



ESSAY

Internet+ Urban Services

When Urban Services Meet the Internet

Recognising that Internet technologies now dominate the lifestyles of mobile-dependent citizens, Chinese government agencies have enhanced service processes with closely integrated mobile applications that deliver greater ease and civic engagement. **Yuting Xu** and **Yimin Zhou** elaborate on the development, benefits and downsides of this digital revolution.

Evelyn, a typical office worker in Beijing, woke up to a WeChat push notification from the Beijing Traffic Police reminding her of the vehicle travel regulation during the upcoming public holiday. The sky was overcast, so she secured a car ride on Didi Chuxing, the Uber-equivalent ride-hailing app. On her way to the office, she purchased a train ticket to her hometown and paid her utility bill on Alipay. When her father sent her a voice message asking for dining recommendations, she found a highly rated restaurant on Meituan and shared the listing. She even made a booking on the restaurant's WeChat Public Account for her father and paid with WeChat Pay.

This is a snapshot of a typical day for mobile-dependent Chinese urban dwellers. Chinese cities are redefining modern urban living with more efficient and equitable urban services, delivered through the Internet and its associated technologies. Behind this unprecedented phenomenon is the gigantic and diverse "Internet+ Urban Services" ecosystem—comprising Internet technology firms and service providers—supported by the central government and well received by the people. This ecosystem built on integrated platforms continues to nurture innovation and deliver greater convenience to Chinese residents.



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In most Chinese cities, retail and F&B outlets have fully integrated Alipay and WeChat Pay solutions for more efficient ordering and checking out.



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The Mobile-Internet Boom

With a large domestic market and eager entrepreneurs, China is now the world leader in e-commerce and fintech. Total e-commerce transactions reached 22.97 trillion yuan (\$\$4.8 trillion) in 2016. Mobile payments—dominated by Internet tech firms Alibaba and Tencent—amounted to 150 trillion yuan (\$\$31 trillion) in 2017. In many cities, wallets have been replaced by mobile phones as a necessity.

Thanks to the population's enthusiasm for new technology, apps such as Meituan and WeChat have seen exponential growth.

The latter, boasting popular features such as e-Hong Bao (a digital monetary gift given to show well wishes), attracted almost five million users in the first three months of its release in 2011, and now has one billion Monthly Active Users (MAU).

By providing solutions ranging from e-commerce to artificial intelligence and cloud computing, Tencent and Alibaba have joined Facebook, Google and Amazon among the world's five largest Internet companies. Together, they shape user behaviour—people now eat, shop and connect to everything else on their smartphones.

“(Internet companies)... shape user behaviour— people now eat, shop and connect to everything else on their smartphones.”

The Onset of “Smart” Urban Services

In stark contrast to the proliferating Internet technology scene, urban services in Chinese cities have been known for poor accountability and transparency, inefficiency, red-tape and lacklustre customer service. To certify a document, citizens often had to visit multiple departments, sometimes even resorting to “guanxi” or personal connections to expedite the process. This was made worse by the lack of updated information across departments and limited service capacity.

Marrying urban services with mobile Internet became the way forward. In 2015, the central government started promoting “Internet+”, a concept that seeks to integrate innovative Internet applications with other economic sectors to enhance overall productivity and efficiency. A series of guidelines was released to city governments to optimise and simplify service processes. For example, city governments have been tasked to adopt Internet and digital technologies to improve service quality, while the central government conducts regular progress checks and ensures poor performance is rectified. To create a conducive environment for “Internet+ Urban Services”, the central government provides institutional support, including the upgrading of ICT infrastructure, and the setting of new laws and regulations to protect critical network infrastructure, safeguard government data in commercial collaborations and create a cybersecure environment.

The “Internet+” concept synergises with China’s Smart City agenda, a national urban development plan introduced in 2012. Over

300 cities have been shortlisted as national pilot smart cities, which China defines as cities that harness the Internet of Things, Big Data, Cloud Computing, Geographic Information System and other advanced information technologies. “Internet+ Urban Services” thus presents itself as a viable smart city project for cities to fulfil their Key Performance Indicator (KPI).

Top-Down Meets Bottom-Up

The “Internet+” policy direction has given a strong push to existing bottom-up business initiatives with a smart city emphasis. Since the early 2010s, Tencent-owned WeChat and Alibaba-affiliated Alipay have been integrating fragmented services into their well-established platforms. Today, these platforms support urban services in over 300 Chinese cities, ranging from public safety and traffic management to healthcare, education, housing and public administration.

Wuhan Xiehe Hospital, for example, holds a public account on WeChat with functions that allow users to check doctors’ schedules, make medical appointments and even receive remote diagnoses. This reduces the strain on hospital resources by digitising the time-consuming components of the service process.

