

Asia Spotlight: Digital Economy

A regional perspective on the economic and business transformation powered by digitization



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The new digital economy in China and Asia-Pacific

Asia Pacific is home to 60% of the global population¹ and, by 2040, Asia may account for more than half of global GDP.² Asia Pacific has become the most advanced digital economy in the world.³ As just one example, Asia already drives 61% of all new mobile subscriptions, compared to 25% in EMEA and just 14% in the US.⁴

Pervasive technology adoption has been a major contributor to Asia's differentiated civic and social response to the COVID-19 pandemic.⁵ Digital technologies have enabled track-trace-test quarantine cycles, enhanced healthcare capacity, facilitated transparent and timely communication to the public and enabled working from home to sustain economic activity.⁶ Moreover, technologies have assisted the rapid digitization of products and services and assisted companies to effectively safeguard and redeploy labour.⁷

The COVID-19 pandemic has forced companies in Asia-Pacific to experiment and adapt and consumers/clients in the region are leapfrogging technologies and adoption pathways.⁸



In China, Alibaba's enterprisescale communications platform DingTalk exhibited a 1,446% rise year-on-year in downloads, and there were more than 11 million financial and non-financial transactions in the first two weeks of Ping An's "do it at home" app.9 There was a 708% rise in sales of food- and health-related items from high-end stores through South Korean online retailer WeMakePrice.10

- 1 https://www.warc.com/newsandopinion/news/three-consumer-trends-driving-change-in-asia-pacific/43373
- 2 https://www.mckinsey.com/featured-insights/asia-pacific/the-future-of-asia-asian-flows-and-networks-are-defining-the-next-phase-of-globalization
- 3 https://www.warc.com/newsandopinion/news/three-consumer-trends-driving-change-in-asia-pacific/43373
- 4 https://www.campaignasia.com/article/from-mobile-video-to-commerce-facebooks-2020-social-mediatrends/456176
- 5 https://www.mckinsey.com/featured-insights/asia-pacific/how-technology-is-safeguarding-health-and-livelihoods-in-asia# See also "Post-Pandemic Reflections: Disruptive Technology An assessment of emerging risks and opportunities", MSCI June 2020 and "Post-Pandemic Reflections: Smart Cities COVID-19 and its potential impact on the new ecosystem", MSCI June 2020
- 6 ibi
- 7 ibid
- 3 "Technology leapfrogging" refers to the adoption of advanced or state-of-the-art technology in an application area where immediate prior technology has not been adopted.
- 9 ibid
- 10 ibid

Seven digital____technologies in focus

Digital Payments

Digital payments are growing fastest across China and Asia Pacific. The transaction value in the digital payments market in Asia is projected to grow to USD 4,490,452 million by 2024, from USD 1,283,552 million in 2017.11 The highest aggregate transaction value in digital payments globally is in China (USD 1,920,536 million in 2020 – three-quarters of the global total). 12 Almost three out of every four of China's e-commerce transactions are carried out on a mobile device, generating USD 873.3 billion in sales. 13 The total transaction value in China is expected to show an annual growth rate (CAGR 2020-2024) of 16.4%, with a projected total amount of 3,529,576 million USD by 2024.14

Digital payments are increasingly offered by non-bank technology firms, attracted by Southeast Asia's combination of high mobile penetration rates and significant un- or underbanked populations. ¹⁵ Digital payments growth is supported by the expansion in the range of ecommerce-enabled wearables as well as the falling cost of the incorporation of payments technology and payment capability into such devices. ¹⁶

A Mastercard survey and study suggests that a large majority of consumers in China and Asia-Pacific will maintain their shift to contactless payments that was fuelled by the Covid-19 pandemic (including 71% of consumers in Australia, 77% in India, 73% in China and 62% in Japan). In Asia-Pacific overall, 46% of consumers report that they plan to use cash less often: 43% in China, 52% in Australia, 49% in India and 41% in Japan. In Indonesia, digital transactions rose by 102.5% year-on-year in the first four months of 2020.

