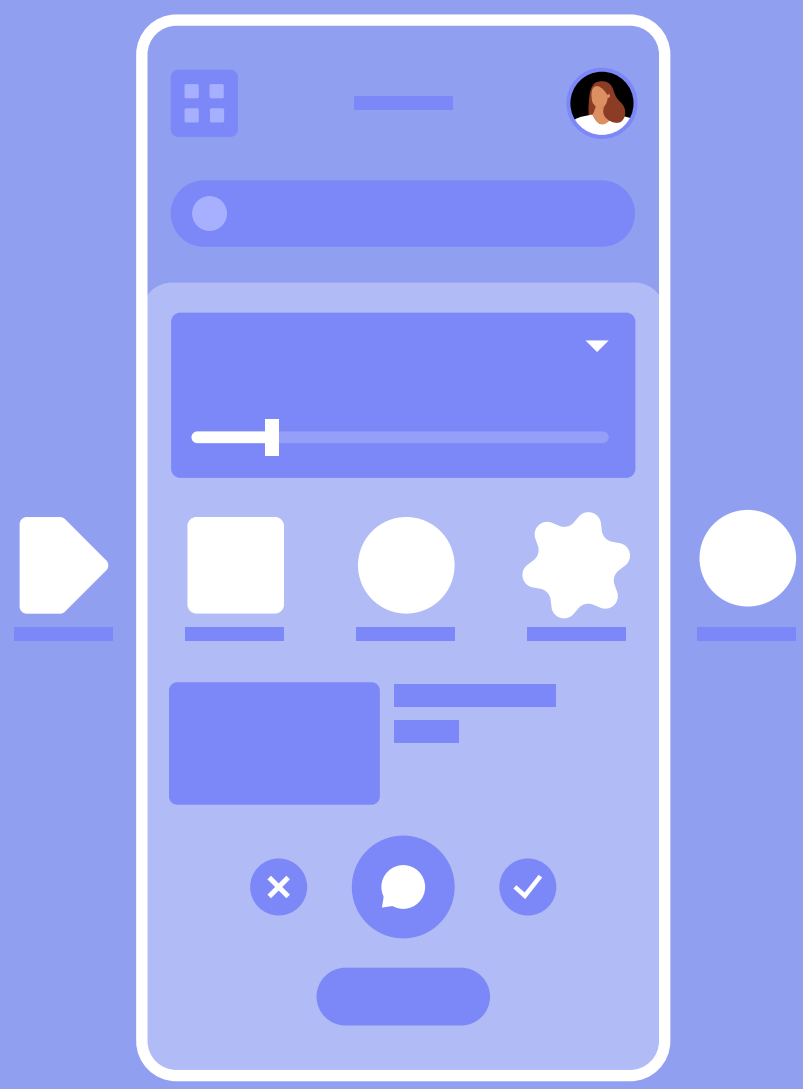
SuperApps

38 interesting facts and more you should know about Super Apps, Mini Apps, and Mini Programs

Whitepaper



GeneXus™

Imagine you're visiting China, and people are puzzled when you try to pay with paper money to purchase a product or service. Why? In China, transactions have been made from smartphones for years so the use of cash has become obsolete.

This way of life shows that the Chinese, and Asians in general, are always one step ahead.

Unlike in the West, China's initial contact with the Internet came from smartphones, not computers.

In the digital world, this is known as Mobile First. The term was coined in 2011 by Google Product Manager Luke Wroblewski in his book Mobile First, where he argues that websites should be created first on mobile and then adjusted to computers.

The mobile-first trend was precisely what led to the invention of Super Apps in China. A Super App is an application that allows many applications (Mini Apps) to run inside it.

Each Mini App addresses a specific issue. These solutions can provide a wide range of services, including utility bill payments, bank loan applications, government proceedings, retail purchases, ride hailing, flight bookings, and much more.

To access these services, users only need to download a Super App on their phone, log in, and enter their payment methods only once.

In the West, most apps fulfill a specific need, such as paying for parking or booking a table at a restaurant in a certain location. So far, they have not taken the leap and allowed others to publish mini-applications inside them to expand their range of services.

The good news is that GeneXus is already working so that new digital ecosystems can be developed on this side of the world using Super Apps.

Below are the 38 interesting facts (and more) you should know about this technological revolution:

SuperApps

#1

The Super App concept is a trend that started in Asia—more specifically, in China—with applications such as WeChat and Alipay. It is currently gaining momentum and expanding to other markets.

#2

The term was coined in 2010 by BlackBerry founder Mike Lazaridis during a Mobile conference when he defined Super Apps as "a closed ecosystem of many apps that people would use every day because they offer such a seamless, integrated, contextualized, and efficient experience."

#3

A Super App is an ecosystem containing a wide range of services seemingly unrelated, but that coexist within the same general application.