Hangzhou, the capital city of Zhejiang Province, has made roughly 50 types of city services available on Alipay. By March 2017, 15 million city service payments were conducted on these integrated service platforms, of which 83% were made on Alipay. Users only need one app to complete virtually every service they require.

01 WeChat payment and other digital payment solutions have significantly enhanced business efficiencies and become widely accepted by businesses in Chinese cities.

“More than ever before, city governments now communicate and engage with residents for public matters through social media.”

With these platforms, service requests such as checking social insurance balance and paying taxes can mostly be performed on the go. Even more complicated processes involving two to three departments such as traffic accident claims—which typically took weeks to complete—can now be completed within 30 minutes of case submission on WeChat.

Service catchment of third-party service platform apps are not bound by city jurisdictions. Travellers and tourists now need not carry multiple public transport fare cards or worry about tedious service processes when they travel between cities: all they need is a mobile phone installed with WeChat or Alipay, which geolocates them and brings services from respective cities to them. Integrated service platforms supported by the large service ecosystem is transforming the traditional service model.

Mobile Social Media for Citizen Engagement

More than ever before, city governments now communicate and engage with residents for public matters through social media. Many agencies have jumped on the bandwagon and created Public Accounts on WeChat. These have become the key source of information for Chinese netizens, with 52% of users receiving regular push notifications of news and notices. By August 2015, over 83,000 WeChat Public Accounts relating to civic matters had been created by government agencies from 31 provinces.



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On Xi'an Traffic Police Department's Public Account, residents can lodge complaints about bad driving behaviour, report traffic incidents and receive updates on the status of their feedback.

“Xinji Publishes”—the official Public Account of Xinji Municipal in Hebei Province with 320,000 followers, around half its population—was used to solicit public feedback on matters such as erecting a sculpture in front of its High Speed Rail Station. Within 12 hours of the announcement, it had gathered over 60,000 views and 640 comments—many of which expressed opposition—from the public. The municipal government eventually cancelled the project and used the funds to improve city greenery and sanitation infrastructure instead.



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“Release the Power”: Let the Market Solve Problems

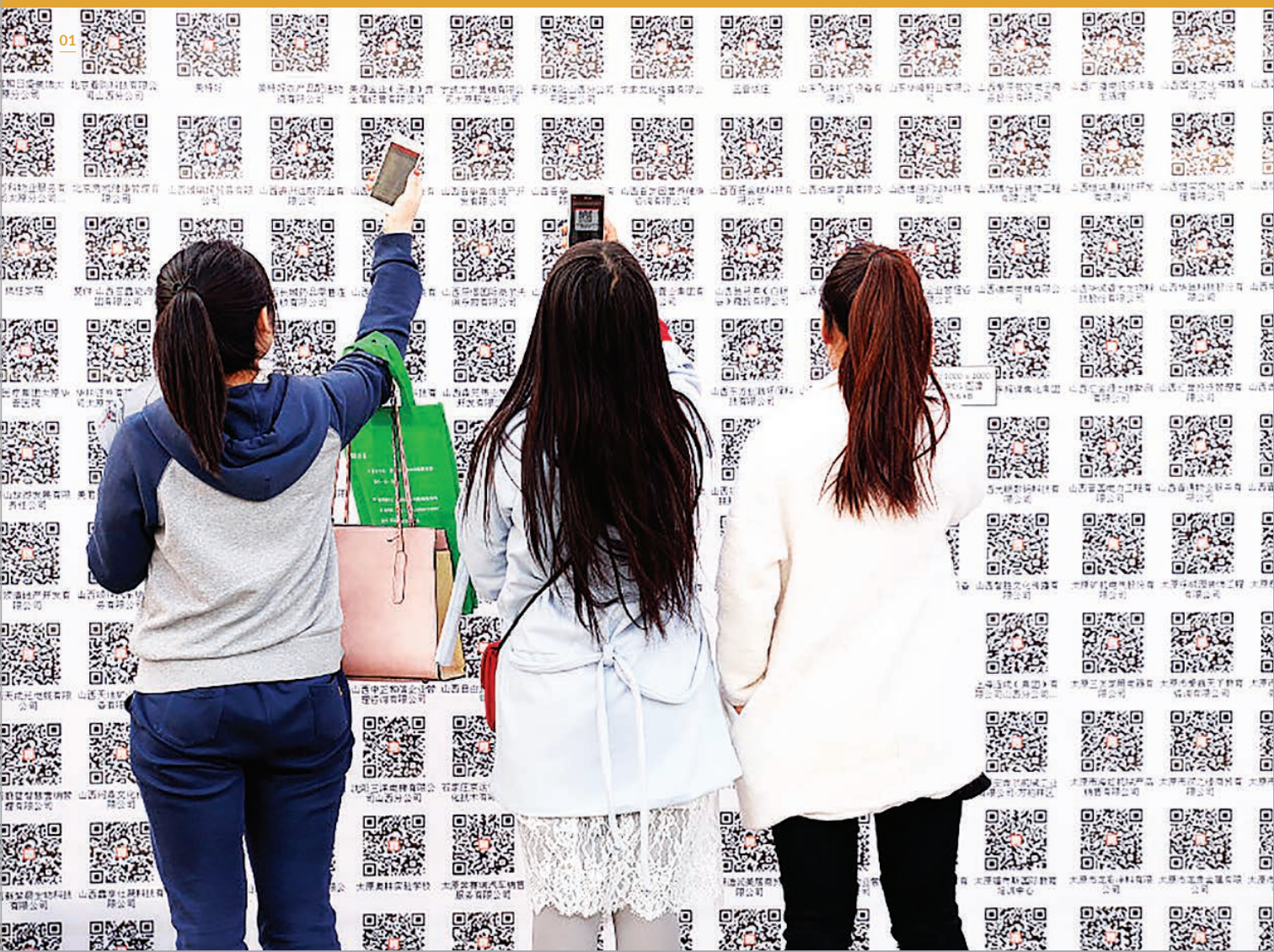
Many Chinese cities have seen deeper and more extensive involvement of Internet technology firms in daily operation. Among Alibaba Cloud's government clients, the Guizhou government cooperated with Alibaba to build the “Guizhou Cloud” platform to integrate and consolidate data across its seven agencies, reducing 51% of IT cost. Alibaba also helped Zhejiang Industry and Commerce Bureau identify businesses with dubious corporate information using data collected from Alibaba's own platforms.

