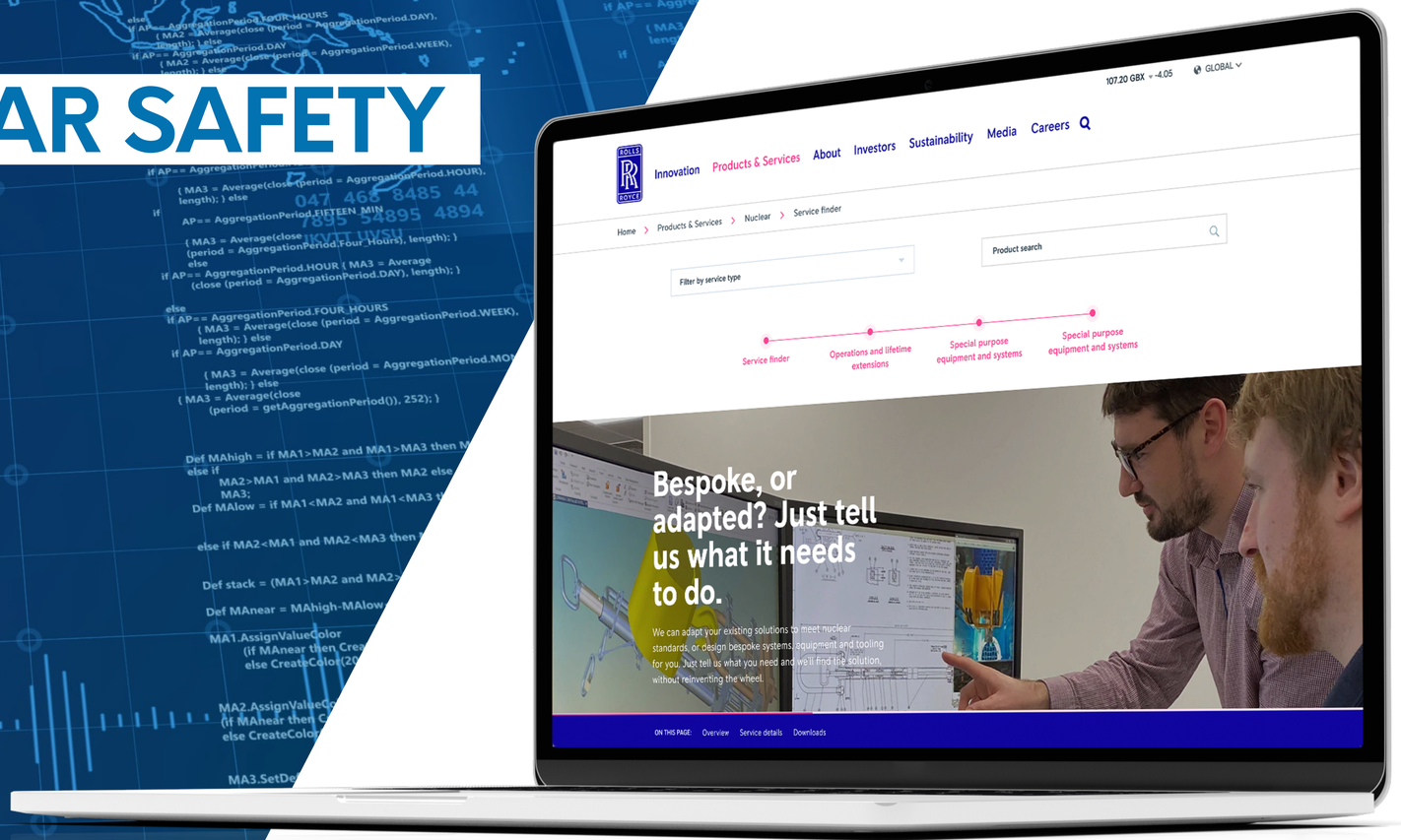
MONITORING NUCLEAR SAFETY FROM ANYWHERE, 24X7X365

Industry:

Nuclear Power

Services Provided:

Mobile application development, Web Platform integration



THE CHALLENGE

To Enable Nuclear Engineers to Monitor Systems from Anywhere

Rolls Royce is a pioneer in engineering cutting-edge technologies that deliver clean, safe, and competitive solutions for the global power industry. The nuclear division provides power companies with a competitive edge through data-analytics, engineering, and support services.

