



What's next for **Java Developers**

A low-code approach for Java Development Teams to deliver digital applications.



No “Business as Usual” **it’s a brave new world**

Two decades on, Java continues to be a popular backend platform, thriving and standing firm in today’s modern era of big data, consumerization, machine learning, and Internet of things - the digital transformation gig. But...

Java developers, once prized, are finding themselves challenged, and possibly dispensable. New development tools and delivery platforms are being announced every week. All talk of fab front-ends, superfast development cycles, multi-channel delivery, micro services, and cloud nativity. Traditional Java development teams have had to learn new skills, new vocabulary, and adopt new approaches to app development. Additionally, modern businesses need to innovate faster and deliver high quality solutions in order to remain competitive. The combination of skills mismatch and rapid delivery puts immense pressure and burden on Java-based application development teams.

Not easy. At WaveMaker, we understand this.

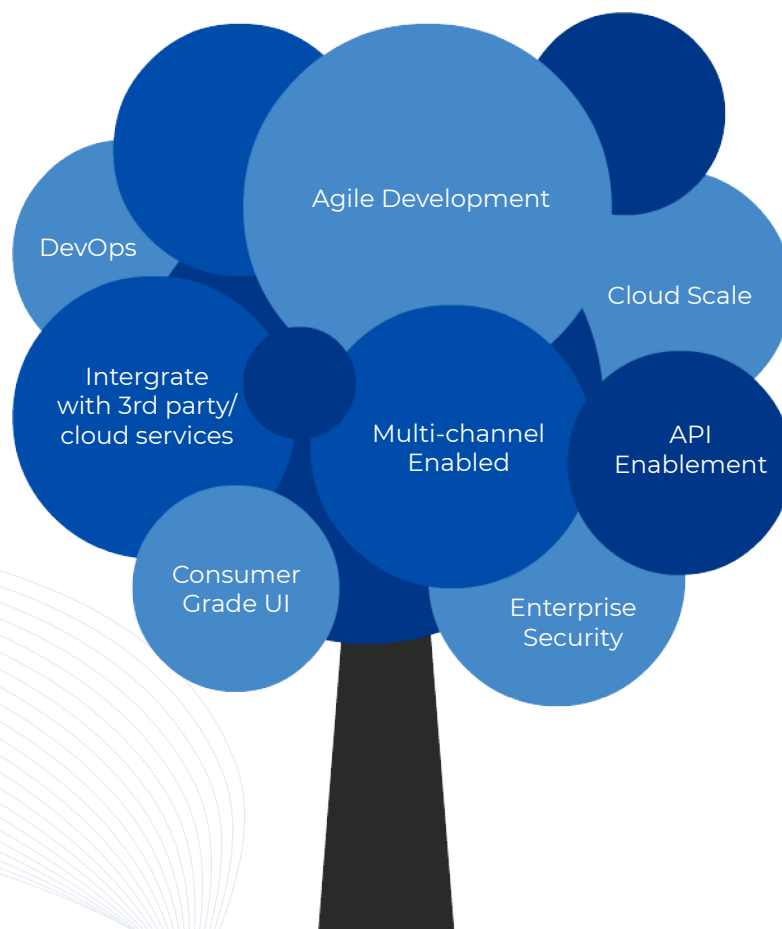
This playbook is meant for existing Java Development Teams looking to upskill and address modern application development needs by adopting low-code, rapid application development platforms. It guides teams on types of skills, composition and best practice approaches in building highly scalable applications with WaveMaker, an open standards based low-code application development platform.

Enterprise Applications State of the Union

Satiating modern application development needs

With the beginning of the cloud era, enterprise systems have become more complex. To support the rise of cloud and mobile applications and to leverage emerging technologies, there is a paradigm shift in enterprise architectural styles.

With the rise of the 'app economy', the demand for enterprise applications is rapidly increasing and the digital opportunities to deliver business value is massive. Modern Application Development is challenging. Every modern day application is expected to address a number of aspects for it to be enterprise and consumer ready.



