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MODULE 1 UNIT 1
The online-payment revolution

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Learning outcomes:

LO1: Explain how FinTech startups are revolutionizing payment methods and undermining traditional mechanisms for the individual and companies.

LO2: Determine how FinTech corporations can extract people from the traditional currency regime.

1. Introduction

For many, the melding of technology and finance, which has disrupted the financial services industry, can trace its beginnings to the revolution in payment processes. This has created what is commonly referred to as Financial Technology, or simply FinTech. The companies that have been at the forefront of this disruption have successfully utilized a variety of technological innovations, such as the rise of the internet, the ubiquity of smartphones, and the improvement in computing capacity to collect and process massive amounts of data.

The rapid expansion of the Chinese economy and incredible alleviation of poverty has placed China in the vanguard of many FinTech revolutions that are seen today (Zhai, 2018). Section 3 and 4 of this casebook closely examines how Ant Financial, the financial arm of the Chinese e-commerce company Alibaba, has successfully positioned itself as the largest organization within the FinTech industry. Additionally, the section explores how Ant Financial's innovation and strategies have evolved, and what possible outcomes there could be for the company's future.

Similarly, startups and established players alike have sought to disrupt the financial services industry by improving the speed at which payments are processed and at lower costs compared to traditionally offered financial services. Section 5 of this casebook explores how Equity Bank, an established bank in sub-Saharan Africa, has sought to enter the online payment arena by offering mobile payment systems. It also examines how this initiative has grown, what challenges has been brought about by that growth, and how the company's success has encouraged it to seek new verticals for growth.

The massive changes brought about by the payment processing revolution have already dramatically altered the way that millions of people interact with companies. It is important to consider how these companies are changing the world of finance, and what this could mean for individuals, startups, and traditional financial institutions.

2. The payment revolution in China

China has emerged as a global leader on many fronts of the FinTech revolution. This has been attributed to the rapid growth in the country's economy, which has lifted millions of people out of poverty over the last 30 years. This massive expansion in the Chinese consumer base left a void in the banking system that has been filled by innovative technology companies providing solutions to these new consumers (Zhai, 2018). Figure 1 illustrates how China's rapid development led to a large, underserved consumer base by 2018, particularly in comparison to the American financial services industry.

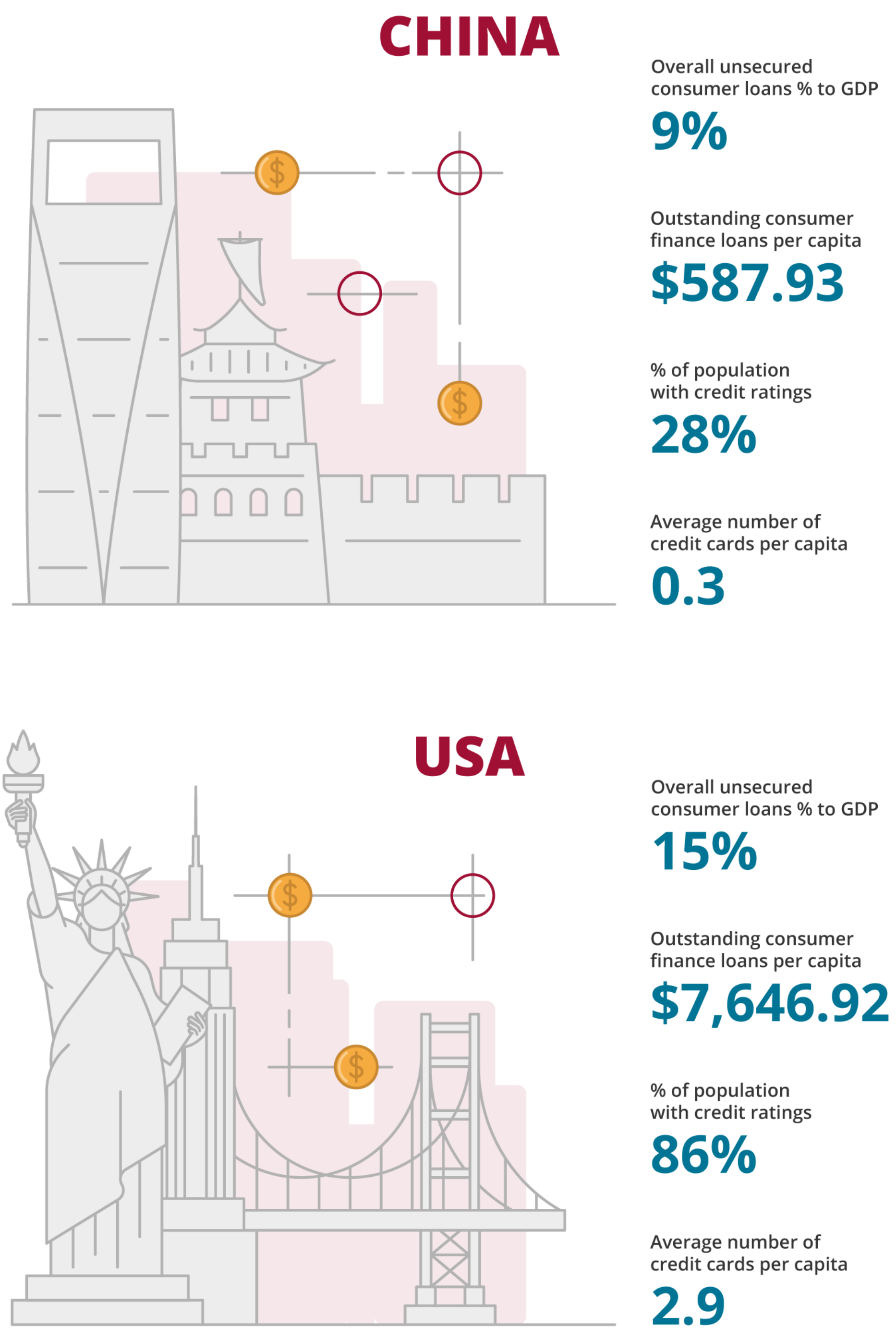

Figure 1: Financial market penetration – USA vs. China. (Source: Zeng, 2018)

