Case Study

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WASTE NOT. WAIT NOT.

J.J. Richards, a leading Australian waste management company modernizes applications from legacy to feature-rich applications within weeks using WaveMaker.

J.J.Richards
& Sons Pty Ltd

> " WaveMaker platform has helped us in rapidly building and deploying robust applications exceeding the expectations of our users. We have managed to cut down on ideation to fruition time from months to weeks. "
>
> Amit Shukla,
> CTO, J.J. Richards

Industry
Waste Management Services

Location
Australia

No of Employees
1500+

3 X	24x7	10+	18
Velocity	Availability	Applications	Months
Faster time to market	Cloud-based portals	Digitized	of Development

CHALLENGES

- Data in legacy systems not easily accessible, not well integrated. (Windows DOS)
- Ideation to fruition took a long time due to technical challenges faced by the team while working with legacy systems.
- Limited team expertise in building modern responsive applications
- No multi-channel mobility solutions, lack of impressive user interface
- Unmanageable supplier management system built on Microsoft Excel

SOLUTION

- Using low code, JJ Richards built new and diverse applications rapidly while integrating them with the existing DB schema leveraging REST APIs. Low code was also used to modernize existing applications using feature-rich and interactive user interfaces.

RESULT

- 10 critical applications built by 7 developers in 18 months
- Improved levels of customer engagement with pixel-perfect user user experiences across applications.
- Smooth onboarding of customers and suppliers with an upgrade from manual to paperless
- Access to real-time data for field operatives
- Applications on hybrid mobile, web services, and in-truck devices.

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J.J Richards journey of application modernization with WaveMaker

Established in 1932, J.J. Richards & Sons Pty Ltd is an Australian-owned and operated family business that provides waste management services pan Australia. The company strongly believes in its philosophy of safety, reliability, and excellence in customer service. Serving 63 local authorities and collecting almost 2.5 million wheelie bins over a week, J.J Richards is a name to reckon with in the waste management industry. With almost 90 years of extensive experience, J.J. Richards provides comprehensive total waste management solutions to its customers and was looking for a digital metamorphosis.

Challenges

To modernize legacy applications rapidly with a lean team and provide multi-channel ability to field operatives and customers.

J.J Richards is a pioneer in the field of waste management but as far as its digital services went, it was handicapped by aging technical solutions--all sitting on legacy systems! (Windows DOS). Being a customer-centric organization, J.J. Richards needed to revamp its existing systems to meet the demands of tech-savvy customers. The existing UI/frontend did not meet those expectations and a 'digital overhaul' was the need of the hour. Various customer-centric tools such as onboarding and field engagement apps had to be built from scratch. Extending the same principle to in-house applications was also critical to standardize internal processes.

The IT team had their job set:

- The existing legacy systems (Windows DOS) did not enable the IT team to build on them to create the modern applications that they were looking for. Data in the legacy systems were not easily accessible and not well integrated. Modern UIs simply did not talk to the older architecture.

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- On the other hand, there was an urgent requirement to streamline the in-house business processes. The aging solution and processes were restricting field operatives and employees in their work. Rapid modernization was an urgent requirement. Customization of applications without any runtime dependency and within budget needed to be expedited.

- Field operatives lacked multi-channel mobility solutions needing a big overhaul of user experience.

- On another end, supplier management was becoming messy. Existing systems depended heavily on Microsoft Excel-based data and managing supplier portfolios was getting cumbersome. There was an acute need to provide a paperless solution.

- The IT team was a .NET shop which limited their ability to build applications rapidly. Being legacy technology experts, the team fell short of expertise to build modern and responsive applications.

The Solution

Using a low-code platform to accelerate the modernization of applications and augment the expertise of the IT group.

J.J.Richards IT team found a reliable partner in WaveMaker low code platform to build applications rapidly and economically. Their vision was to create nimble, modern, and secure applications for their customers while staying true to their goals of excellence in customer service. The applications needed to be on mobile as well as a web service. J.J Richards was looking for a single point capture of data from customers that could coherently track and engage customers.

- WaveMaker's developer-centric capabilities helped them go agile with a lean team. Visually appealing UI's were created using simple drag and drop (Angular Widgets). Thus legacy applications were replaced with multi-channel high fidelity user interfaces that run on multiple devices.

- Interfacing with databases was made effortless by simply importing the DB schema. The APIs for these databases were autogenerated and all that developers needed to do was establish a connection from widget to API. Further filters could be provided by a click of the button.

- Additionally pro-active and timely guidance from the WaveMaker team in supporting and training the internal IT team helped lower the learning curve drastically.

- Wavemakers' commercial model was cost-effective and ensured continued engagement.

- Creation of hybrid mobile applications, web services, and applications compatible with in-truck devices to enable field operatives, customers, and suppliers.