However, the lack as yet of a unified standard may create hurdles for long-term scaling of digital retail payments.²⁰ In Japan, for instance, there are more than 10 payment services, each one using its own QR code standard.²¹ Fragmented digital retail payment ecosystems can also confuse consumers, making market penetration growth more challenging.²²

- 11 https://www.statista.com/outlook/296/101/digital-payments/asia
- 12 ibid
- 13 https://www.jpmorgan.com/merchant-services/insights/reports/china
- 14 https://www.statista.com/outlook/296/117/digital-payments/china
- 15 https://www2.deloitte.com/sg/en/pages/financial-services/articles/future-of-digital-payments.html
- 16 https://techwireasia.com/2019/11/how-is-mastercard-preparing-asia-pacific-for-the-era-of-digital-payments/
- 17 https://newsroom.mastercard.com/asia-pacific/press-releases/in-stores-or-on-the-couch-asia-pacific-consumers-shift-rapidly-to-digital-commerce-and-show-no-signs-of-turning-back-mastercard-study/
- 18 ibio
- 19 https://oxfordbusinessgroup.com/news/does-cash-have-future-after-covid-19
- 20 https://www.zdnet.com/article/three-hurdles-to-address-before-digital-retail-payments-can-scale-across-asia-pacific
- 21 ibid
- 22 ibid



Robotics

Factors including an aging population and shortages of healthcare workers, are boosting demand for assistive technology robots in the Asia-Pacific region.²³ China has developed into the world's largest market for industrial robotics and the fastest-growing market worldwide.²⁴ The robotics market in China is forecasted to grow at a CAGR of 26.2% to 103.6 billion USD in 2023.²⁵

The COVID-19 outbreak is expected to fuel the use of robots in healthcare, and to increase operation capacity in labor-intensive verticals especially in the face of unforgiving demographic.²⁶ Robotics can reduce labour costs, increase productivity and help prevent a recurrence of future plant shutdowns by substituting humans.²⁷

Cybersecurity

The race to enhance customer convenience, service effiency and experiences has led to a proliferation of connected devices.²⁸ This in turn has increased the potential risk of cyberattacks for companies and users.²⁹ Cybersecurity has unsurprisingly become a leading concern for Asia-Pacific businesses, with cyber incidents listed among the top three risks that businesses are facing in many countries in the region.³⁰





- 23 https://www.globenewswire.com/news-release/2020/02/26/1990601/0/en/The-global-service-robotics-market-is-valued-at-USD-11-48-billion-in-2018-and-is-expected-to-reach-USD-50-90-billion-by-2024-at-a-CAGR-of-25-34-over-the-forecast-period-of-2019.
- 24 https://www.cnbc.com/2020/03/02/the-rush-to-deploy-robots-in-china-amid-the-coronavirus-outbreak.html#:~:text=be%20left%20behind.-,China%20has%20become%20the%20world's%20largest%20market%20for%20industrial%20robotics,Federation%20of%20Robotics%20in%20Frankfurt.
- 25 https://www.idc.com/getdoc.jsp?containerId=US44623420
- 26 ihid
- $27 \quad https://www.cnbc.com/2020/03/02/the-rush-to-deploy-robots-in-china-amid-the-coronavirus-outbreak.html \\$
- 28 https://www.prnewswire.com/in/news-releases/frost-amp-sullivan-cybersecurity-market-in-asia-pacific-observes-growth-opportunities-from-digital-transformation-and-sophisticated-cyber-threats-888104827.html
- 29 https://www.reportlinker.com/p05753651/Asia-Pacific-Cybersecurity-Market.html
- 30 https://www.scmp.com/business/companies/article/3046215/cybersecurity-among-leading-concerns-asia-pacific-businesses.

