codurance | CASE STUDY

Peninsula

Modernising a health and safety application for scalability and operational efficiency

About Peninsula

Since 1983 Peninsula Group has been providing HR and Health & Safety professional services to businesses of all sizes, from multinationals to microbusinesses. In 2015 they launched its digital offering BrightHR, a library of online tools to build and share rotas, approve holidays, monitor attendance and manage staff expenses from a computer or mobile app. Initial success in driving engagement through digitisation resulted in building a digital offering to enhance the Health & Safety provision.

Peninsula identified scope to improve its current processes and supporting product suite in the consulting area of the business. Managed initially in a paper-based system, it made a strategic decision to deliver a new application for consultants on health & safety visits. The new iPad based tool would remove the need for paperwork and improve operational efficiencies by freeing up the time consultants spent creating reports.

The work had already begun to build the platform, and they had been experiencing challenges with growing concerns around budget and timelines to complete the project.

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Peninsula needed a partner they could trust to meet deadlines and deliver value early. Following a short discovery Codurance was engaged to provide the specialist knowledge required to digitalise the paper-based system into a modern application.

Project

Peninsula's Health & Safety consultants visit customer sites to undertake an audit, with the outcome being a documentation set which can then be used to manage their risks. The tool was operated on laptops, making data input challenging while undertaking the audit in environments requiring physical interaction. The environments tend to be positioned where telephone and internet connectivity is poor, so data was being entered remotely and offline, leading to duplication of effort and time. There was also additional effort when data was entered manually for availability in other internal systems. To overcome these limitations and improve operational efficiency, the plan was to roll out mobile devices with the Health & Safety application to the consultants.

The intended outcome of this project was to deliver a tool which captures the required audit information, gives the user improved functionality to record all required observation data, whilst increasing operational efficiency and allowing consultants the ability to work in the field in an effective and timely manner.

We began with an initial discovery to fully understand the problem and work that had already started on the application, align with the Peninsula organisation, explore solutions, and create a prioritised list of high-level features and estimates.

It was important for Peninsula to work with a partner that could hold credibility in the work they could achieve, especially in the scoping phase. We provided detailed estimates to build confidence that we could build the product within the timeframe and with quality in mind.

Codurance provided a cross-functional team of software craftspeople to build the remaining software with the initial aim of completing the Consultant's Handbook feature, a significant feature build that would validate the ROI and development approach to the rest of the platform. The team consisted of a Principal Craftsperson, three Craftspeople and a Delivery Manager. This team covered all the required skills in .NET, Flutter and project governance required to complete the work. An Engagement Manager was responsible for overseeing the feature delivery from a commercial perspective to keep client stakeholders informed of progress, proactively identifying and unblocking any risks, and ensuring the team maintained the required pace throughout.

The key element was to provide full transparency into the process and prove that we could not only deliver on our commitments but also provide a very high standard of governance around the work.

Due to the early success and delivery of the initial phase, Peninsula requested a second team to work on a new feature. As the existing codebase structure limited the number of engineers who could work in parallel, Codurance advised on architecture changes to the application that allowed more people to work on the code, resulting in increased delivery velocity without increasing the overall spend. We re-architected the front-end, converting it to a modular monolith which allowed pairs to work on modules independently.

We worked with Peninsula's in-house Product and Health & Safety technical teams who would have responsibility for the system, to share and transfer our methodology and agile best practices, such as daily standups, pairing, mob programming, DevOps, CI/CD and remote working. This ensured that we not only delivered the product on time but also instilled modern practices and new technology skills as part of the engagement.

Outcome

Over 9 months, Codurance modernised the Health & Safety application into a reliable platform allowing Peninsula to scale and service its clients effectively. It was vital that ROI was demonstrated early in the project. We focused our efforts to develop working prototypes of the initial build to increase stakeholder confidence. This led to us delivering to schedule, with the initial phase being delivered four weeks earlier than projected and 25% under budget.

The new platform has the potential to save one consultancy day each week per consultant, allowing the consultants to bill for an extra day and increasing productivity by 20%. We also considered the scalability of the platform and built the capacity for it to extend and create different types of reports.

The governance and reporting process implemented by Codurance is now used as an example to other software suppliers of industry best practice.

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Codurance Service Lines Delivered:

PLATFORM ENGINEERING   **FEATURE DELIVERY**

TECHNOLOGIES USED:

- .NET
- Azure
- Azure DevOps
- Flutter

PRACTICES

- Agile ceremonies – daily standups, pairing, mob programming
- XP
- DevOps
- CI/CD
- Automation
- TDD
- Software Craftsmanship