



Superapps

Explained



Table of Contents

Introduction	03
Defining superapps	04
Types of superapps	05
Business advantages of building superapps	11
Case Study Bringing a superapp to the health and beauty industry	14
Concerns about superapps	15
Superapp examples	18
Case Study How a storage company cut 8 apps down to 1 superapp	20
Building superapps with Ionic's Superapp SDK	21
Summary	24

Introduction

Superapps are essential mobile tools used by millions of users around the world. The rise of superapps began in China in 2011 with the customer-facing app WeChat. Created by multinational technology and entertainment conglomerate Tencent, WeChat revolutionized the way users communicated with friends and family, hailed rides, paid medical bills, bought movie tickets, and more.

Since then, the use of superapps has expanded beyond China to other countries in Asia. Paytm and TataNeu are two major superapps in India, and LINE can be seen in Japan and South Korea. In LATAM, Rappi, Mercado Libre (MELI), PicPay, and Baz combine payment solutions with products and services.

What do all of these apps have in common? They all consolidate disparate digital experiences into one. Whether making payments or chatting with friends, superapps allow users to do more from a single, integrated mobile experience.

By 2027, Gartner predicts that more than 50% of the global population will be daily active users of multiple superapps. In their 2023 Trends Report, Gartner states, “as of November 2021, around 67% of consumers in the United States reported being interested in integrating multiple digital experiences in one superapp.” The market for superapps is expansive and full of opportunity.

Why are superapps so important to the future of mobile application development? Are they only reserved for large Fortune 100 companies? What benefits do they hold for businesses? This comprehensive ebook will cover the definition of superapps, the business benefits of building superapps, some considerations when thinking about building apps in this way, and how enterprises are currently using them. After reading this book, if you still have questions about how to implement superapps in your business, we encourage you to schedule a demo (ionic.io/demo).

Let's get started.

Defining superapps

While conventional superapps serve as a sort of app store where users can download different mini apps they want to use within the larger superapp, we see the use of superapps a bit differently.

We define superapps as providing the user with one app that shapes their experience for that specific company or brand, regardless of whether they're used by consumers or the workplace. Superapps are built using a native shell for iOS and/or Android and mini apps are added to provide a variety of app functions. For instance, a financial services company could develop individual mini apps that enable users to manage all aspects of their financial needs. This app could allow users to check balances, make payments, transfer funds, invest, apply for loans, and more, all in one place.

We also find that a hallmark feature of a superapp focuses on complete customization. Depending on the use case of the superapp, mini apps can be pre-loaded with the native shell, and users can have the power to add or remove the mini apps they want to use. These app experiences can also be gated depending on the user's role, status, membership level, or other grouping.

A superapp is an app that provides end-users (customers, partners or employees) with a set of core features plus access to independently created mini apps.

Gartner, "Executive Guide to Superapps"
October 2022

Types of superapps

There are two general types of superapps currently available:

- ⦿ Consumer superapps
- ⦿ Workplace superapps

Consumer superapps provide unified brand experiences for customers, and workplace superapps offer a seamless way for employees to access information pertinent to their role.

But how are consumer and employee superapps more beneficial than traditional applications?

First, let's review what challenges the workforce and consumers are facing so that we can explore how enterprises are thinking about using technology to combat these challenges.



The state of the workforce

With the global trend of supporting a remote or hybrid workforce, combined with the continued need for frontline workers, communication and efficiency are more critical than ever. As the number of disparate tools these employees use increases, so does complexity, causing a decrease in engagement, which can lead to burnout and high turnover.



Employee engagement remains a persistent challenge.

Companies consistently struggle to find ways to engage their frontline and remote employees and make them feel connected to their role and the company.

According to HRZone:

“49% of organizations with mostly frontline or on-site workers have seen engagement decline over the past year.”

A Gallup State of the Workplace 2022 survey found that:

“60% of [remote] employees have stated they feel emotionally detached at work”

and that:

“21% feel truly engaged at work.”

Better application interfaces equals better engagement.

Harvard Business Review shares that improved technology can help. They say, “86% of leaders note that frontline employees need better technology-enabled insights in order to make important decisions and improve productivity.”

Working with technology that fosters communication and makes it easy for employees to engage in the work—like through chat systems and peer recognition applications can make employees feel more tied to their jobs, coworkers, and company.

Juggling too many apps limits employee productivity.