The Asia-Pacific cybersecurity market is expected to grow at an overall compound annual growth rate (CAGR) of 15% and is projected to be worth 46.09 billion USD by 2023.³¹

Moreover, China has introduced new rules that require firms buying networking products and services to perform cybersecurity evaluations for any vulnerabilities that may impact national security.³² The rules may affect purchases of server equipment, mass storage devices, cloud computing services and large-scale databases and could trigger stricter controls over technology that enables consumers to interact in a digital world.³³ Firms may have to switch local operations to Chinese service providers to meet the new rules on the protection of sensitive data.³⁴

The fear of cyberattacks is already causing some delays to digitization in Asia Pacific.³⁵ As many as three in five firms in the Asia Pacific region have delayed some digitization plans due to fear of cyberattacks.³⁶ Lack of sufficient budgets, lack of management support and shortages of resources also hinder cybersecurity.³⁷ Moreover, the end-consumer can be considered vulnerable when about 75% of the Asian population are estimated to lack a proper understanding of cybersecurity.³⁸

- 31 https://www.reportlinker.com/p05753651/Asia-Pacific-Cybersecurity-Market.html
- 32 https://technode.com/2020/04/30/china-to-impose-new-cybersecurity-rules-for-networks/
- 33 Ibid.
- 34 https://global.chinadaily.com.cn/a/202004/28/WS5ea78912a310a8b241152323.html
- 35 https://www.vmware.com/au/company/news/releases/2020/Fear_of_cyberattacks_ delaying_digitalization_in_Asia_Pacific.html
- 36 https://www.vmware.com/au/company/news/releases/2020/Fear_of_cyberattacks_delaying_digitalization_in_Asia_Pacific.html
- 37 https://brandessenceresearch.biz/ICT-and-Media/Asia-to-Pacific-Cybersecurity-Market-2018-to-2023/Summary
- 38 Ibid.



E-commerce

From a cross-border perspective, e-commerce in the Asian market continues to grow rapidly.³⁹ For instance, in Southeast Asia, e-commerce is projected to exceed USD 100 billion by 2025.40 The e-commerce industry across India is estimated to be worth around USD 200 billion in 2027, a steep rise from around USD 39 billion in 2017.41 It is argued that China's middle class is driving e-commerce growth, as an increase in per-capita income is enhancing internet penetration and consumer spending.⁴² Moreover, ecommerce transactions are enabled by wallets like Alipay, WeChat Pay and others that live within the region's "superapps". 43

In China. "live commerce" – the convergence of live streaming and e-commerce – has grown in popularity. In 2019, the live commerce market was worth 440 billion Yuan (USD 63 billion), a 220% increase on 2018.44 About 25% of consumers use live commerce daily, and 71% at least once a week.⁴⁵ Community buying – a location-based approach of selling in bulk to consumers with a limited budget living in close proximity - is also expected to scale, particularly in lower-tier cities.46 In the social commerce field, apps like WeChat are evolving into 'all inclusive', offering taxi and restaurant booking, social commerce, e-wallet, games and more.⁴⁷ China's fresh-food e-commerce market is also expected to continue to consolidate. 48 The COVID-19 pandemic has further fuelled Asia's e-commerce boom.⁴⁹ A recent study highlighted that 30% of people in Australia, 49% in India, 55% in China and 34% in Japan are planning to make more purchases online, while 38% in Australia, 68% in India, 57% in China and 40% in Japan think less in-store shopping is here to stay.⁵⁰ E-commerce is expected to move further into off-price luxury, as luxury firms look to shift excess inventory due to the pandemic.⁵¹ Brands are also expected to focus on leveraging private traffic to engage with shoppers, and in this, WeChat has been a key enabler during the pandemic.⁵²

- 39 https://thepaypers.com/interviews/on-cross-border-transactions-and-cash-payments-in-ecommerce-interview-with-joseph-chan-asiapay-776137
- 40 https://www.strategicdigitalab.com/7-e-commerce-forecasts-asia-pacific-marketers-need-to-know-in-2020/
- 41 https://www.statista.com/statistics/792047/india-e-commerce-market-size/
- 42 https://www.strategicdigitalab.com/7-e-commerce-forecasts-asia-pacific-marketers-need-to-know-in-2020/
- 43 https://thepaypers.com/interviews/on-cross-border-transactions-and-cash-payments-in-ecommerce-interview-with-joseph-chan-asiapay-776137
- 44 https://theconversation.com/how-china-is-revolutionising-e-commerce-with-an-injection-of-entertainment-131728
- 45 Ihid
- 46 https://technode.com/2020/07/28/the-battle-for-chinas-community-group-buying-market/
- 47 https://www.monigroup.com/article/asia-ecommerce-trends-watch-2020
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- 49 https://newsroom.mastercard.com/asia-pacific/press-releases/in-stores-or-on-the-couch-asia-pacific-consumers-shift-rapidly-to-digital-commerce-and-show-no-signs-of-turning-back-mastercard-study/
- 50 https://newsroom.mastercard.com/asia-pacific/press-releases/in-stores-or-on-the-couch-asia-pacific-consumers-shift-rapidly-to-digital-commerce-and-show-no-signs-of-turning-back-mastercard-study/
- 51 https://www.voguebusiness.com/companies/luxury-brands-gear-inventory-louis-vuitton-prada
- 52 https://www.prnewswire.co.uk/news-releases/wechat-retail-growth-plan-drives-digital-transformation-861360378.html