Modern Enterprise App

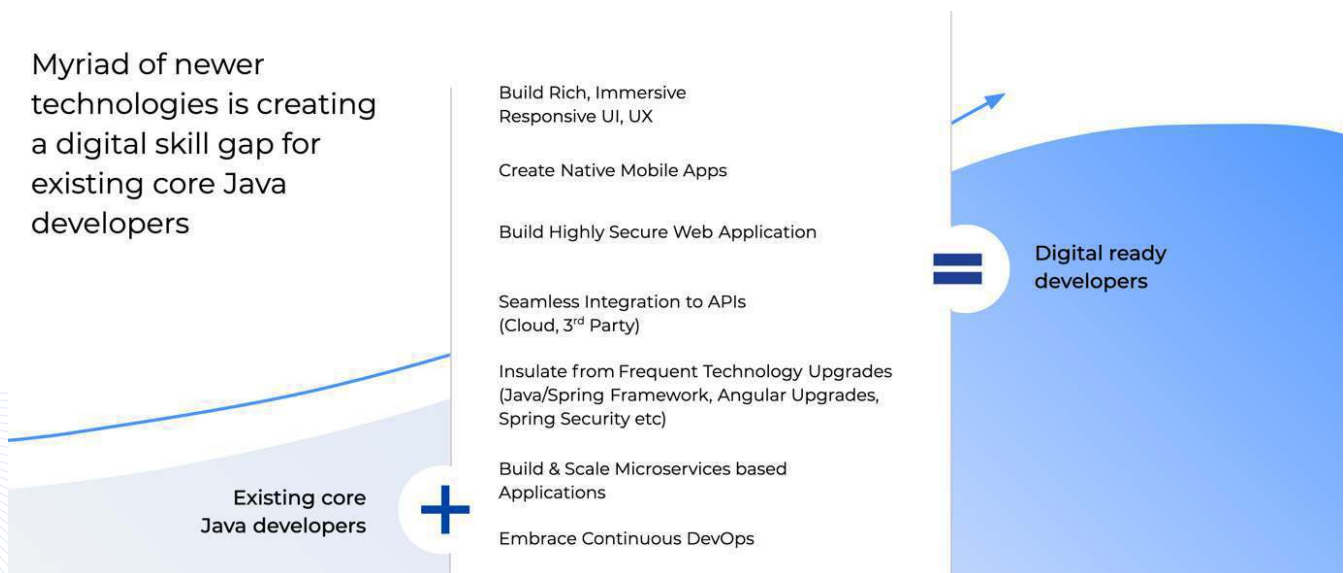
Java teams

Identifying the Gaps

Nurturing Java developers to become digital-ready through upskilling

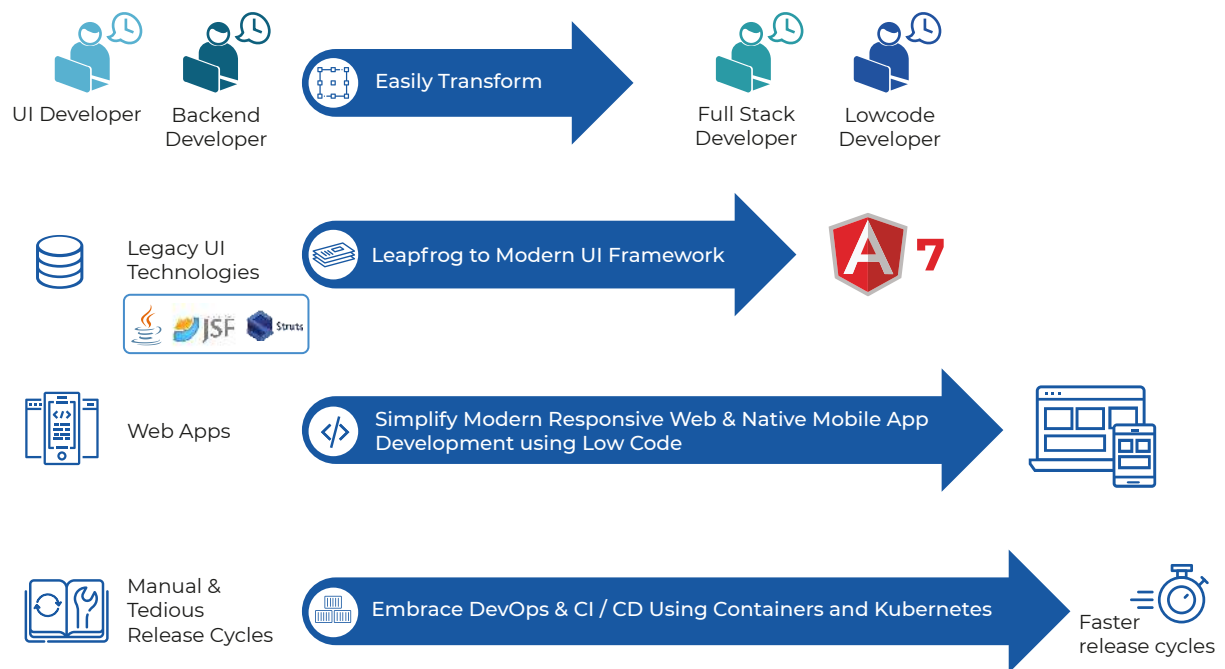
Existing Java Teams are dabbling with a myriad of old technologies, frameworks and platforms that are unsuited to address the modern day application needs. These include but are not limited to:

- Legacy UI Technologies : JSF, JSPs, Struts, HTML
- Legacy Backend : Servlets, Monolithic code
- User Experience: Non-Responsive Frontends
- Separate Web and Mobile Development Efforts
- Manual, Tedious & Slow Release Cycles
- Constant heavy lifting to manage and migrate application across frameworks and technologies



These technologies and methodologies are not scalable and cannot meet the needs of modern businesses looking to leverage cloud, APIs and multichannel user experiences for building rapid & scalable innovation.

There is a need for upskilling existing teams and finding optimal ways to build applications. Here's where rapid application development plays an important role in empowering and upskilling existing Java development teams. By providing exposure to various types of technologies, frameworks, tools and languages, developers can learn and become full stack developers using low-code.



Preparing For Change With WaveMaker

Gearing up Java development teams for full stack development

Reflecting the change in pace of software delivery and demands, existing Java development teams need to move from legacy UI technologies and embrace a modern backend development approach. Using rapid application development platforms such as WaveMaker, Java developers can easily become full stack developers with exposure to a modern technology stack.

Java Development Teams Need To...	
Move From	To
<i>Legacy UI Technologies : JSF, JSPs, Struts, HTML</i>	<i>Modern UI: Angular 7</i>
<i>Legacy Backend : Servlets, Monolithic code, Java , Spring</i>	<i>Spring & Microservices</i>
<i>User Experience: Non-Responsive Frontends</i>	<i>Responsive & Progressive web apps</i>
<i>Separate Web and Mobile Development Efforts</i>	<i>Hybrid app development</i>
<i>Manual, Tedious & Slow Release Cycles</i>	<i>Containerization & Faster agile development</i>
<i>Constant Heavy lifting to manage and migrate application across frameworks and technologies</i>	<i>Automatic upgrades</i>

Application development using WaveMaker doesn't require specialists with depth in Java, Angular or web technologies. Developers who have hands-on coding experience with HTML, JavaScript & Java understanding can be additionally skilled to learn WaveMaker.

To Build And Deliver End To End Applications

What traditional application development teams need...	With WaveMaker, you can create optimized team sizes...
UI Designer - Creates standard themes for all applications.	UI Designer - Creates standard themes for all applications.
UX Expert - Creates UX Design for multi-channel applications.	
UI Developer - Implements modern responsive user interfaces required for the application.	Full Stack Developer - Ensures complete functional development encompassing UI, Backend, Security and Database integration.
Backend Developer - Implements scalable business logic in the form of APIs or micro-services.	
Database Developer - Design database schema, queries, ORM layer & profiles performance of query execution etc.	
Test Developer - Automates unit, integration and full lifecycle test for application deployment.	Test Developer - Automates unit, integration and full lifecycle test for application deployment.
DevOps - Ensures best practices around deployment lifecycle and CI/CD	DevOps - Ensures best practices around deployment lifecycle and CI/CD