Throughout a given workday, a company's workforce can navigate between over a dozen applications that are relevant to their position.

A Financial Times survey from 2022 discovered that:

“69% of workers were wasting up to an hour a day navigating between apps.”

Additionally, a survey conducted in 2018 by CITE Research found that of those surveyed:

“56% find searching for information in different apps disruptive.”

Streamlining the digital workplace experience saves time and improves efficiency.

It's no secret that context switching—that is, shifting quickly from one unrelated task to another—can cause loss of focus, a loss of momentum, and increased difficulty to get back to the original task at hand.

According to the Financial Times, a change in technology will streamline productivity. They say of those surveyed, “67% said they believe that a unified platform would help them achieve a better workflow.” A better workflow could ultimately lead to greater focus and more productivity.

A growing need for consumers

Employees are not the only ones feeling the need for improved technology experiences. Customers expect valuable interactions and a unified brand experience when engaging with companies. Not meeting customers expectations can ultimately lead to a decline in trust and a decrease in sales.

Many of today's customers are digital natives and expect the companies they engage with to keep pace with the latest technology.

With the amount of time the average person spends on mobile devices (up to 4 hours and 10 minutes a day for the average person according to Instabug) it benefits businesses to meet customers where they are on mobile devices.

Customers want an easy-to-use, unified application.

Creating an application that is easy to navigate and is functionally useful is not only the bare minimum for any app experience—it's crucial for keeping customers engaged.

According to Adjust, the average retention rate for iOS and Android mobile applications is 7% after just seven days.

Additionally, according to eMarketer:

“14% of smartphone owners reported deleting an app that was difficult to use.”

Competition for engagement is immense, and with suboptimal functionality, customers will quickly move on.

Create better, not more.

Because competition is fierce for customer attention, enterprise leaders might think the best solution would be to create a multitude of applications to attract more users. But simply pumping out more applications is the wrong approach.

For instance, creating multiple apps, each built with a single purpose in mind like unique apps for chat, social networking, marketplace, analytics manager, and more provides a disjointed and even confusing experience for customers. Instead, consolidate existing applications using a modern SDK to provide users with a unified brand experience, rather than juggling a disparate collection of standalone apps that provide limited value on their own.

Creating a more convenient, streamlined brand experience not only provides value to customers like simple navigation and easy access to important features but it also lays the groundwork to build more experiences under the same application.

According to Statista:

“66% of consumer respondents reported valuing convenience benefits, 54% of respondents reported highly valuing the coordination benefits of applications under one app.”

Curating experiences for customers

App users have come to expect a high level of personalization in every digital experience. From the local coffee shop's app remembering your favorite order and suggesting a new drink to the music streaming service suggesting songs based on previously played tracks, personalized experiences have become a staple of any organization wanting to retain and delight customers.

According to McKinsey, **“76% of consumers say they’re more likely to purchase from brands that personalize.”**

Salesforce agrees, saying, **“66% of customers expect brands to understand their wants and needs.”**

Create built-in customizable experiences in applications.

According to Twilio Segment, **“60% of consumers say they’ll become repeat customers after a personalized shopping experience.”**

Building personalized customer experiences could look like product recommendations, ad targeting, and checkout flow. Additionally, customization can be left in the hands of customers, allowing them to only download the experiences that are relevant to them.

All superapps, whether consumer or workforce, bring together disparate experiences into one unified, cohesive application. Unlike traditional applications that require multiple logins, repetitive data entries, and different UI flows, superapps enable customizable, easy app experiences that keep users engaged and connected.



Business advantages of building superapps

It's clear that poor digital experiences can lead to disengaged employees and lost revenue. But what can be gained in productivity and profitability by making applications better?

By modernizing their current tech stack and building out applications that fit the needs of both the workforce and consumers, businesses stand to gain a lot. But looking at how apps are traditionally built, many companies are facing difficulties getting there.

- ⦿ Application development teams spend a great deal of time and budget on the upkeep of multiple apps for the workforce, cloud infrastructures, licensing, and more.
- ⦿ Disparate applications and their coinciding backends result in disjointed and conflicting data sets.
- ⦿ Building multiple single-purpose mobile apps requires a lot of overhead and is costly to develop and maintain.



The Superapp SDK is a real game changer for us. It allows our partners as well as our own development teams to build add-ons much faster than before, while reducing the overhead we had before with native customizations.