#4

They are usually born as an application that addresses a specific need and then start to include other services. Each of these services is a native app (Mini App) loaded inside the Super App.

#5

The Super App is also a native app that ends up becoming a kind of **"parent app."**

The Super App concept is a trend that started in Asia with applications such as WeChat and Alipay. It is currently gaining momentum and expanding to other markets.

#6

The process of turning a native app into a Super App starts with the creation of an app that is intended to meet a specific goal and need, and is capable of adding other apps. The second step is to develop businesses, which can be internal or external, through partnerships or agreements with other organizations. This allows for the integration of services other than the initial offering. Lastly, the product line should be open to allow anyone to create applications (Mini Apps) that provide services through the Super App.

#7

These applications are deployed in a way similar to what we're used to. Once the application is compiled, the back-end services—the services that feed the application on its own server—must be deployed.

#8

Below are some scenarios that can be covered with a Super App:

Payment or FinTech apps

Since solutions of this type already have a community of users and payments integrated into the application, this information can be leveraged to enable payments for different services from different vendors, in a very simple way.

Government apps

Different Mini Apps could be created to handle all the services provided or proceedings to be carried out by the residents of a territory.

Community apps

Any city, school, university, or company could also have its own Super App. This technology allows products to be developed incrementally; that is, small applications can be added to make up a large app, and these services can even be customized.

#9

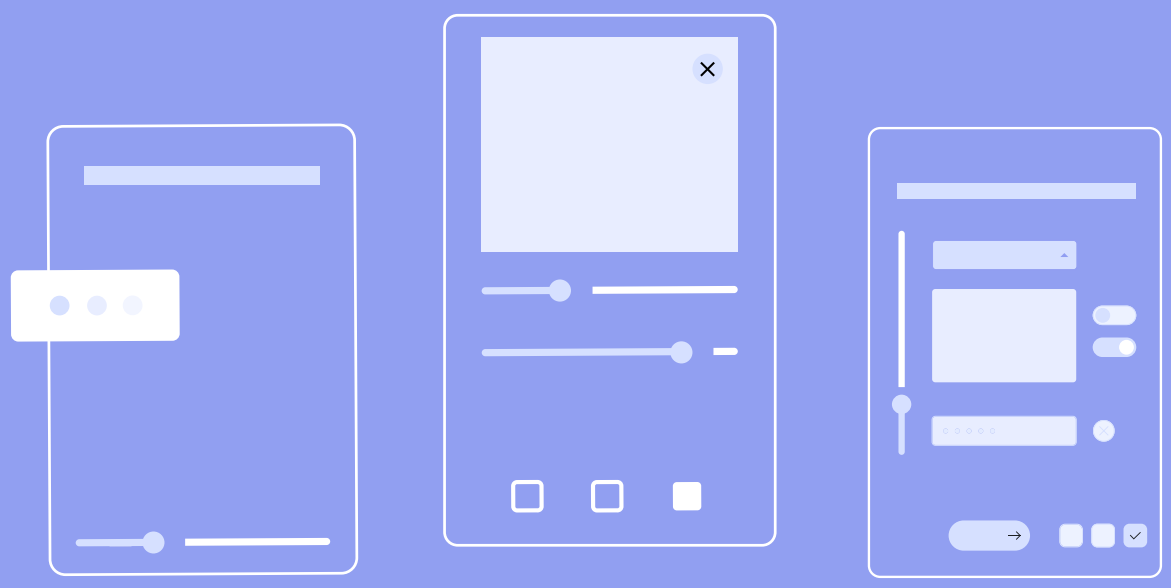
A great advantage over the web is that it removes the friction of having to obtain user's identities and payment methods, as they don't have to register in different applications. Super Apps provide a one-stop solution to this problem.

#10

When an app is approved, they are not as rigid as native apps; that is to say, apps will be available with no need to publish them in each Store.

#11

In the Super App, information (Mini Apps) can be displayed as a list of icons or featured.



MiniApps

#12

A Mini App is a small application that solves a problem within the Super App, which is the host.

#13

Mini Apps are applications embedded in a Super App.

#14

The user dynamically loads Mini Apps on demand. That is, when users download a Super App to their phone, they will not have all the Mini Apps installed. Instead, they will access them through discovery points that can be the start menu, embedded in official articles, linked from users' profiles, in a QR code, or the search bar, among others.

#15

Application exposure can also be dynamically triggered by user location. For example, when a person goes to a shopping mall, the Super App could display the stores that have a Mini App to quickly access their services.

#16

Another discovery mechanism that can trigger Mini Apps is time. Depending on the time of year or week, Mini Apps which are relevant at that moment may be displayed more prominently. This allows developing Mini Apps that can be useful for a few days or for a specific period of time.

#17

Their objective is clear and specific. The user doesn't have to learn what it is all about; simply by running the application they can do what they want quickly and easily.