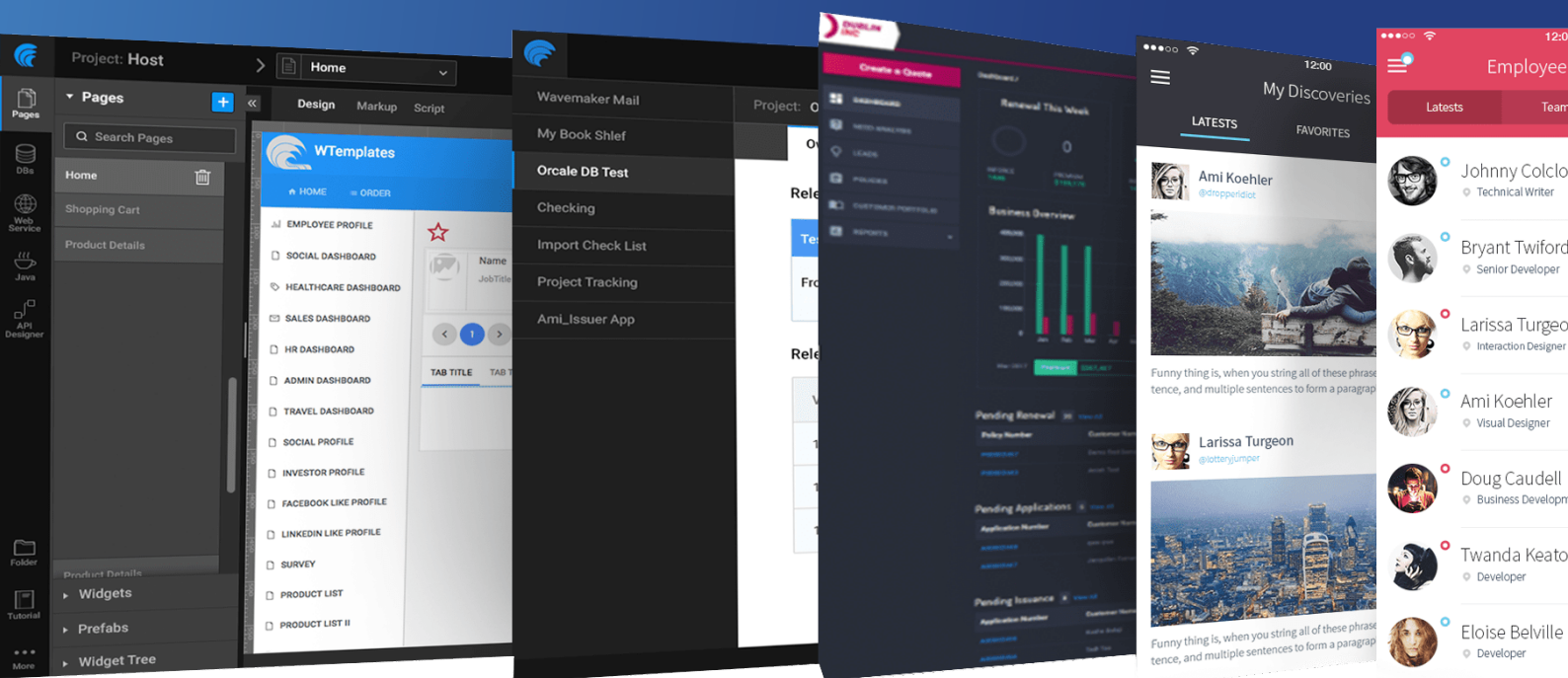
Dependency on specialists in traditional development teams decelerates the application development process. Using rapid application development platforms not only reduces dependency on specialized skills, it helps create smaller and agile teams and encourages development teams to upskill using modern programming languages, technologies and frameworks.