In industries such as healthcare, power is also “released” from the city government to enthusiastic Internet tech firms, which have created innovative service models to address problems. Tencent-backed WeDoctor, a healthcare mobile app, brings over 240,000 doctors in 2,700 hospitals from 30 provinces online to serve its 160 million registered users. Besides facilitating the remote diagnosis of patients through the sharing of medical records, WeDoctor consolidates the fragmented and inefficient Chinese healthcare supply chain by integrating diagnosis, treatment and pharmacies in its operation. It bridges the gap in healthcare demand and supply by precisely matching the specialties of the doctors to the described symptoms of the patients.

01 In museums, the public can scan a WeChat QR code to loan and return audio guides from a vending machine.

02 Tourists scan a QR code to purchase tickets at the Forbidden City, reducing queuing time as an effective crowd control tool.

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Digital Revolution Through Integrated Platforms

China demonstrates that building a large and diverse ecosystem with an open and cooperative mindset sustains the success and drastically increases the scale and resilience of innovations. In expanding their businesses, all-in-one platforms such as Alipay and WeChat adopt greater flexibility in their functionality, attracting service providers to build a large and diverse service agglomeration. This in turn attracts more cities and users to join, building the momentum for an inclusive digital revolution.

In a positive feedback loop, these integrated platforms continue to nurture innovation, as residents and service providers communicate and interact on the platforms. New service models that ride on these platforms emerge to address social issues.

Strong public-private collaboration is essential, as witnessed in the close cooperation between Internet firms, government and citizens. In China's case, such collaboration comes with a mandate from the central government, and thrives as the private sector actively develops solutions to create greater convenience and smoother service delivery for citizens.

China's success in e-payment and mobile platforms for urban services, however, is not without its shortcomings. For instance, while the creation of Public Accounts shows the willingness of city governments to work closely with citizens to improve service efficiency and accountability, many accounts were only created to meet performance targets and lack regular updates or follow-up processes for the feedback received.

For digitisation to be effective, existing bureaucratic structures and work



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processes also need to be restructured. Digitisation makes the alignment and integration of workstreams across departments imperative, while social media requires a different communication and public engagement strategy.

Concerns on data privacy and legal loopholes exploited by these innovative service models have also been growing. The 2018 Facebook privacy scandal in the US shed light on how legislative systems are inadequately equipped to regulate new modes of businesses that use online platforms as infrastructure and data as currency. While the Internet facilitates efficient service delivery, greater clarity on the roles and responsibilities and stronger enforcement are required to safeguard consumers' interests. How Chinese cities approach these issues remains to be seen, but one thing is clear: it takes more than technology to make the digital revolution work. 

01 At a career fair in Shanxi, job seekers scan QR codes of companies and organisations to submit their resumes using WeChat.

02 Commuters pay for bus rides by scanning their personalised Alipay QR code at the payment device, which deducts the bus fare from their Alipay account.