Sharing Economy

Before the COVID-19 pandemic, Chinese consumers were embracing the sharing economy more than consumers in many Western countries.⁵³ In a recent survey, for instance, 24% of Chinese respondents said that they would rent their cars, compared to 15% of consumers in the US. 18% of Chinese respondents would also rent their bicycles, compared to 5% of consumers in the US.⁵⁴

However, China's sharing economy in the Covid-19 era is challenged in parts.⁵⁵ The pandemic has negatively impacted fields including shared accommodation, transportation and housekeeping.⁵⁶ Yet, fields such as shared healthcare, online education and food delivery have seen increases in transaction and traffic volume.⁵⁷

China's sharing economy in aggregate may be recover slowly, due to viral transmission anxiety, as well as disrupted operations.⁵⁸ During the pandemic, the growth rate of China's sharing economy is likely to decline around 8%-10% in 2020, but has been projected to catch up again in the next two years.⁵⁹

Some sharing economy firms have been making strong efforts to ease customers' anxieties. For instance, Korea's car-sharing SOCAR, has been fumigating cars up to twice a week and focusing on effectively managing its cars' operations to avoid traffic paths of confirmed patients. ⁶⁰ SOCAR usage this year remains at a similar level to last year. ⁶¹ In China, while traffic has returned, some workers are still staying at home and self-isolating. ⁶² New safety regulations are also costly and time-consuming, forcing many sharing economy firms to delay opening or extending their operations. ⁶³

Social Media

In Q1 of 2020, 85% of respondents in a Southeast Asia study said that they have tried new digital apps.⁶⁴ Social media apps, in particular, have seen the greatest increase in first-time usage.⁶⁵ One of the fastest-growing markets for social media usage is the Phillipines, with an increase of over 8.6% between April 2019 and January 2020.⁶⁶

7 of the top 10 countries forecasted for Twitter user growth are in Asia-Pacific.⁶⁷ By 2023, 124.6 million Twitter users are predicted in Asia Pacific.⁶⁸ A similar regional user growth trend is seen for Facebook and, to some extent, Instagram.⁶⁹

Asia Pacific's share of global social advertising spend is expected to increase from 30% in 2018 to 35% in 2023.⁷⁰ Video advertising spending in the region is forecasted to increase from USD 21.3 billion in 2018 to USD 53.7 billion in 2023, at a CAGR of 20.3%, and video share in digital marketing in the region is expected to rise from 25% in 2018 to 38% in 2023.⁷¹

- 53 https://www.statista.com/chart/18327/openness-to-sharing-economysurvey/
- 54 Ibi
- 55 https://jingdaily.com/chinas-sharing-economy-is-in-trouble/
- 56 http://global.chinadaily.com.cn/a/202003/04/ WS5e5f56baa31012821727c46d.html
- 57 Ibid
- 58 https://jingdaily.com/chinas-sharing-economy-is-in-trouble/
- 59 https://global.chinadaily.com.cn/a/202003/04/ WS5e5f56baa31012821727c46d.html
- 60 https://www.koreatimes.co.kr/www/biz/2020/04/175_288613.html
- 61 Ibid.
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- 64 https://techwireasia.com/2020/07/will-social-commerce-in-indonesiarival-chinas-shoppertainment/
- 65 Ibid.
- 66 https://scandasia.com/how-mcommerce-is-shaping-the-onlinecommerce-in-asia
- 67 https://www.emarketer.com/content/asia-pacific-drives-twitter-growth-as-other-regions-plateau
- 68 Ibid.
- 69 Ibid.
- 70 https://infotechlead.com/digital/social-advertising-and-video-spending-trends-in-asia-pacific-59693
- 71 Ibid.