In comparison with traditional app development approach, here's how WaveMaker simplifies full stack app development:

Development Aspect	Traditional Approach	WaveMaker - Low-Code Approach
<i>To create responsive and rich UI/UX</i>	<i>Requires highly skilled front-end technologist (HTML5, Bootstrap, Angular, UI Design).</i>	<i>Simple drag and drop out-of-box Angular-based responsive UI with minimal coding.</i>
<i>To create business logic and APIs</i>	<i>Requires skilled java developers and API developers.</i>	<i>Auto-create microservices with database logic, reuse existing java code, or create new Java code in IDE such as Eclipse.</i>
<i>To create database Middleware Logic</i>	<i>Create database logic using ORM tools, and map them to application logic.</i>	<i>Auto-create ORM layer using ORM tools such as Hibernate and create logical data models that can be used within application UI.</i>
<i>Deployment options</i>	<i>Create deployment scripts to deploy apps to Java application server and create CI/CD hooks for continuous delivery.</i>	<i>Application artifact, a WAR file, can be deployed to any Java application server. Supports container as well as VM-based deployments for OnPrem and Public Cloud environments.</i>

WaveMaker makes full stack app development simpler and faster, from simple drag-and-drop features using Angular-based responsive UI with minimal coding, auto-creating microservices and ORM layers, deployment of application artifacts to any Java Application Server to supporting containers and VM based deployments.