The Results

A comprehensive set of 10 critical applications built within 18 months using a lean team

J.J Richards used WaveMaker to build 10 essential internal as well as external applications across their business processes, modernizing their tech stack, and achieving digital transformation. The applications reigned in customers and field operatives across their business flow and helped them onboard, track, and engage with customers rapidly and with ease.

To enhance the customer experience and interaction, the J.J Richards IT team developed the **J.J Richards Customer Portal** (available on phone as an app) using WaveMaker. The application made the company more accessible to its customers, helping all stakeholders to find information quickly and easily. From onboarding customers to updating records, tracking requests, viewing services, finding invoices, making payments through externa gateways, and generating transaction reports, the app covered the entire gamut of customer engagement effectively and easily.

10 Days
For application development

05 Developers
For application development

1000+ Users
Customers

4

Another key application that the IT team developed using WaveMaker is the **j-Track®**
On Board System. Aimed at field operatives, **j-Track®** is an in-truck software that is designed to monitor and optimize collection and vehicle performance. It records factual information regarding daily collection runs. This application required integration withthe backend to support real-time data recording and accommodating requests of the field teams.

10 Weeks
For application development

05 Developers
For application development

100+ Users
Field Operativers

j-Track® is one of the flagship products for the company. It ensures timely and consistent services to its customers via the onboard-run navigational system. Safe and compliant vehicle operations, load weight monitoring, effective contamination management, auditable database of collection, lower instances of missed bins, and incident investigation are some of the highlights of using the application onboard the truck.

Another pain point for J.J. Richards was the bureaucratic processes involved in supplier management. The prevalent system of managing suppliers on Microsoft Excel was tiresome, ungainly, and messy and had no scope for scale. To overcome this, the team developed a **Supplier Registration Portal** using WaveMaker. The centralized application, segregated supplier onboarding geographically making the workflow less cumbersome.

Standard safeguard methods like authentication and authorization were embedded through access to their LDAP and Active Directory while capturing supplier information and data into Microsoft SQL Server. An intuitive and feature-rich user interface was developed using UI/UX widgets present in Wavemaker through simple drag and drop.

The result--standardization of the process flow for supplier management with the help of a centralized application.

08 Weeks
For application development

07 Developers
For application development

100+ Users
Suppliers
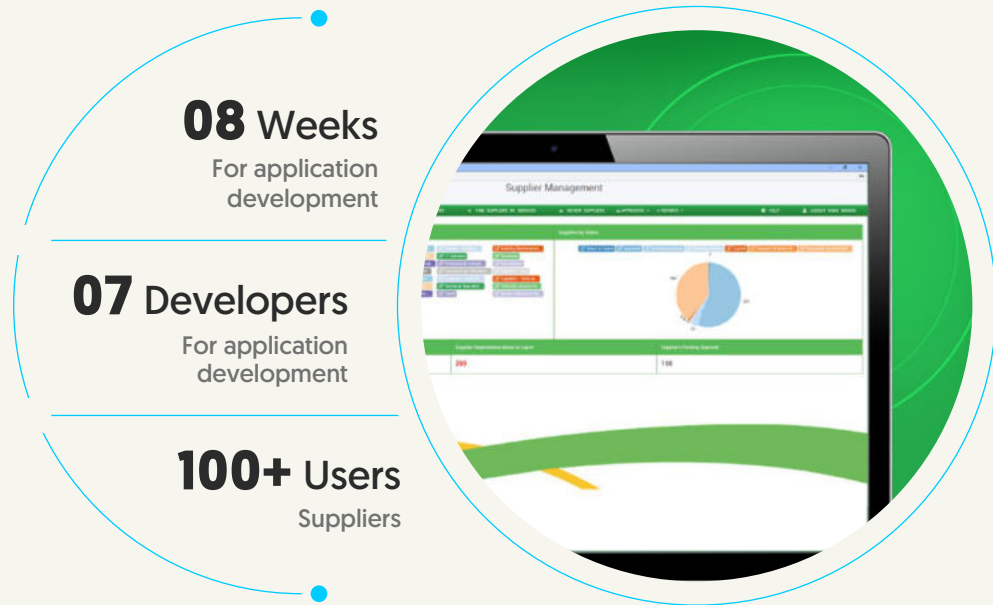
J.J. Richards developed 10 applications using WaveMaker -- both in-house as well as customer-oriented. It took only an average of 5-6 developers to build small-sized to mid-sized applications in as little as 4 weeks. The number of end-users it catered to ran into 1000s. The user experience for customers, suppliers, and field operatives improved in leaps and bounds. The WaveMaker platform helped the company scale economically, as IT could now build unlimited applications for an unlimited number of users.

J.J Richards did a turnaround in terms of digitizing their systems and services. Using WaveMaker, they were able to streamline their business processes and keep up their brand promise - safety, reliability, and excellence in customer service.

Write to us at **info@wavemaker.com**