Rapid-Code Platform

To Build, Deploy & Run Industrial-Grade Apps
When low-code tools hit a ceiling, innovative avenues turn into dead-ends
Low-code app platforms have enjoyed huge hype in recent years, but companies are increasingly seeing the dark side of these tools: They have severe limitations to customizability (especially when it comes to custom integration and business logic) and bad vendor lock-in, to say the least.

When low-code tools hit a ceiling, innovative avenues turn into dead-ends, either restricting business initiatives or requiring costly and cumbersome workarounds.

On the other hand, conventional software development using professional tools (so-called “pro-code”) is highly complex and requires scarce senior developer talent. For most companies, it’s simply too expensive to use pro-code on a large enough scale to meet the huge demand for new apps.

A clear gap exists between the world of low-code/no-code tools and the world of traditional pro-code tools:

- **Low-Code/No-Code**
  - Too Limiting

- **Traditional Coding**
  - Too Complex, Slow, Expensive

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**THE BIG CHALLENGE:**

Many Teams Are Stuck Between **Low-Code & “Pro-Code” Tools**

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That is why JourneyApps has created a unique new kind of app development platform: **Rapid-Code**.

The JourneyApps Rapid-Code Platform drastically improves the efficiency of custom app development, without the limitations and vendor lock-in of low-code tools. It gives developers the full power of code, yet eliminates all the rote work and the majority of the complexity normally associated with conventional development.

Our studies show that customers save more than 90% on development hours by using JourneyApps compared to conventional development tools.

JourneyApps allows development teams to **build more ambitious software and innovate faster**.
JourneyApps Rapid-Code Platform: A Turnkey Full Stack

The JourneyApps Rapid-Code Platform provides everything you need to develop, deploy and run enterprise-grade custom apps. It is a turnkey cloud-based stack that is fully managed. It minimizes the time you need to spend on non-functional requirements.

The primary components of the platform include a cutting-edge web IDE called OXIDE, a cross-platform app runtime (which can be custom-branded), and an integrated full-featured cloud backend.

All running in the secure and scalable JourneyApps Cloud
Key Elements of JourneyApps
Rapid-Code
Diving Deeper into JourneyApps

JourneyApps delivers a 10x increase in development productivity without sacrificing the power and control that comes with creating applications using code. **JourneyApps keeps everything that you love about code, while eliminating rote work.**

- **Cloud Hosting Built-In:** JourneyApps provides a fully-managed built-in cloud backend with auto-scaling. Developers don’t have to perform any server setup or maintenance.

- **Code Tooling Built-in:** JourneyApps comes with a pre-built coding toolset that developers can start using in minutes, including a world-class fully-fledged web IDE called OXIDE, and a fully automated one-click deployment system (with the option of customizing the CI/CD pipeline in more depth if desired). OXIDE also provides full Git support (including built-in support for branching).

- **Complete Data Architecture System Built-in:** Developing and maintaining an enterprise-grade data architecture for applications is normally complex, expensive and high-risk (especially when it comes to security). It can easily require years of time and millions of dollars with a team of professional software engineers. With JourneyApps, you get a pre-built world-class data architecture system.

In JourneyApps, you simply need to define a universal data schema inside of OXIDE, which then automatically creates a cloud database, on-device databases on each user device, APIs and a backend data management UI. The JourneyApps PowerSync system automatically keeps the cloud database and the on-device databases in sync. *(The data sync behavior can be comprehensively configured if desired).*
- **UI Framework Built-in:** JourneyApps comes with dozens of pre-built UI components, allowing you to quickly put together applications with UI building blocks. All apps and all UI components are automatically responsive on all supported operating systems and form factors: Android, iOS, Windows, macOS, Linux and web, across smartphones, tablets, computers and web browsers. The UI framework and component library is truly enterprise-grade: For example, JourneyApps has the most powerful data grids / data tables on the market, with Excel-parity functionality like keyboard shortcuts, copy & paste, filtering & sorting, frozen rows and columns, and more. This UI component alone can save your team a year of development effort!

Need to add custom UI components? JourneyApps has you covered. You can add any custom UI using the HTML component. Within the HTML component, you can use the CSS and JavaScript libraries of your choice.

- **World-class Security Architecture Built-in:** JourneyApps includes all the security features you need: Automatic full audit trails, encryption of data in all states, and much more. The entire platform is also SOC 2 audited and regularly penetration-tested. Refer to our Secure by Design white paper for more information.