Florian Sauter, CTO
EGYM

Superapps remove many of these barriers around building and maintaining single-use applications by giving organizations the means to consolidate disparate application offerings into a single app experience. This can then lead to increased efficiency, retention, and profitability.

Here's how:

Superapps decrease time-to-market

Large organizations building app experiences often do so on a grand scale; these companies are usually globally distributed and have unique requirements per region. But even with smaller, single-region organizations, standardization is crucial to maintaining brand identity and a streamlined experience across all users, both internal and external.

Superapp architecture allows for standardized mobile app development and delivery across multiple departments in multiple locations. After the core native shell is built in both iOS and Android, cross-platform mini apps make up the rest of the application functionality and user experience. Mini apps are universal and can be written in any flavor of JavaScript, shared across multiple devices, and built independently of each other.

Building superapps also encourages mobile app governance to ensure apps are being built to the quality and precision expected. These mini apps can also be templated to share across regions, allowing for teams in other countries to customize their app experiences while adhering to universal brand guidelines.

Finally, mini applications can be reused. Organizations can use their existing web applications as mini apps. Native applications take an extensive time to build, and all app features would need to be built, updated, and maintained twice for iOS and Android. Because mini apps are built using web technology, the same mini app can be integrated in both native operating systems without the need to rewrite it.

This level of streamlined development can bring applications to market faster than a traditional single-use native application.

User experience is improved.

The ultimate goal of app modernization is to improve the overall experience for users. Failure to provide a great experience for the workforce and customers can lead to high turnover, low engagement, and loss of profits.

Superapps are meant to remove friction from context switching, login juggling, and multi app downloading.

By consolidating multiple apps into one app, users can login once, choose the mini apps they want to use, and navigate through each mini app without leaving the main app experience. This completely customized experience leads to improved engagement for customers and an increase in productivity for the workforce.

Additionally, developing one core superapp with multiple mini app experiences makes it easier for businesses to maintain design and user experience standards.

Superapps optimize scaling.

Modernizing applications takes a great deal of time and consideration. Organizations need to invest in solutions that will not only compete in today's market, but leave room for growth in the future.

Superapps are made to scale. Their modular architecture reduces development overhead, and because mini applications can be built independently, the lack of dependencies allows for quick and agile development.

Case study: Bringing a superapp to the health and beauty industry

A global health and beauty brand with locations throughout Asia and Europe needed a way to train new retail staff as quickly as stores were opening. But their tech didn't appeal to the mobile-first generation of workers they were hiring. This led to high turnover and frustration among the workforce. They knew that in order to retain and excite on-site employees, they needed to modernize their app experience so they decided to build a superapp.

The company got to work creating an application for employees to easily check inventory, order new products in the store, clock in and out, and more. They built the app in just under 5 months, and plan to roll out the application to many more regions and users.

The result was astonishing. Not only were employees happier to use the technology, they were able to spend more time interacting with customers instead of navigating cumbersome tech, which improved the overall customer experience.

