

At CPP Investments, we're thinking ahead about global issues and trends as we invest for generations. Explore more of our latest insights at <u>cppinvestments.com/thinking-ahead</u>.

The future is taking root in different ways and at different speeds around the world. Regional differences in resources, public policy and consumer preferences result in different approaches to new technologies—leading to some surprising innovations. SuperApps—apps that attract massive followings by allowing consumers to access a number of services in one place—have come to the fore in Asia and are just such an innovation.

SuperApps can be thought of as operating platforms for mobile devices. By providing an array of functionality accessible within a single app, from payments to online shopping to ride sharing and social media, they drive massive daily usage and user engagement across a wide swath of users. This gives them enormous power in their markets. Most achieved scale in a core offering, and then added additional functions and use cases—without having to spend much to get users to try these incremental products. Examples include Alipay and WeChat in China (each with over a billion active users), Gojek in Southeast Asia and PayTM in India. Unlike in Europe and North America, where consumers turn to different apps for different functions, consumers in China, India and other SuperApp markets tend to rely on one app—a SuperApp—for most of their online activities.

To better understand the investment opportunities and risks posed by SuperApps, CPP Investments set out to identify what makes an app a SuperApp, what enables their emergence and success, and what that means for the technology sector. We took a global approach, understanding the local regulatory and cultural factors that supported the rise of SuperApps in China and across Asia, evaluated whether those factors are present in other markets, and also evaluated the strategies of the current market leaders for various SuperApp features around the world. For each area, we analyzed detailed quantitative and qualitative data, including relevant research from respected organizations and our own proprietary research. We leveraged the expertise of dozens of professionals across our fund and conducted scores of interviews with outside experts and specialists, including relevant CPP Investments portfolio companies and investment partners.



In Europe and North America, consumers first learned to access the Internet from their desktop computers back in the 1990s. By the time smartphones emerged a decade later, their browsing habits were well formed, and consumer technology companies had strong market positions. Users had favourite sites (which later became favourite apps) for shopping, web browsing, messaging and other services. In other parts of the world, for example, Africa and Asia, consumers were often introduced to the Internet when they got their first mobile phone. This meant that there was a large greenfield opportunity with no clear market leaders. Merchants and service providers quickly emerged to provide services popular elsewhere with a local twist and to innovate entirely new product areas. Once they achieved scale with one product, they used their critical mass of users as an advantage in entering adjacent product categories.

What follows is a primer on SuperApps and what they could mean in new markets and across sectors.

QUICKtake

Four things investors should know about SuperApps

- 1. SuperApps are mobile app platforms that offer a range of features and drive high daily user engagement across a large user base. Their success is based on their ability to provide convenient solutions for high-frequency core use cases, a mobile-first approach, heavily localized functionality, and a step-change in experience for an element of economic or physical infrastructure such as payments, logistics, or transport.
- 2. SuperApps are expected to scale materially in the coming years across Africa, India, Latin America and Southeast Asia. Consumer and regulatory factors will limit growth potential in the West, though we see a continued trend towards large tech companies offering a range of services through separate, but linked apps.
- 3. Similar to SuperApps, merchant platforms such as Amazon and Shopify realize strong network effects by offering a range of services to their merchants on one platform. This increases their value to merchants while simultaneously deepening their competitive moats.
- 4. The growth of SuperApps and their linked ecosystems in new markets will have material implications for incumbents. However, where barriers to entry are high, SuperApps are more likely to take a partnership approach, rather than attempt to compete head-to-head.



What exactly is a SuperApp?

In our research, we uncovered some key characteristics and commonalities regarding these massively used platforms. SuperApps usually make their mark with some combination of the following features:



SOCIAL

This includes instant messaging, voice and video calls, and content sharing. Typically, services are free to consumers and monetized through advertising.



PAYMENTS

Digital wallets allow users to pay bills, transfer funds or make payments for free, supported by fees from merchants.



E-COMMERCE

Players here may sell directly to consumers or serve as a marketplace for third-party sellers, supported by merchant fees of 5-30+%.



