Case Study

NewRedo

AI Risk Assessment Platform and Safety Bot

/ Cathedral Safety Services

Cathedral Safety Services has a long history of improving workplace safety through behavioural change. They are dedicated to driving innovation in the sector by leveraging modern technology. Their offerings include comprehensive consultancy services and 'Dawn,' an AI-driven tool providing 24/7 health and safety support. They continue to explore new technologies to further enhance workplace safety solutions. With extensive experience, Cathedral Safety Services works across industries to minimise incidents and ensure compliance.

> " NewRedo's expertise has been instrumental in helping us develop a powerful tool that significantly enhances workplace safety while reducing costs. "
>
> Dawn Simmonds - Managing Director

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Project Introduction

Collaborated to create an MVP for an innovative risk assessment extension of their AI-driven tool, 'Dawn.' Leveraging machine learning and automation, the solution proactively identified and mitigated risks. With agile methodologies, the team delivered a scalable, responsive tool allowing early customer engagement and feedback collection. The rapid outcome demonstrated alignment with real-world needs and supported Cathedral Safety's follow on commercial objectives.

Project Challenge

The MVP nature of the project posed significant challenges, requiring a collaborative workflow with regular deployments and fast feedback to quickly adapt to user needs. Balancing rapid development with robustness was key. Data collection and preprocessing involved gathering large volumes of safety data to train machine learning models while ensuring quality and relevance. Training and testing focused on building models that could accurately assess risks and provide reliable safety recommendations, despite the variability of real-world scenarios. Integrating multiple APIs, including OpenAI, added complexity, requiring careful attention to system performance and stability. Security and compliance were crucial, ensuring adherence to strict data privacy regulations while allowing rapid iteration. Scalable cloud infrastructure was also needed to handle fluctuating workloads and ensure performance. A user feedback loop enabled iterative improvements, making the tool practical and effective for field use. Training and onboarding resources ensured users could adopt the tool effectively, meeting the needs of those in demanding work environments.

Project Solution

NewRedo assembled an expert cross-functional team of software engineers, data scientists, and UX designers to address the challenges of the AI Risk Assessment Extension project. The team applied agile methodologies, including daily stand-ups, sprints, and retrospectives, to stay aligned and respond swiftly to evolving requirements. Tools like Jira and Slack ensured efficient workflow management and communication. Azure cloud services provided a scalable and reliable foundation, while Kubernetes was used for container orchestration to ensure flexible resource management. OpenAI APIs were integrated to add natural language processing capabilities,

enhancing the tool's intuitiveness. The backend, built with TypeScript and Node.js, handled data processing and API integration, while the frontend used Remix for a responsive, user-friendly interface tailored for busy field staff. Regular Azure deployments enabled continuous testing and feature releases, facilitating rapid user feedback. This iterative process allowed for data-driven improvements, enhancing risk assessment capabilities and usability in demanding environments.

Customer Value Proposition

NewRedo's rapid iteration and efficient development approach delivered a solution that effectively met Cathedral Safety's fast MVP needs. By adopting an well practiced, agile approach, the NewRedo team ensured a low-risk development process, with regular deployments and fast feedback cycles allowing for quick adaptation to user requirements. This speed and efficiency enabled early engagement with customers, providing an opportunity to gather valuable insights and adjust the solution to better fit market needs. When placed in the hands of users, the tool was well received, with early adopters praising its practical application and ease of use. The MVP approach allowed Cathedral Safety to validate their tool in real-world environments, gather essential feedback, and plan the next commercial stage with confidence, all while minimising risks and ensuring the solution was aligned with user demands.

Project Skills

Node.js, Typescript, APIs, AI, Machine Learning, Remix, Azure, DevOps, ML Ops, Kubernetes, Jira, Stakeholder Management, Agile Delivery Management, Stakeholder Collaboration