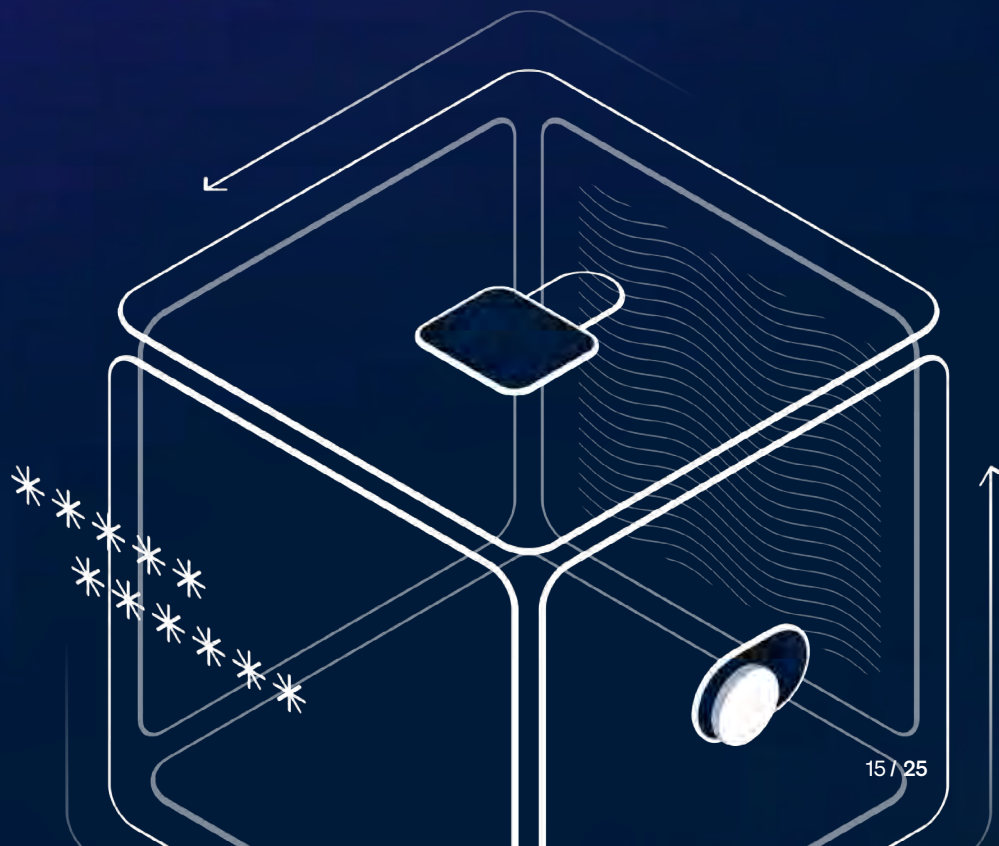
Concerns about superapps

Before we dive into a few superapp examples, we wanted to address some concerns regarding the use of superapps, particularly around security and data sharing.

While it may sound concerning that superapps share proprietary information between mini applications—like login information, payment information, location information, and more—data logging and sharing information across different functions is a secure and common practice for apps that create a truly customizable experience for users.

Organizations that build superapps and maintain the mini apps within their own ecosystem, rather than allowing any user to build and upload mini apps into their superapp, maintain the same level of control and security as if building a single-use application.

Additionally, data breaches, albeit crippling and an unfortunate part of living in a digitally connected world, are no more problematic or imminent in superapps as in traditionally built single applications.





Are superapps for everyone?

While the concept of superapps is easy to understand and ripe with possibilities, the implementation of superapps can be difficult if organizations are not prepared.

Deciding to build superapps takes time, planning, and agreement from various stakeholders within an organization. Often, app development teams are organized in the same way traditional applications are built—in a single monolithic architecture with each team depending on each other to get features built and deployed in a unified order. To build superapps means to break this team structure down into mini app teams that handle different mini app experiences.

Superapps are not small projects. Though superapps decrease time-to-market and provide a runway for future growth, the creation of a superapp can take additional time to plan, architect, and execute initially.

If superapps are so great, why aren't they everywhere?

Superapps have taken over the Asian and Latin American markets, making their presence on mobile devices ubiquitous. However, if these same applications were to launch in the US and Europe, they would run into issues with privacy regulations and app store infringements (mimicking an app store and trying to promote it on the Apple App Store or Google Play Store is a no-no).

A few more reasons might include:

- ⦿ Organizations have tried other approaches (traditional web views, complex React/React Native architectures) to create superapps and struggled to do it on their own.
- ⦿ Superapps are newer in the history of app development and some companies might not be sure how to implement them into their business.
- ⦿ Some organizations might not be aware that building superapps is even a possibility.
- ⦿ Customers outside of those regions are not trained to expect various brands from ride shares to food delivery to movie ticket vendors to share space within a single application, as seen in larger superapp examples like WeChat and AliPay.

Luckily, there are additional uses for superapps that range beyond the mega apps like Alipay and WeChat that enterprises can build to provide seamless, friendly experiences for users. Next, we'll cover a few examples of how these enterprises can build superapps specific to their industries.

Superapp examples

Earlier, we introduced two types of superapps: consumer and workplace superapps. How can superapps benefit these two groups in different industries like ecommerce, finance, retail, and government?



Here are four different hypothetical examples how superapps can be used in different industries:

Finance

Customer superapp: Users can streamline their banking and financial management in one place by checking balances, making payments, transferring funds, investing, applying for loans, and more.

Workforce superapp: Financial advisors can securely access client information, offer loans and other products, and check application statuses without logging in to multiple systems.

Retail

Customer superapp: Shoppers can self-checkout, check store inventory, call employees over for assistance, receive loyalty points, check gift card balances, and more.

Workforce superapp: Retail employees can run the point-of-sale system, clock-in and out, review schedules, check inventory, and assist shoppers all from one application.