RIDE HAILING

This is basically the Uber model, where the platform connects drivers with customers for a fee.



ONLINE DELIVERY

Similar to ride hailing, these services connect drivers with cars or delivery vehicles to customers and merchants in need of delivery.

SuperApps tend to scale from a profitable (or nearly profitable) core offering, and then add additional functionality to increase loyalty and stickiness. A distinguishing feature of SuperApps is the high daily usage rates they elicit. These high usage rates mean users are engaged with their SuperApps for many minutes or hours per day, giving the SuperApp more time to pitch other services. Usage is driven by robust social use cases like group chat and video sharing as well as payments, which most SuperApps have expanded into as a way to attract and retain both consumers and merchants. Other services, sometimes offered in the app but fulfilled by a third-party, include financial services, premium media/content, gaming and travel services.

The ability to develop a core user base and cost-effective scalability are two major determinants of whether an app will become "Super".



How do SuperApps achieve their fast growth?



KEY DRIVERS FOR SUPERAPP GROWTH

- Core functionality with high engagement
- Ability to unlock cost synergies (customer acquisition cost and operational cost)
- Strong partnerships for adjacent features

SuperApps have a number of strategic and market characteristics that drive their success.

On the strategic side, most build a core business in one of the five areas mentioned above and expand from there. They're able to achieve impressive usage, both in terms of daily and monthly active users and the number of minutes those users log on each day. As a result of this engagement, SuperApps have access to rich user data. This confers a number of advantages, including the ability to cross-sell and upsell as well as lowering customer acquisition costs. SuperApps also tend to be highly localized and to form partnerships outside of their core competencies. Communications SuperApp WeChat, for example, expanded its reach and use case by developing Mini Programs, third-party apps that are embedded within WeChat.

On the market side, SuperApps tend to thrive in places where smartphone and internet penetration happened in concert, providing SuperApps the opportunity to help shape consumer behaviour. They are also able to fill gaps in the physical infrastructure, such as lack of physical bank branches or comprehensive logistics networks. In that sense, they are well adapted to local conditions and, since they address a market gap, they drive high levels of usage and engagement. In many markets, the introduction of SuperApps coincided with an emerging consumer class, eager to spend and save. Finally, in many markets that have given birth to SuperApps, protectionist laws lower the level of foreign competition.





Are there any SuperApps for businesses?



WHAT ARE SUPERPLATFORMS?

SuperPlatforms provide merchants (e.g., small- and medium-sized businesses, retailers) with an end-to-end platform to establish and operate an online business through the integration of features including software, logistics, customer acquisition, marketing and financial services



While some SuperApps do offer functionality for businesses, the closest things to true merchant SuperApps are what we call SuperPlatforms, which are now emerging in several markets. These platforms, such as Amazon and Shopify, enable small- and medium-sized businesses to have e-commerce capabilities that would otherwise be available only to large-scale competitors. These include features such as software, logistics, customer acquisition, marketing and financial services.

Where will the next SuperApps emerge?

Africa and India have the right combination of factors to give rise to more SuperApps. For one thing, they both have serious infrastructure gaps. In most African economies, electronic payment penetration is minimal, and in India, despite attempts at demonetization, nearly a quarter of the adult population do not have bank accounts. This suggests the Indian market could be ripe for a SuperApp that provides easy payment functionality—a common feature of SuperApps. In addition, both markets are seeing growth in per capita income. The final piece—smartphone penetration—is also in progress. Penetration has lagged other regions but is growing quickly.



Will SuperApps emerge in Europe and North America?



SUPERAPPS AROUND THE WORLD

SuperApps in North America/ Europe will evolve differently than SuperApps in Asia/ Latin America due to distinct market dynamics, consumer preferences and regulatory environments SuperApps in Europe and North America are expected to evolve differently from SuperApps in Asia and Latin America, due to distinct market dynamics, consumer preferences and regulatory environments. Consumers in these developed markets already have plenty of options for banking and shopping, both online and offline, and have lined up behind their favorite apps. That makes it harder for a newcomer to build scale around one of those verticals. In the U.S., Amazon, for example, already holds a roughly 40% market share in e-commerce, while Uber has about a 70% share of the ride-hailing market.