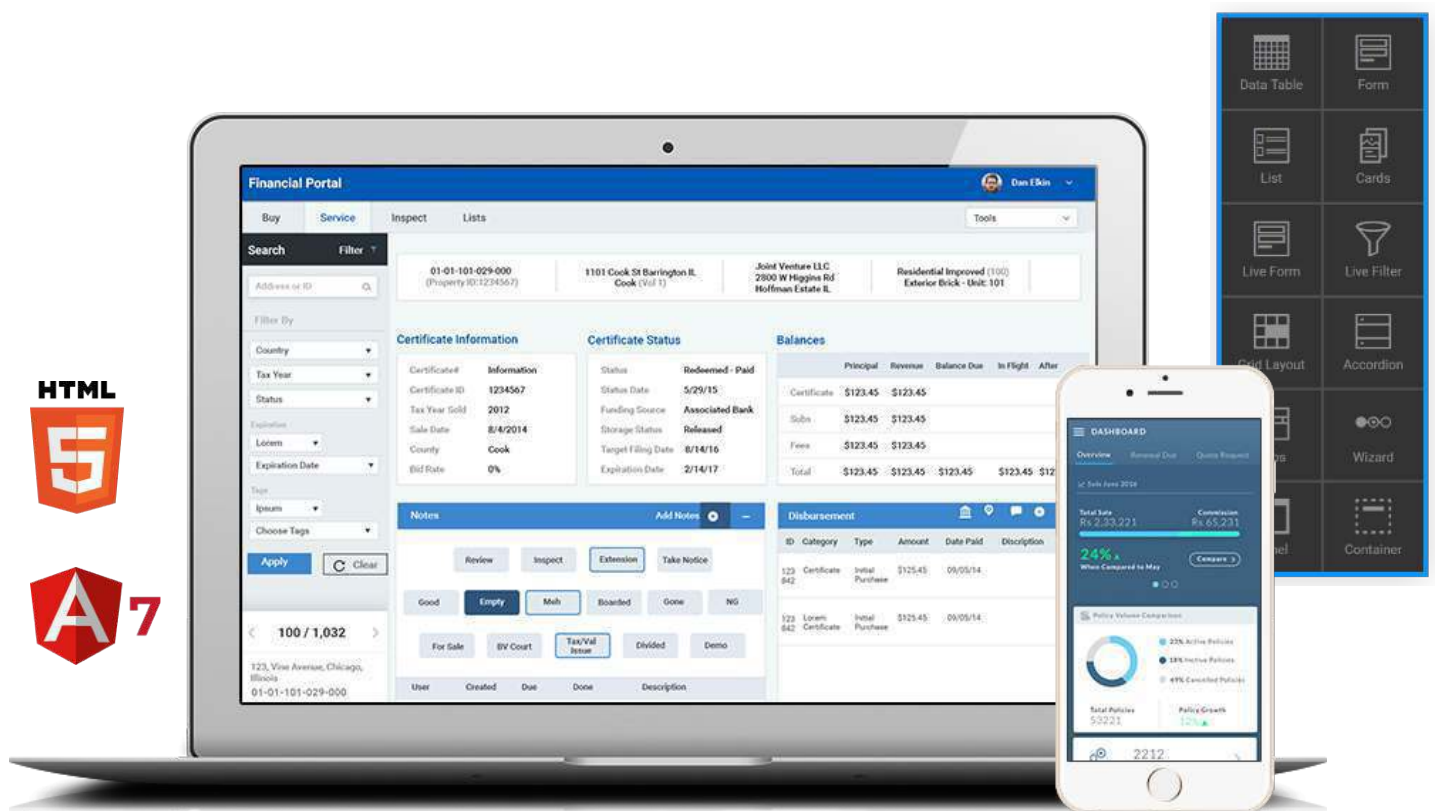


A Peek into the Possibilities

Apps You Can Build With WaveMaker

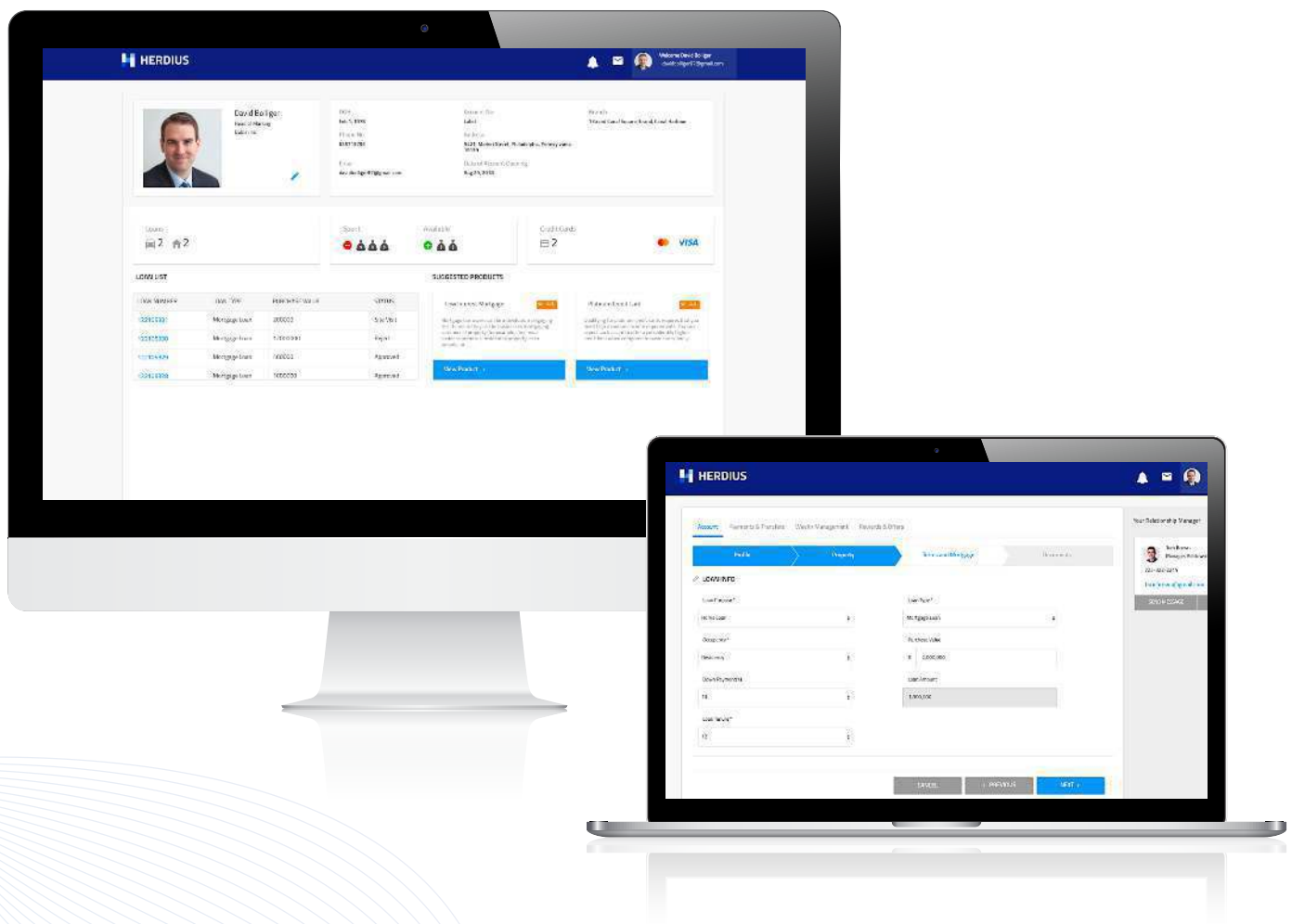
Experience Rich Customer Portals

With out-of-the-box features, you can create rich user experience for your customer portals. You not only can easily integrate with enterprise data and services, you can run, deploy and manage your apps on multi-cloud environments as well.