Ecommerce

Customer superapp: Customers can enjoy one login experience that will give them access to different stores, payments, and customer support in one application.

Workforce superapp: Customer support teams can manage tickets, quickly triage issues, and communicate with customers with a single app.

Public Sector

Customer superapp: Users can log in once to access bill pay, tax information, local government documents, public utility services, and more.

Workforce superapp: Government employees can access cases, order supplies through procurement, clock in and out, and more under one login.

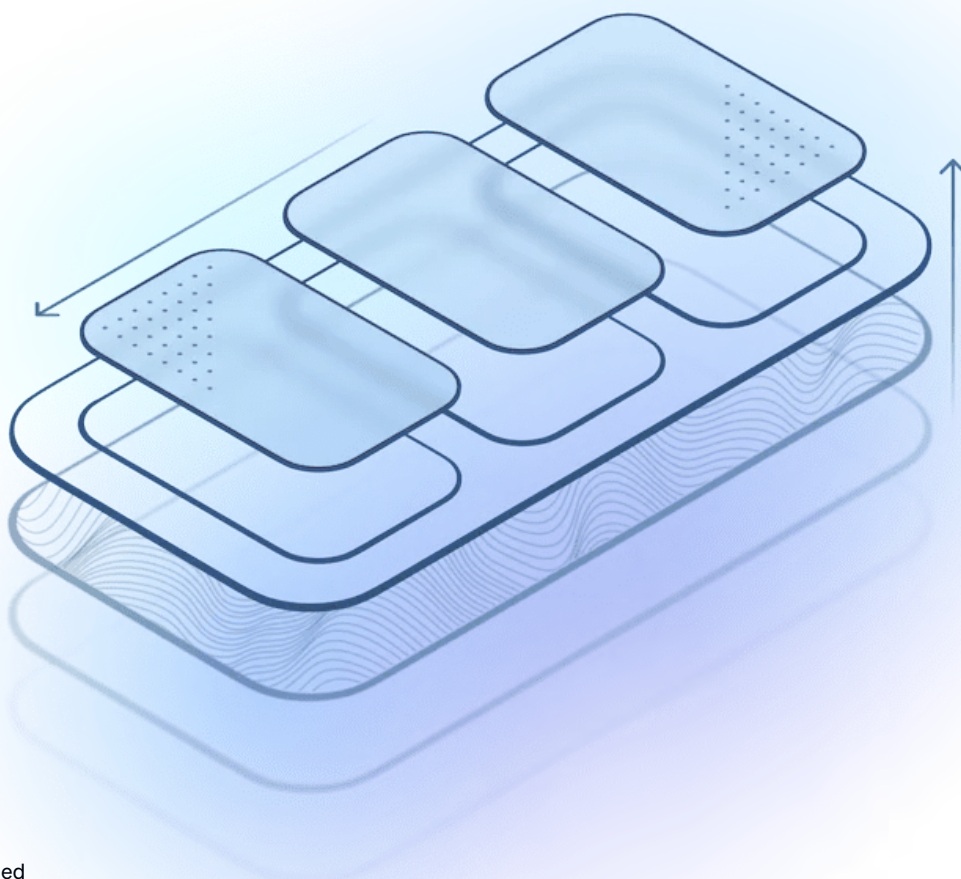
How a storage company consolidated 8 apps into 1 superapp

A multi-billion dollar public company, best known for its portable storage solutions, faced the challenge of managing 8 individual apps across various personas, including drivers, field service personnel, repair technicians, and partners. They aimed to consolidate these disparate experiences into a single, unified experience.

The company decided to build a superapp to solve their challenges. Their native shell app was built using native SDKs, while each mini app was developed using Ionic's Superapp SDK. The company leveraged AWS Amplify for backend services and adopted an organizational structure with a single native app team and multiple mini app teams, each working autonomously.

The company successfully transformed its multiple individual apps into a superapp ecosystem. Users can now access a single app with multiple mini apps, with each mini app tailored to their specific persona or role.

The company plans to scale to 20+ mini apps, gradually phasing out their old, disjointed apps from various app stores. The superapp not only offers a unified experience but also allows users to discover, activate, and remove mini apps as needed, enhancing user engagement.



Building superapps with Ionic's Superapp SDK

Now that we've explored the many ways superapps can be used to provide robust and tailored app experiences for users, let's discover how Ionic's Superapp SDK can help organizations get started building their own superapp experiences.