In 2016, Rolls Royce presented its Safety Data Sheet (SDS) website at the Nuclear Information Technology Strategic Leadership (NITSL) conference.

The website improved **plant safety** and provided **real-time data** from sensors throughout a power plant, but only to those on-site in the control room.

To remain on the cutting-edge, Rolls Royce needed to **deliver these same data**, alerts, and alarms to those **outside the control room, safely and in real time**. After assessing their challenge, the solution was clear to BairesDev. They needed a mobile app.

BairesDev

THE SOLUTION

Assemble a Team of the Industry's Top Talent

Rolls Royce turned to BairesDev to develop an efficient, user-friendly mobile app. To find the required skill-set for the project, BairesDev used Staffing Hero™, its own AI algorithm for matching client needs with the technical talent best suited for the role, and a customized development team with a project manager, technical lead, front end, QA and UX engineers got to work.

A two-week discovery process with the Rolls Royce product owner identified a comprehensive list of functionalities, data streams, and displays required to meet their clients' expectations for a mobile SDS.

BairesDev

THE SOLUTION

Making Secure, Real-time Safety Information Available on Any Device

To create immediate value for Rolls Royce, the BairesDev team used Xamarin to leverage the same codebase for both the Progressive Web Application (PWA) and mSDS, significantly cutting the speed to market.

Both applications featured the real-time monitoring of sensors throughout the power plant, and for clients with multiple plants, it offered the ability to monitor each site from the same app.

Key features include:

- Real-time System monitoring, scalable to multi-site usage
- Alerts/alarms customizable for defined localized conditions and variances
- Customizable data groupings
- Graphic analysis of current, historic, and trend data
- Cybersecurity controls and safeguards

Technologies Used:

React Xamarin

BairesDev

When it comes to software engineers we have a deep bench, but developing a mobile app draws on a completely different set of skills than our day-to-day solutions require. BairesDev assembled a dream team for us and in just a few months our digital offering was completely transformed.

Rolls Royce, Project Owner

BairesDev

THE OUTCOME

Safer Energy with 24/7/365 Access to Sensor Data

With the completion of its mSDS 1.0, and complimentary PWA, BairesDev expanded the Rolls Royce service solutions offering and helped it maintain its position as the provider of cutting-edge technologies that deliver clean, safe, and competitive solutions for the global power industry.

Rolls Royce customers now have the ability to:

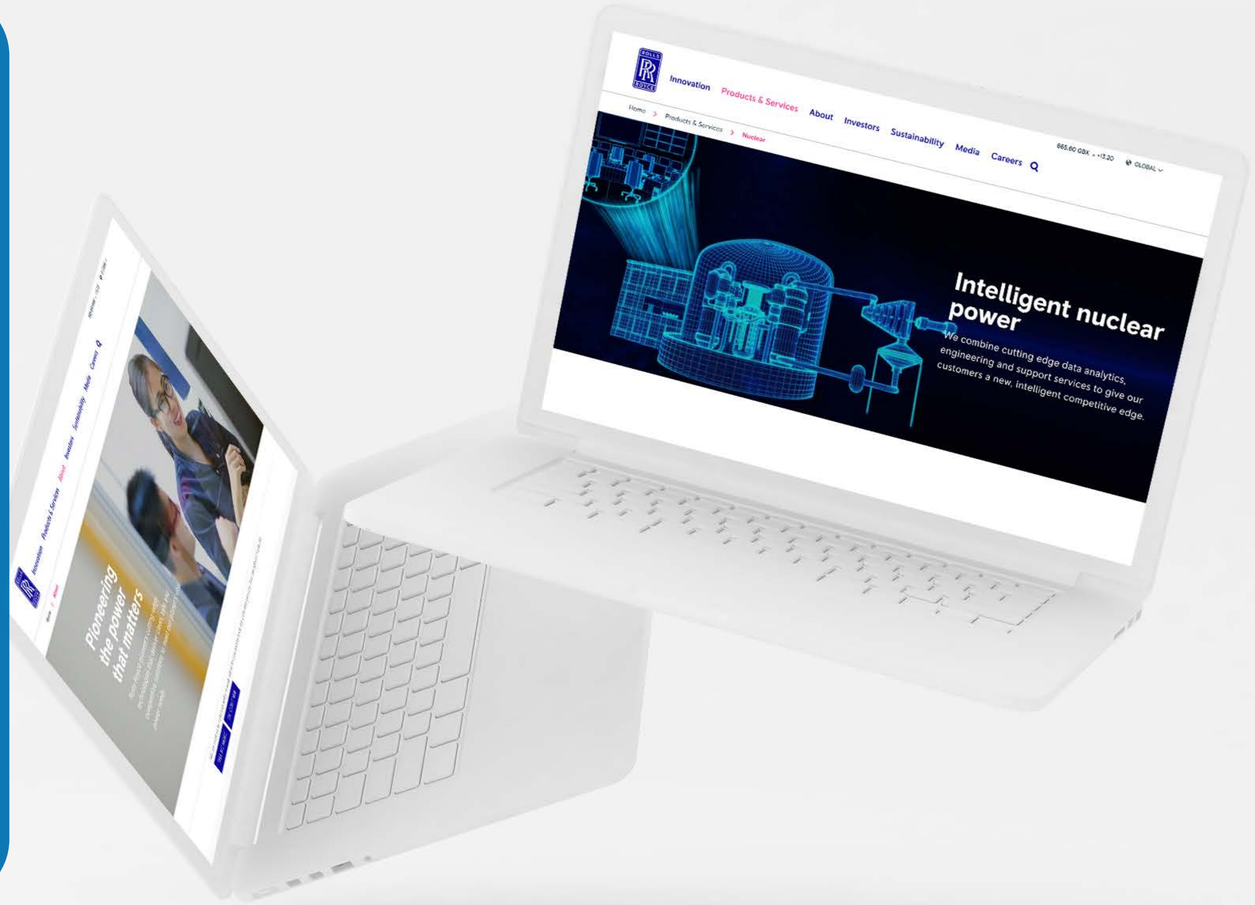
- Make better decisions with real-time information and analysis
- Monitor multiple sites, and specific sensors from anywhere in the world
- Access their data remotely, trusting that it is secure

BairesDev

BairesDev

> *To say that safety is paramount in the nuclear power industry would be an understatement, and customers have long trusted the engineering behind Rolls Royce sensors, monitoring, and control systems. With the addition of this mSDS, we give our customers the ability to make better decisions about the safety and maintenance of any of their facilities without the need for time-consuming site visits.*

Rolls Royce, Product Manager



ABOUT US

What Sets BairesDev Apart?

Only BairesDev hires the **Top 1% of IT Talent in Latin America.** From augmenting client teams for full integration to assembling dedicated teams for independent production, **no other solution comes close** to offering the speed and efficiency of BairesDev talent. But these developers and engineers also offer another essential element to excellence in technology innovation: a design thinking mindset.

What's a Design Thinking Mindset?

Design Thinking is both an ideology and a process dedicated to **solving complex problems in a user-centric way.** Every BairesDev employee follows a Design Thinking mindset as described by the Stanford Design School. These innovation-driven principles **transform the way companies produce and deliver value.**

POWERED BY TECHNOLOGY
DRIVEN BY TALENT

CONTACT US

BairesDev