

## Survival – Embrace the Java Ecosystem Across the App Development Lifecycle

**“Write once, run anywhere”. Java is used everywhere, on all platforms, devices and systems. Even your office printer runs Java.**

*Java is still used because of its simplicity, readability, portability and security.*

### Is it a Curtain Call for Java yet?

Many Java-based enterprise applications lack modern UI. Enterprise application development teams use a combination of technologies to modernize legacy Java-based systems.

#### How the Java Ecosystem can be adopted across the entire app development lifecycle



## Revival – Standing still will not be an Option

**“The only skill relevant in the 21st century will be learning new skills” - Peter Drucker**

### Future-Proof the Developer Workforce by Upskilling Java Development Teams

Java development teams need to upskill and evolve from using legacy UI technologies and frameworks, web applications and manual release cycles.

**In 2019, here are some relevant skills, languages and technologies that your development team should be equipped with:**

- **JavaScript Front-End Frameworks** - Empower your team to build user interfaces that are customer-centric.

*Angular, React.js and Vue.js are the most loved and wanted web frameworks and are most likely to be used again.<sup>1</sup>*

- **Modern Back-End Frameworks** - Enable your development team to create and maintain server-side code and provide seamless user interaction, engagement and response.

*65% of developers use Express, a server-rendered JavaScript framework and would use it again.<sup>2</sup>*

- **New Programming Languages** – Transform your development team through upskilling and with access to a modern technology stack.

*In 2019, developers are most interested to learn Go (37%), Kotlin (27%), and Python (26%). Rust (84%) is most loved programming language.<sup>1</sup>*

- **Popular Unit Testing Frameworks** - Allow your development teams to ensure accuracy of codebase and writing tests in a feature-rich API to get faster results.

*40% of developers use Jest and Mocha respectively and intend to use it again.<sup>2</sup>*

- **RESTful APIs** - Let development teams learn to write REST APIs and implement secure and scalable RESTful Web Service in Java using Spring.

*One of the highly desired Java skills is to know both Java and REST.*

- **Soft Skills** - There is a growing demand for developers with analytical thinking and innovation skills because they fill the gaps found in the lack of complete knowledge of a given technology or programming language.

*Developers with problem solving attributes are more valuable.*

## Arrival – Full Stack Developers Are No Longer Unicorns

**“Developers need to increase the breadth and depth of their development knowledge.”**

Full stack developers are involved in end-to-end development of an application. Referred to as unicorns they are difficult to find in the developers market.

Upskilling to transform your Java teams to become full stack developers is one of the ways to meet the demands of the growing market and reduce the skills gap.

How rapid application development platforms can make full stack app development simpler and faster:

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

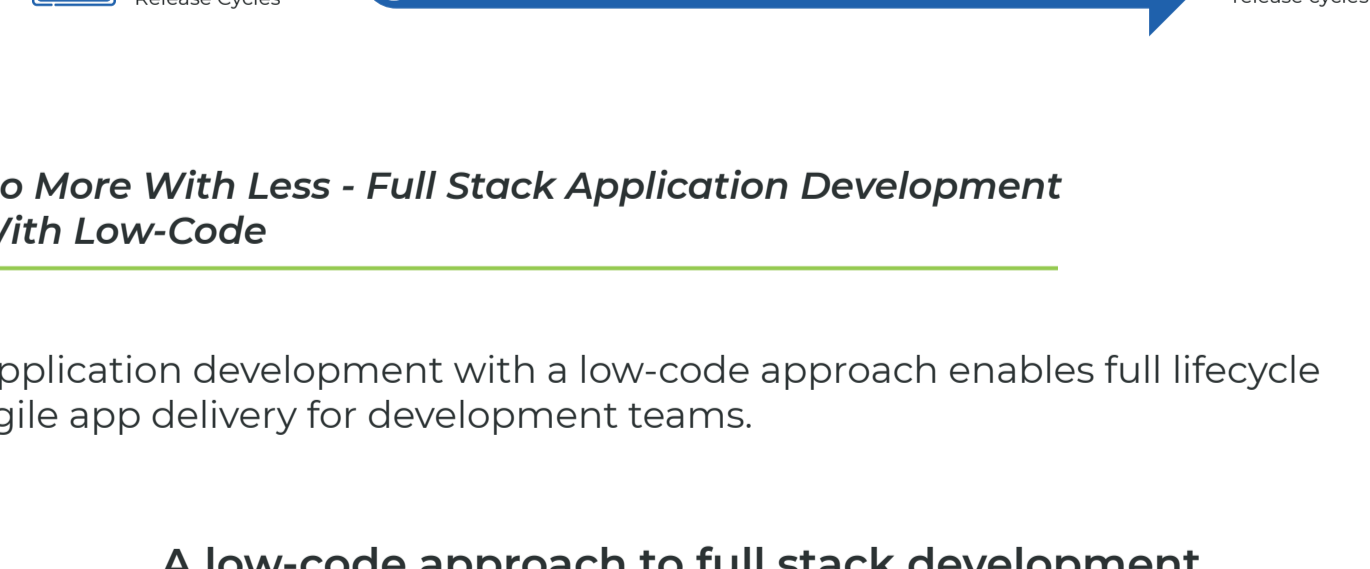
### How Rapid Application Development Platforms Help to Bridge the Skills Gap

**By 2024, low-code application development will be responsible for more than 65% of application development activity.<sup>3</sup>**

At different stages in the application development lifecycle, traditional teams require software development professionals with specific skill sets.

- **Helps to build smaller, agile teams** - An application development project which normally requires around 10 different types of developers can now be done with just 4 developer types using rapid application development tools.
- **Encourages upskilling** - Rapid application development platforms provides exposure to various types of technologies, frameworks, tools and languages, allowing developers to learn and implement full stack development.
- **Empowers developers to deliver more** - With full stack development, tedious and time-consuming tasks are handled by the platform, giving the bandwidth for developers to focus on innovation and analytical thinking.

### A glimpse of how low-code enable developers upskill to become full stack developers:



### Do More With Less - Full Stack Application Development With Low-Code

Application development with a low-code approach enables full lifecycle agile app delivery for development teams.

#### A low-code approach to full stack development



Technology is reshaping the ways businesses will work in future. Modernization of legacy systems is going to be the prime enabler in digital transformation and embracing modern technology is inevitable. As the demand for IT professionals and developers continues to increase, the skills gap continues to widen. Given the right tools such as rapid application development platforms, the developer workforce can increase the depth and breadth of their knowledge and address the development demands of the modern enterprise.

Download this [Whitepaper](#) to explore how the ‘Survival, Revival and Arrival of Java Developers’ will depend on how they can upskill to full-stack developers using the right tools such as rapid application development platforms.

Sources:  
 1. HackerRank Developer Skills Report 2019  
 2. State of JavaScript 2018  
 3. Gartner's Low-Code Development Technologies Evaluation Guide