Case Study



GreenBuild Analytics Data Platform

/ Yonder Consulting

Yonder Consulting is a premier building physics engineering firm specialising in optimising building performance. Their expert team is engaged in enhancing the indoor environment, reducing energy consumption, and minimising carbon emissions. Yonder Consulting collaborates closely with construction industry professionals, including architects, project managers, and contractors, to ensure that the buildings they work on not only meet but exceed performance expectations. Through their innovative approach and use of cutting-edge technology, Yonder Consulting delivers significant value to their clients' projects. They are instrumental in reducing construction costs, lowering running expenses through decreased energy demand, and improving the overall indoor environment.

> " The NewRedo team were great to work with, quickly understanding our needs and delivering a platform that quickly transformed our teams effectiveness and workflow "
>
> Nathan Evans - CEO

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Project Introduction

The development and deployment of a sophisticated web-based cloud application aimed at streamlining BREEAM certification processes. This project involved managing the integration of diverse data sources on a robust AWS and Kubernetes-backed platform, featuring enterprise security protocols such as SSO and MFA. Successfully designed a user-friendly, mobile-optimised interface that significantly enhanced data collection efficiency for field engineers. Contributed to significant reductions in lead times for BREEAM pre-assessment reports, driving sustainable building practices and achieving improved BREEAM ratings for clients. Involved expertise in project management, stakeholder engagement, and agile methodologies, while utilising skills in cloud infrastructure, UX design, .NET, APIs, and DevOps practices.

Project Challenge

Building a platform to streamline the BREEAM certification process involved several complex challenges. Key among these is integrating diverse data sources accurately and securely, while ensuring compliance with construction industry standards. The platform needed a user-friendly, intuitive interface that supports users of varying technical levels and provides real-time data processing capabilities via a robust back-end infrastructure. It's essential that the platform was scalable, customisable to different client needs, and could integrate seamlessly with existing systems without causing disruptions. Managing development costs to maintain affordability, promoting user adoption through effective change management, and providing ongoing training were also critical for success. Furthermore, the platform would require regular updates and maintenance to adapt to user feedback and changing industry standards. Addressing these challenges necessitates a collaborative approach involving IT specialists, data scientists, UX designers, and compliance experts, all working together to optimise the platform's performance and sustainability.

Project Solution

The solution was a comprehensive web-based cloud application designed to streamline BREEAM certification. It ran on a robust back end cloud infrastructure utilising AWS and Kubernetes, ensuring high security and strict data governance. The system supported enterprise-level SSO and

MFA authentication, enhancing security and user management. Mobile optimisation allowed field engineers and consultants to efficiently collect and manage data on-the-go. Additionally, the platform offered extensive reporting and dashboard functionalities that aided in managing project throughput and improving client communication. A self-service client portal facilitated secure data capture and transfer, minimising client hand offs and enhancing overall communication efficiency. This solution leveraged modern cloud technology and user-centred design to create a seamless and effective certification process.

Customer Value Proposition

The solution provided significant value-based outcomes for Yonder Consulting. It streamlined the process of collecting building and construction-related data, both on-site and from a diverse range of stakeholder parties. By employing a web-based cloud application optimised for mobile use, data collection became significantly easier and quicker for field engineers and consultants. This improvement drastically reduced the lead time for producing BREEAM pre-assessment reports. Moreover, the enhanced data collection and management capabilities enabled Yonder to deliver critical sustainability performance insights at stages of the building design process where changes could be made with minimal cost implications. This timely availability of data had a profound impact, allowing Yonder to influence building designs in a way that added significant value without increasing project costs. The use of a self-service client portal and integrated communication tools further streamlined stakeholder interactions, reducing delays and improving the efficiency of data exchanges. Overall, the platform uplifted the impact of Yonder's services, enabling them to contribute more effectively to sustainable building practices and achieve better BREEAM ratings for their clients.

Project Skills

Project Management, Stakeholder Management, Business Analysis, UX Design, Software Archtecture, Agile Delivery Management, Test Management, Cloud Infrastructure, Amazon AWS, .NET, APIs, Web Programming, Mobile Development, CI/CD, Node.js, Javascript, React.js, Cascading Style Sheets (CSS)