Cloud Computing

Multi-cloud computing is predicted to grow strongly, as companies strive to keep up with digital disruption.⁷³ In Asia Pacific ex-Japan, more than 65% of firms are predicted to use multiple cloud services and platforms in 2021.⁷⁴ Alibaba is the leading cloud service provider in Asia Pacific, with a market share of 19.6%.⁷⁵

In China, cloud computing adoption is increasing. In the first quarter of 2020, China's cloud infrastructure spending in the first quarter of 2020 increased 67% year on year to USD 3.9 billion and accounted for 12.5% of the world total, compared to 10% a year ago.⁷⁶ By 2023, over 60% of domestic firms and government agencies are projected to rely on cloud computing and China's cloud computing market is expected to exceed 300 billion yuan (USD 42.3 billion)⁷⁷ with intense competition amongst local cloud providers such as Alibaba Cloud, Tencent Cloud and Baidu Cloud.⁷⁸

Singapore has been highlighted as the most 'cloud-ready' country in Asia Pacific, with a cloud readiness score of 76.6 out of 100.79 High quality broadband services, enhanced cybersecurity and business sophistication are contributing to this high score.80

In Japan, support from the government, increased ICT infrastructure, and adoption of cloud services by SMEs are also driving the growth of cloud computing.⁸¹



China, Japan and India will continue to drive growth in the cloud computing market in Asia Pacific, and are projected to account for two thirds of the overall region's cloud computing market in 2023.⁸²

A digital region

The growth of the digital economy is a global phenomenon but it is in Asia-Paciifc, and in China in particular, that the trend is most advanced with the greatest adoption of mobile payments, the highest penetration of aggregator apps and the strongest policy and demographic support. The intense growth and competition is leading to rapid experimentation with new business models and new forms of e-commerce that will serve as a guide for other economies seeking to catch up.

- 73 https://www.digiconasia.net/perspectives/three-cloud-trends-that-will-define-2020
- 74 Ibid.
- 75 https://www.technologymagazine.com/cloud-computing/alibaba-cloud-gains-top-market-share-asia-pacific-iaas-and-ius-according-gartner
- 76 https://www.scmp.com/tech/big-tech/article/3089225/cloud-computing-adoption-accelerates-china-economy-recovers
- $77 \quad https://www.sixthtone.com/news/1004673/chinas-cloud-computing-market-to-reach-\%2442-billion-by-2023$
- 78 https://www.scmp.com/tech/big-tech/article/3027638/alibaba-maintains-leads-chinas-hot-cloud-computing-market-tencent-and
- 79 https://theaseanpost.com/article/singapore-leads-cloud-tech
- 30 Ibid.
- 81 https://the-european.eu/story-19064/china-to-account-for-one-third-of-apac-cloud-computing-market-by-2023.html
- 82 Ibid.

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His research focuses on organisational ambidexterity: how companies can excel at both incremental and radical innovation.



Contact us

clientservice@msci.com

AMERICA	4S

Americas 1 888 588 4567 * Atlanta + 1 404 551 3212 **Boston** + 1 617 532 0920 Chicago + 1 312 675 0545 Monterrey + 52 81 1253 4020 **New York** + 1 212 804 3901 San Francisco + 1 415 836 8800 São Paulo + 55 11 3706 1360 Toronto + 1 416 628 1007

EUROPE, MIDDLE EAST & AFRICA

Cape Town + 27 21 673 0100+
Frankfurt 49 69 133 859 00
Geneva + 41 22 817 9777
London + 44 20 7618 2222
Milan + 39 02 5849 0415
Paris 0800 91 59 17 *

ASIA PACIFIC

China North 10800 852 1032 * China South 10800 152 1032 * Hong Kong +852 2844 9333 Mumbai +91 22 6784 9160 Seoul 00798 8521 3392 * Singapore 800 852 3749 * Sydney +61 2 9033 9333 Taipei 008 0112 7513 * Thailand 0018 0015 6207 7181 * Tokyo +81352901555

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