- **Serverless Backend Engine Built-in:** The CloudCode system in the JourneyApps backend is a swiss army knife for building customized backend functionality: It’s a full Node.js environment that allows you to use any NPM package, making for an incredibly powerful architecture: Build “any-to-any” custom integrations by simply writing concise JavaScript or TypeScript tasks, with direct access to your cloud data. Easily consume any external web services, and expose your own custom web service APIs from JourneyApps. Generate reports dynamically — PDF, Microsoft Word, Excel and PowerPoint. Implement powerful workflows that exchange data between users. These are just a few of many examples of what you can do in the CloudCode system with minimal lines of code. It’s highly secure and runs inside of the JourneyApps backend cloud environment, so no deployment work is needed.
The Impact of JourneyApps

Rapid-Code

NO CONFIGURATION

No pre-work work

JourneyApps eliminates configuration effort so your team isn’t held back by the decision fatigue, set up time, and maintenance burden that come with configuring & maintaining conventional development stacks.

LESS CODE

Less lines of code

JourneyApps is like having an app dev and cloud infrastructure team working for you, allowing your developers to focus on delivering requirements that make the biggest business impact.

MORE PRODUCTIVITY

10X less effort to deliver apps

Studies show that JourneyApps provides a 10X productivity gain when compared to conventional development.
Another area that makes JourneyApps unique is its built-in capabilities to deliver truly industrial-grade apps.

JourneyApps is focused on the industrial segments of the market, such as oil & gas, mining & metals, chemicals and high-tech manufacturing.

We have engineered key capabilities specifically for these companies who need to build apps for deskless workers in the field (or on the factory floor), to automate and digitize their work processes.
Key Industrial-Grade Capabilities Include:

**PowerSync:** The most powerful data sync system on the market, allowing for full offline operation of apps. It provides bi-directional syncing of relational data between user devices and the cloud — not just local caching or “store and forward” of data. It has ultra high-performance and scalability — supporting millions of records synced offline, and dynamic partitioning of data per user. It’s secure, robust and battle-hardened — providing on-device data encryption and data privacy compliance. We literally spent 10 years of R&D to develop PowerSync — saving you millions of dollars in development costs:

- PowerSync uses the JourneyApps universal database schema: Define your data model in OXIDE and the database structure updates on-the-fly in the cloud backend and on user devices.
- Define flexible rules to control dynamic data partitioning per user.
- Automatic conflict resolution, as well as support for custom conflict-resolution strategies (scripted in CloudCode).
- Data syncs in the background, while a smart sync status indicator is unobtrusively shown in the corner of the screen. Therefore, the user is never interrupted by the sync process, even if there’s degraded network connectivity.
- Data syncing is extremely efficient due to the use of delta-syncing.
- Automatic continuous algorithmic data integrity-checking and automatic data integrity recovery.
- Syncs files too, not just data.

**PhotonSync:** Allows for peer-to-peer data transfer between user devices (regardless of whether they are using Android, iOS, Windows or other operating systems). It can be described as a cross-platform version of Apple’s AirDrop, that doesn’t require Bluetooth, WiFi, Internet, or any kind of connectivity. Just point one device’s camera to another device’s screen, and PhotonSync transfers data in a matter of seconds.

**Hardware & Control Engine:** Allowing you to easily build cross-platform apps that work with a variety of hardware devices and asset tags. The platform has built-in cross-platform support for NFC, RFID, Bluetooth and Bluetooth Low Energy (BLE) devices, thermal printers, as well as working with TCP streams to connect to even more types of devices. Coming soon: Working with the OPC-UA protocol.

**IIoT MQTT Streaming Data:** Built-in support for ingesting IIoT streaming data using the MQTT protocol. Since the platform also has built-in support for Microsoft Power BI Embedded dashboards, you can easily create real-time data visualizations and dashboards based on streaming data.

**Rugged UI Framework:** We built the platform’s user interface framework for rugged field conditions, including dark conditions and conditions where workers can only work with one hand. Coming soon: Optimizing the platform for deployment on RealWear head-mounted tablet devices.
Build Powerful Industrial Edge Apps

Taken together, the industrial-grade capabilities in JourneyApps allows companies to build incredibly powerful apps that work on the edge network — for example on an oil rig, a customer site, or inside a mine.