#18

The Super App owner or administrator is who authorizes the publication of Mini Apps on its platform, and not the phone's operating system or store.

MiniPrograms

#19

Mini Programs are the Mini Apps that run on already established Super Apps such as Alipay, and WeChat, among others.

#20

They are similar to Mini Apps, and are instantly loaded as required by the customer or end user. As we've said before, they are not all installed when the Super App is downloaded.

#21

They are easier to develop than a native application.
In China, for example, companies do not develop a native iOS, Android, or web app. Instead, they develop a Mini Program for a certain Super App, which can be WeChat, Alipay or Baidu, to name a few.

#22

Like Mini Apps, they don't involve design and size decisions, as those guidelines are set by the Super App owner.

#23

Some experts claim that Mini Programs involve 80% of a native application's functionality and only 20% of the development effort.

#24

Mini Programs are also highly integrated with the Super App ecosystem. They share the same login.

#25

Like Mini Apps, Mini Programs are visible through discovery points.

Benefits of Super Apps

#26

Less friction

End users don't need to download every single application, and can instantly access the services in a contextualized way.

#27

More security

Everything related to user identity and payments is entered only once in the Super App. Mini Apps will be able to use these services with no need to register or provide confidential information again.

#28

Value delivery

Super App owners can provide more and better services through partners, enabling incremental development of their solutions.

#29

Positioning

Mini App owners can place their applications in an already established ecosystem, instead of publishing them in different stores and competing with dozens or hundreds of other applications offering similar services.

#30

Simpler development

Everything related to user identity and payments comes from the Super App, so no programming is required. This is a fundamental aspect, because these complex issues may not be the core of the business.

#31

Agility

The process of launching a Mini App in a Super App is very fast.

#32

Market knowledge

Mini Apps can target a specific audience, presenting them with the right offer, at the right time.

#33

Reduced costs

The Super App gives many design rules or best practices. As a result, the development process is more simplified and integrated. The costs of getting to know the customer are also reduced because this information is obtained through the profiles subscribed to the Super App.

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The Super App phenomenon in China and the world

#34

WeChat

In the world of social media, WeChat is positioned as the sixth most used application in the world, with **1.2 billion active users by the end of 2020.**

WeChat means “micro message” in Mandarin. It was born in 2011 as a messaging application. Tencent, the technology conglomerate behind WeChat, took that first messaging app and turned it into the first Super App. **It currently includes more than one million Mini Programs,** offering services in more than 200 categories

Its mobile payment system, WeChat Pay, is a digital wallet that allows sending and receiving money in China and 25 other countries

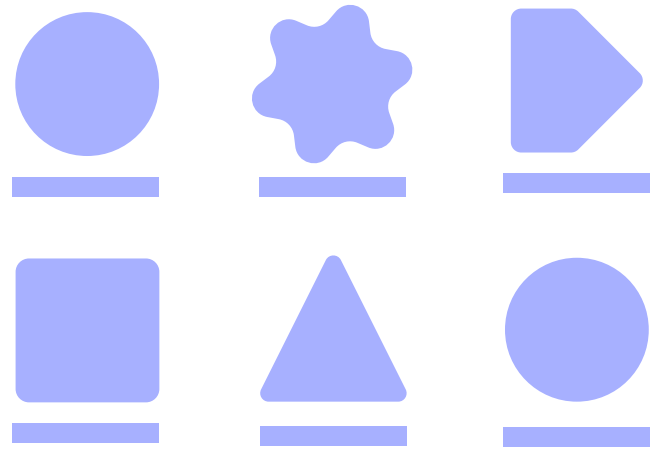
#35

Alipay

Alipay, which belongs to the Alibaba group, is a super app that acts as a payment method for e-commerce giants like Tao Bao and TMall

In 2013, it matched PayPal’s popularity as the world’s largest mobile payment platform

More than 300 worldwide merchants use Alipay to sell directly in China, in 18 foreign currencies



#36

Grab

Grab started as a ride-hailing company, helping drivers earn a livelihood, and later on added everything from street vendors to international brands. There are more than 70 million small and medium-sized enterprises (SMEs) in SEA, employing more than 140 million people and representing 99% of all companies in the region. “Everyday entrepreneurs are the bedrock of our economy and the reason Grab expanded its services to become the super app to millions of such entrepreneurs,” say Grab founders Anthony Tan and Hooi Ling Tan

Grab includes deliveries, mobility and financial services, companies and others, connecting consumers from all walks of life with everyday entrepreneurs in 428 cities and 8 countries

As of September 30, 2021, Grab had cash liquidity of approximately US$5.2 billion

#37

Gojek

In Indonesia, we find Gojek, which was born as a ride-sharing company and then evolved into a Super App

It is Grab’s main competitor in the Asian market and represents 2% of Indonesia’s Gross Domestic Product. It is the first unicorn from that country

In 2020, they launched GoStore, a solution that helps local micro, small, and medium-sized enterprises (MSMEs) set up online stores with ease

#38

Paytm

Paytm is an Indian startup that already has 350 million registered users. Its platform is used as a payment method for different transactions, and it is a digital bank

With this application, you can buy train tickets, book airline tickets, and pay at its e-commerce subsidiary Paytm Mall

GeneXus in the world of Super Apps

For a Super App to work, it needs a component that enables other applications to load dynamically.

