the retailer's Store Fulfilment suite of legacy mainframe applications using Agile methodology.

### Key points

- Using Agile to reduce the time and cost of releasing software
- Combined onshore-offshore delivery model
- Fast-track approach to software development

### The challenge

Sopra Steria's client is a leading UK retailer with international business operations. The retailer recognised that to support its ambitious 14% operating cost reduction target it needed to improve the productivity and efficiency of IT project development in the IBM Mainframe platform.

The retailer's Store Fulfilment system is one of the most complex in-house applications developed in the company's IBM mainframe. Significant IT projects are continuously delivered to enhance Store Fulfilment and enable robust movement of products from suppliers to the stores. Every year, 12,000 man-days of enhancement work (design/develop/test) are completed to implement up to 150,000 lines of code changes into the system. Four major releases (quarterly) are planned in a year to implement these massive changes with minimal impact on current operations.

The retailer's sequential waterfall model for designing, developing and testing these changes was highly inflexible, with time to realise business value taking around 36 weeks. There was heavy upfront effort around design and test documentation, while multiple ongoing releases meant numerous change requests being made during a release cycle. With minimal to non-existent automation and late defect detection, the client unsurprisingly sought to improve this approach and take advantage of automated testing.

### Our solution

Sopra Steria's proposed Agile transformation solution took a three-phase approach. The aim was to embed an Agile culture across the retailer's and Sopra Steria teams (Business team, Business Analysts, Program Managers, Developers, Testers and Support teams) and avoid the risks of a big-bang approach where team morale can suffer, resulting in project failures.

The three phases were adopted by the client and comprise:

- Phase 1: Requirements developed in three chunks (or block of work), so that development can start as soon as the first chunk is ready; business analysts and developers work closely for the continuous creation of requirement and code components in four-week cycles; testing and release cycles maintained as is; and finally, development for the regression automation suite begins
- Phase 2: Agile Scrum structure put in place with product owners and cross-functional Scrum teams. Agile collaboration tools (Jira, Planning Poker, Retrospective) deployed and Scrum ceremonies scheduled with four-week sprints; the last week of each sprint is dedicated to testing and for planning the next sprint; quarterly release cycle maintained as is; and finally, the regression automation suite is built.

- Phase 3: Sprint cycle reduced to three weeks by removing the dedicated testing week. Automation suites used for regression testing and to replace repeat, manual development tasks. Demo with product owners to sign-off release after every sprint; and major projects continue to be deployed in quarterly releases.

## How we worked together

Having successfully provided a traditional software delivery model to the retailer for 10+ years, Sopra Steria was tasked with the early adoption of Agile ways of working with more than 150,000 lines of code being introduced year-on-year in the retailer's legacy mainframe system.

Using a proprietary Agile project management toolkit (based on open source 'Jira') and leveraging its Agile practice capability, Sopra Steria adopted a fast track approach to development. A frequent release-based model using a three-week time-boxed Scrum development methodology utilised a flexible onshore/offshore delivery model to speed up development for the Store Fulfilment suite of applications.

- Program Managers and Product Owners based on site at the client in the UK and Scrum teams in two locations in India (retailer's offshore centre and Sopra Steria office) held daily Scrum meetings using video calls/WebEx online meetings
- Weekly calls were held to prioritise and define (groom) User Stories and to review overall progress on projects
- Regular feedback was provided from business users at the end of each sprint delivery, along with retrospective meetings to identify benefits and improvements
- The Sopra Steria offshore teams travelled between their respective sites in India at the start of any complex chunks of work (EPICs) to brainstorm on strategies to deliver faster.

## Results and benefits

Sopra Steria initially delivered software enhancements using Agile for the retailer's Store fulfilment applications. Subsequently, when the client's own IT people had been trained in Agile, both parties worked and continue to work in collaboration in the legacy mainframe space.

Key benefits of the Agile transformation include:

- Agile processes embedded quality in the day-to-day delivery of products and reduced post-delivery issues/changes to original requirements in each development sprint by almost 90%
- Faster benefits to the business with incremental functionality designed to delight users made available in both production and live stages in less than one month, compared to three months using the previous waterfall methodology
- Removal of inefficiency in the development process by streamlining testing and enabling automation in both test and regression processes. This has seen at least 30% reduction in effort to deliver the same value - driving greater productivity across development and testing operations
- Enabled early and continuous visibility of the product and ability to incorporate changes as required - ensuring frequent incremental MVP (minimum viable product) delivery to release, while accommodating frequent and last-minute changes to meet business demands
- Sopra Steria continues to support the retailer's engineering and operational activities with the extension of our contract till 2020, retaining a substantial presence.



Sopra Steria, European leader in digital transformation, provides one of the most comprehensive portfolios of end to end service offerings in the market: Consulting, Systems Integration, Software Development and Business Process Services. Sopra Steria is trusted by leading private and public organisations to deliver successful transformation programmes that address their most complex and critical business challenges.