For example, one of our customers has sensor-equipped drill rigs that stream down-the-hole data over a TCP connection directly into a JourneyApps application. The application performs a comparison between design parameters for the drilling job and actual measurements from the job, and displays variations on a 3D model inside the application (which was implemented using the BabylonJS 3D JavaScript library, embedded inside of the JourneyApps HTML component). All of this works offline without internet connectivity.
Why JourneyApps Should be a Core Part of Your App Technology Strategy

Conquer the app backlog with a lean development team:
JourneyApps increases the output of a single junior developer to that of a team of full-stack developers. This means you can increase your software development output dramatically without increasing headcount. For example, a major industrial equipment supplier was able to use our platform to build 14 custom mobile apps with a single developer, in a matter of months. These are complex mission-critical apps with custom integrations to a mainframe backend. They thought they would need a team of 5 developers until they started using JourneyApps.

Build more ambitious software and innovate faster:
Software development teams can cut down on their development and infrastructure maintenance time by 90% using JourneyApps, allowing them to take on larger software projects that drive more bold innovation in the business.

Consolidate into a single common app stack:
The limitations of low-code tools mean that it’s virtually impossible to use a low-code platform to deliver all types of applications inside an organization. On the other hand, it’s too expensive to use conventional professional development tooling for the majority of your apps. Yet a key priority for many IT organizations is to consolidate their apps into a single technology stack. JourneyApps Rapid-Code is the only platform that can power the full range of applications across your enterprise, since it gives you both high speed and real power in a single platform. Many of our customers use JourneyApps to replace a variety of legacy applications, standardizing them all on a single modern platform stack.

Guard against cost-spiraling risks:
Because JourneyApps provides a robust and complete app stack for enterprise applications, there are dramatically fewer unknowns in building apps on the platform. This means that the enormous cost-spiralling that often happens with conventional professional software development projects is a rarity when using JourneyApps.

Guard against security risks:
JourneyApps provides a comprehensive set of security features that are automatically enabled for every application. The entire platform is also SOC 2 audited and regularly penetration tested. This means that companies can save the majority of their costs on security reviews and audits, since the platform layer that provides 90% of an application stack is already secure. In a conventionally-developed software project, there is always the risk of accidentally exposing a security vulnerability. By contrast, with JourneyApps, the majority of that risk is eliminated since developers don’t have to worry about the intricacies of the underlying platform layer for each application.
Let’s Get Started

Getting started with JourneyApps is easy and flexible. Just pick the option that works best for you and your team:

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<th>Free 14-Day Trial</th>
<th>Platform Demo</th>
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<td>If you prefer self-service, you can sign up for a 14-day free trial from our website in seconds. You can also contact us if you prefer a guided &amp; assisted 30-day free trial, which will start with an onboarding session with one of our engineers.</td>
<td>If you’d like to receive a personalized demonstration of the platform with one of our engineers, please contact us and we will get you scheduled.</td>
<td>Whatever you need, we are here for you. We can co-develop a proof-of-concept with you, provide in-depth Q&amp;A with our engineering team, or provide a fit-gap consultation on your requirements.</td>
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For more information, visit journeyapps.com

- hello@journeyapps.com
- journeyapps.com/contact
What Customers Are Saying

**JourneyApps code-first approach makes it easy to develop scalable apps**

“With JourneyApps, we were able to quickly design, develop and deploy a Safety Inspection app to our field operators. The app includes photo capture and signature functionality, and integrates seamlessly with our ERP system.”

Grant N.  
Enterprise, >1000 employees

Overall Rating: ★★★★★

Read more reviews at: 

**Excellent tool for building cross-platform applications**

“I am a FrontEnd Developer with little knowledge on backends and databases, but using JourneyApps I am able to work with the data models, backend integrations and on CloudCode with Javascript.”

Sai Durga M.  
Senior Software Engineer  
Oil & Energy, 501-1000 employees

Overall Rating: ★★★★★

Read more reviews at: 

**Expand your enterprise application portfolio at lightspeed**

“Our experience with JourneyApps has been incredible, beyond their great tool, they have an incredible group of people to support you throughout the project.”

Jonathan V.  
Application Analyst III  
Oil & Energy, 1001-5000 employees

Overall Rating: ★★★★★

Read more reviews at: 

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Journey Apps

The Rapid-Code Platform To Build, Deploy & Run Industrial-Grade Apps

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