We started using this type of component in GeneXus more than 10 years ago, when we released the generators for Smart Devices that allow us to dynamically load applications, interpret them, and give them native behavior.

What does this mean? That GeneXus has the technological power to create this new generation of applications. In fact, **we are the first Low-Code platform that allows you to generate Super Apps and Mini Apps.** The best part? You can do it the easy way, without learning anything new.

With GeneXus, you can also turn a native application that hasn't been developed with our platform into a Super App, obtaining all its advantages: dynamic application loading, integration with partners, incremental development, and more.

For modeling this type of application, we have 3 components:

-Super App development
-Mini App development
-Provisioning Server, where all these -Mini Apps will be catalogued.

To simplify the development of Mini Apps we offer Design Systems, Stencils, and User Controls components.

As for development, GeneXus users don't need to learn anything new. Developing a Super App is like developing a native application. The only thing added is a component that will allow you to connect to the Provisioning Server created by GeneXus to obtain the Mini Apps from the Super App. The latter will have an API where the different services provided by the Mini Apps will be exposed.

The development of Mini Apps is also the same as for any other native application using GeneXus. It is an online app. The only thing to be imported is the Super App module containing the services with which you may interact from the Mini App. Once this application is generated, the services that feed this app must also be deployed. Since it is online, it will surely have that service layer that can also be on your own server. The difference here is that the application doesn't have to be compiled; instead, that metadata—the product generated by GeneXus—will be catalogued in the Provisioning Server.

When the application is published on the Provisioning Server, the Super App owners are notified so that they can review and approve the Mini App.

What's coming up

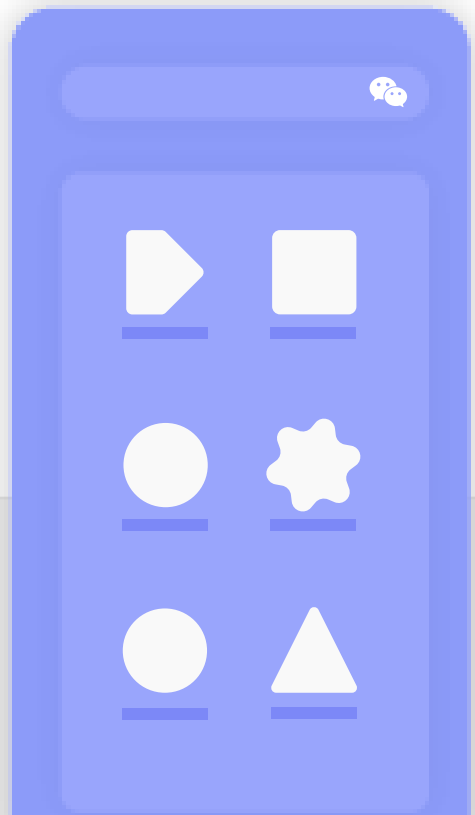
Our technology and experience developing mobile generators allow us to meet all the latest technical requirements to create ecosystems around a Super App. In turn, this opens the door to great opportunities for the global GeneXus community.

Regarding multi-experience, at GeneXus we are working on three fronts:

Mini App Generator for GeneXus Super Apps.

Mini Program Generator for the WeChat Super App.

Solution to convert any native app—not necessarily developed with GeneXus—into a Super App



The first Low-Code Generator of Mini Programs for WeChat

This channel will allow our customers in China and anywhere in the world to create and publish Mini Programs for WeChat.

From a technical point of view, this generator is a hybrid between Web and Mobile. On one hand, it resembles front-end development, with technologies such as Angular, Vue, and React. However, the WeChat team extended this and created a new language.

The release will be in the beta channel, so that anyone can use it and prototype on this platform. As this generator evolves, we also envision targeting other Super Apps, adding properties and generating new projects, simplifying processes and reusing all our knowledge within these systems.

GeneXus welcomes your ideas about Super Apps and Mini Apps so that we can collaborate in this new reality.

Another dose of Super Apps

To learn more, we share the following contents for you:

Super Apps: The complete guide

¿What's the difference between Super Apps, Mini Apps and Mini Programs?

¿How does a Super App work and why will they be so important in the future?

Low-Code generator of Mini Programs for WeChat

Ask Me Anything - AMA: Super Apps, Mini Apps and Mini programs

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