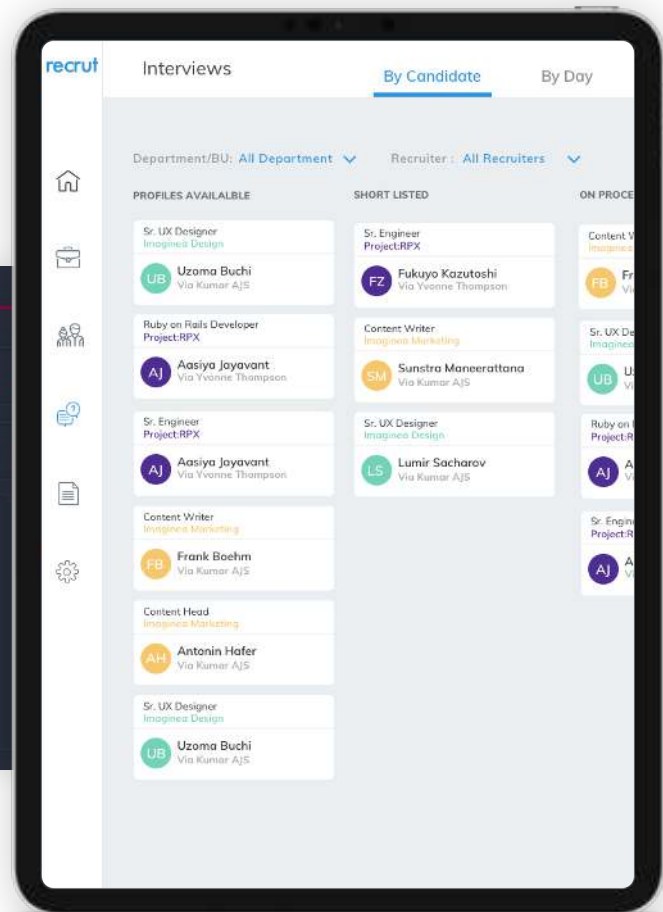
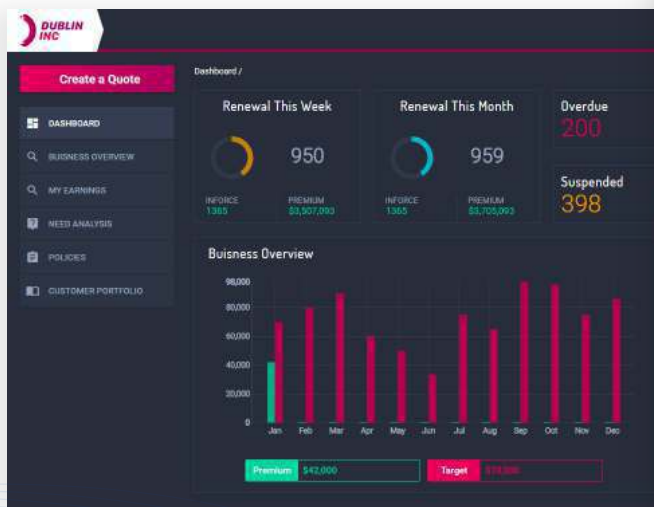
Workflow and Business Apps

Using APIs and database queries, you can create business logic workflows using built-in pre/post validation rules and out-of-the-box rich UI forms.