Partly, this reflects different consumer preferences. Consumers in Europe and North America are adept at toggling among different apps and seem to prefer an unbundled marketplace that allows them to choose best-in-breed apps by function, rather than moving all their activities to a single platform. In addition, tougher regulatory scrutiny, ongoing trade and geopolitical tensions, tougher data-privacy laws, and increased costs of compliance favour long-established incumbents. We see technology platforms like Microsoft, Apple, Uber, Google and Amazon continuing to scale their consumer businesses with separate, product-specific apps with shared back-ends and branding.

Which verticals in Europe and North America would be most likely to attract SuperApps?

We envision Western tech platforms potentially expanding into new categories with high repeat usage potential. These categories include Health Care, Education and Lifestyle services such as beauty and fitness. We are already starting to see this with Amazon's health care ambitions, Apple's recent Fitness+ launch and Microsoft's launch of its mobile cloud gaming platform.





What do SuperApps mean for long-term investors?

We believe that SuperApps have several important implications. The emergence of any business with the market clout and ability to scale that SuperApps have should matter to a long-term investor; most would want to spot that trend early. Just as important, as SuperApps form, they are likely to drive changes to the ecosystem that will present both new risks and opportunities for investors.

As SuperApps scale and increasingly bundle offerings from across verticals, we are likely to see a commoditization of certain products and services. If a platform already has a profitable core business, and management's goal is to add incremental features to drive adoption of their core product, they may be willing to use new functionality as a loss leader. This could result in meaningful pricing and margin compressions in the areas where they compete.

In the case of a SuperApp in a payments vertical, companies that enable the formation of SuperApps, such as licensed banks and merchant partners, could benefit. Online banks without their own banking licenses and legacy payments enablers could theoretically be disrupted. In financial services, where there may be opportunity for SuperApps to distribute financial products, traditional financial institutions that partner with the SuperApp could gain a considerable advantage. In retailing, the arrival of a SuperApp could confer new reach on small- and medium-sized merchants, while dealing a blow to e-commerce-related search-engine traffic as well as wholesalers.

Conclusion

As long-term investors with a global reach, an important part of our job at CPP Investments is to detect new sources of innovation in regional markets and share those insights with our teams in other parts of the world. The goal is to understand what these disruptive new approaches might mean to our current investments and future opportunities. By understanding new trends while they are still forming, we can reap greater advantage for the Fund.



About the Authors

This work reflects the input of investment and core services professionals across CPP Investments, as part of an initiative led by the Thematic Investing team.



CAITLIN WALSHSenior Portfolio Manager, Thematic Investing San Francisco office

Caitlin is responsible for building thematic portfolios exposed to long-term secular growth and recently established our San Francisco office for Thematic Investing. She manages the Automobility and Climate Change Opportunities strategies within Thematic Investing. Caitlin was a founding member of the Thematic Investing team in Toronto, leading proprietary research into themes and investing in companies expected to benefit.



RUBY GREWALPortfolio Manager, Thematic Investing
Toronto office

Ruby is responsible for the Retail 4.0 strategy within Thematic Investing and has extensive experience in fundamental research. Prior to joining CPP Investments in 2015, Ruby worked as Vice President, Research, for Hansberger Global Investors (a subsidiary of Natixis Global Asset Management) covering several global sectors, including Telecom, Media, Consumer Discretionary & Staples, and Real Estate.



JORDAN UDASKINPortfolio Manager, Thematic Investing
Toronto office

Jordan is responsible for Thematic Investing's fintech investment strategy. Prior to joining CPP Investments in 2017, Jordan covered Technology, Media and Healthcare at Difference Capital (Venture Capital), and worked in Private Equity at Onex Corporation and in Investment Banking at Credit Suisse.