The Superapp SDK core functionality

The Superapp SDK provides development teams with a toolkit to develop, build, deploy, and update superapps. Here is how the Superapp SDK handles each step in the development process:

Develop

Native teams build out native shells for iOS and Android with core functionality like authentication. This part of the process can be done before the superapp is actually created.

Web teams also can start developing mini apps in parallel with the native teams building the shell—this is where the Superapp SDK really kicks in. Web development teams build mini apps with any web technology stack or framework, and the SDK's built-in cross-platform native bridge provides easy access to native functionality while merging robust experiences found in the web apps.

The best part, because this bridge offers seamless integration, users will not be able to tell where the native app stops and the web app begins.

Build

Once the superapp structure and mini apps are created, the Superapp SDK allows developers to generate a native binary that is ready for deployment to the app stores. As your development pipeline matures, electing to automate these steps is made possible via hooks into production branch commits.

The SDK's cloud services remove the burden of maintaining consistent build stacks amongst the development team members. By offloading signing certificate maintenance and build steps, and leveraging AI assistance to provide valuable insight and potential resolutions if build errors should arise, the tail end of the development lifecycle becomes drastically simplified.

The Superapp SDK provides a central location to maintain both web and native builds where together teams can review logs, ensure quality via app previews, update environment variables, and so much more.

Deploy

Time to deploy your superapp! With the Superapp SDK, developers can deploy their native shell to the app store, and mini apps can be bundled with the native shell or installed separately based on defined user criteria.

Additionally, mini apps can be added to the superapp after the app is deployed. This flexibility not only allows for a completely customized experience for the user, but this way of developing mini apps also prevents dependencies from stalling launches and allows for asynchronous development.

Update

Mini apps can be added at any point after the initial deployment of the application to the app store, and the Superapp SDK allows developers to update each mini app independently.

These updates can be done over the air, directly to users' devices, without the need to repackage and upload the entire superapp to the app store. This live update capability keeps development moving and leaves room for A/B testing, immediate bug fixes, rollbacks, and more.

What else comes with Ionic's Superapp SDK?

The Superapp SDK was built by Ionic—a trusted platform with over a decade of experience in building high quality, secure, enterprise-grade applications. When you partner with Ionic, you receive a comprehensive library of tools to help your web and native developers create amazing app experiences, including:

Off-the-shelf design system

Organizations can completely customize the look and feel of superapps to meet their core brand needs. Additionally, the SDK comes with a library of 100+ web-based UI building blocks and mobile-ready components that fit any superapp project.

Native-like gestures and animations

Make the flow between the native shell and web-based mini apps feel seamless with native-like gestures including swiping gestures, enter animations, leave animations, and more.

SOC II Type 2 certification

Security is paramount at Ionic. The Superapp SDK has been built to the rigorous standards of SOC II Type 2 compliance.

Support and advisory

All Superapp SDK licenses come with a dedicated Customer Success Manager, implementation and onboarding support, debugging assistance, annual maintenance services, and more.

Access to build and deploy apps to the app stores

The Superapp SDK provides developers with the DevOps tools necessary to easily build and deploy apps to the app store. Alternatively, if an organization has an existing DevOps setup, the Superapp SDK can integrate with any cloud setup.

Summary

Large organizations looking to provide their workforce or consumers (or both!) with a more unified, simpler mobile app experience should evaluate whether a superapp is right for them. With superapps, users enjoy customizable mobile apps with targeted, useful functionality. Additionally, superapps allow developers to work independently to create mini app experiences, leading to a faster time-to-market and room to scale.

There are considerations when building superapps, including the multiple stakeholders that might need to be involved in deciding to go forward with such a project. However, this sort of care and consideration should be performed for any project that involves modernizing an application experience and upgrading existing technology.

If you're considering building a superapp for your internal workforce or customers, Ionic's Superapp SDK (ionic.io/superapp-sdk) is a great solution. It provides organizations with the exact tools needed to successfully build a superapp that meets their users' needs. The SDK is backed by Ionic's team of experts, who will ensure you create the best app possible. Contact us to learn more about how superapps can help you achieve your business goals.



For general questions, comments, or feedback, please contact demo@ionic.io.

 [@ionicframework](https://twitter.com/ionicframework)

 LinkedIn



Visit our website:
ionic.io/superapp-sdk



Schedule a demo:
ionic.io/demo