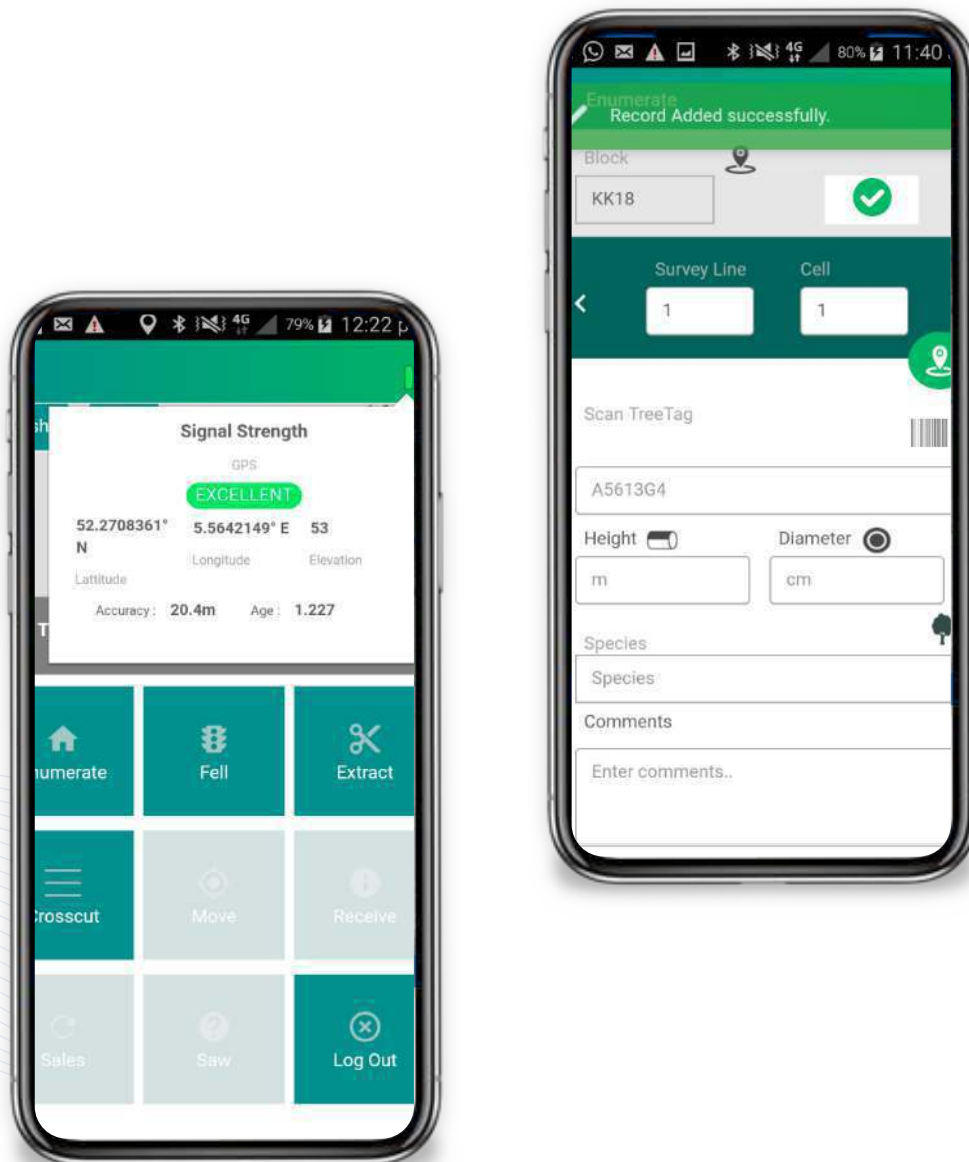
Data Driven Dashboard Apps

To create data-driven apps you can use real-time dashboards and ready-to-run charts and templates. You can also easily integrate to data services and mashup Data Widgets from multiple data sources and services.



Apps for Deskless Workforce

Empower users regardless of where they are by creating native Mobile App User Experience. You can easily integrate Device Features into your application and enable offline storage for remote working.



Deliver More With Less

Technology is reshaping the ways businesses work. With the rise of the “app economy”, business ecosystems have become complex and the demand for internal and external enterprise applications is huge. Keep up with the demands of the modern enterprise. Don’t worry about code. Focus on CX, business goals, business value creation with minimal coding. Future-proof your Java developer workforce with rapid application development.

About WaveMaker

WaveMaker is one of the most open, extensible and flexible low-code platforms that elevates your enterprise application delivery while keeping in mind the requirements of Software Developers, Citizen Developers/Business Users, IT Architects and CIOs.

[Start your free trial](#)