In China, the use of peer-to-peer payments, non-bank money transfers and in-store payments among consumers is the most prevalent, with an adoption rate of 95% (Adoption Index, 2019). Figure 2 illustrates the different divisions in China's FinTech sector, which was valued at US$1.8 trillion in 2015. This shows that the online payment sector dominates in comparison to other offerings such as wealth management and financing, contributing 89.4% of the total market size. The online payments industry in China grew substantially with a valuation of US$7.6 trillion in 2020 (Wang, 2020). Its FinTech market size is further anticipated to reach US$85.7 billion in 2022.

China's FinTech industry has successfully used its technological advantages to create high-functioning and easy-to-access financial services that bypass some traditional financial institutions. China is also on the verge of becoming the first totally cashless society, with immense potential in the development of online wealth management. Blockchain is also becoming a priority for China, as they increase their SME lending, risk management, operational efficiency and the introduction of the digital yuan (McGregor, 2021).

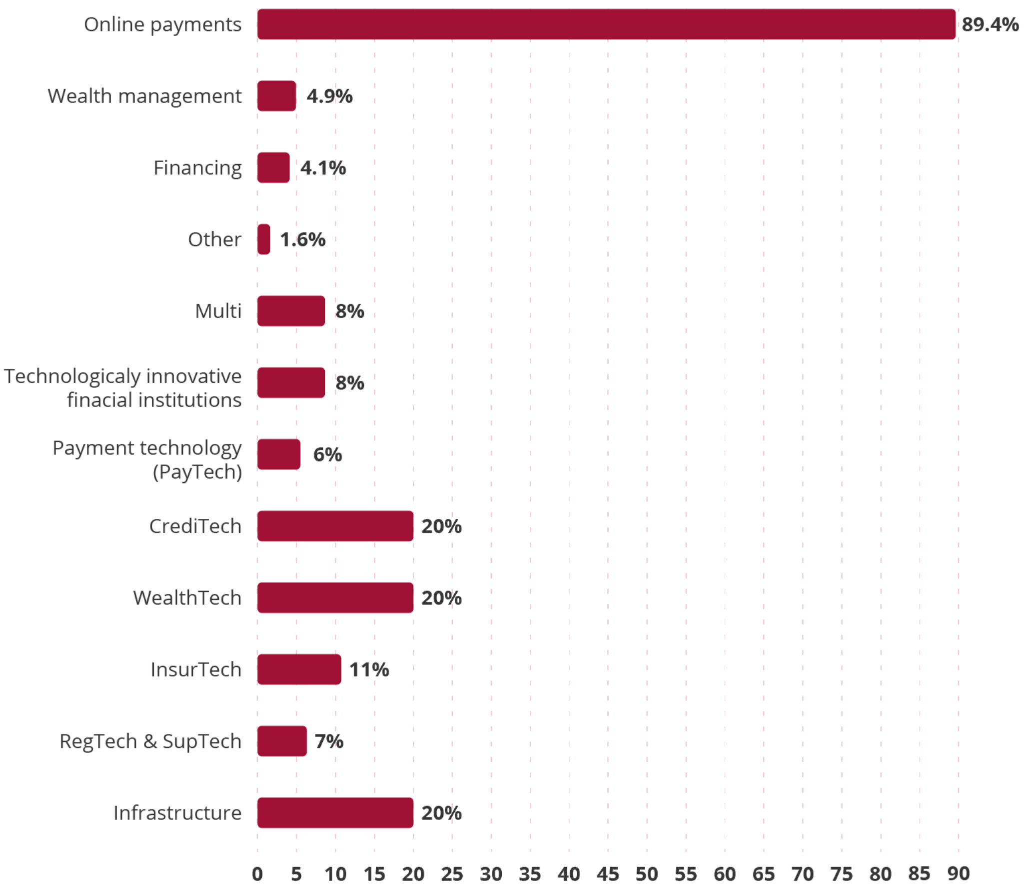

Figure 2: The divisions within China's FinTech sector. (Adapted from: Ngai, Qu & Zhou, 2016; KPMG, 2020)

2.1 FinTech adoption rates among small to medium sized enterprises

FinTech adoption rates are moving beyond consumers to include small to medium sized enterprises (SMEs). China's FinTech advantage is built on the underserved nature of its population, which has high rates of technological adoption due to the leapfrogging it has undergone through its rapid industrialization process. According to the Global FinTech adoption index (2019), China is leading the way with the highest rates of FinTech adoption among SMEs, followed by the US. Figure 3 illustrates the rate of FinTech adoption among SME's across 5 markets namely; China, US, United Kingdom (UK), South Africa and Mexico.

Figure 3: Small to medium sized enterprise FinTech adoption rates. (Adapted from: Global FinTech adoption Index, 2019).

The use of financial technology by SMEs presents far-reaching opportunities for the growth of these businesses. Historically, SMEs lacked access to financial services with many banks offering services to more established businesses (Rodstrom, 2020). SMEs have also battled with the type of products and services provided by traditional financial institutions. Some of the challenges sighted by SMEs are poor product fit, complex customer journeys and minimal access to funding that is often bogged down by complex and lengthy processes (FinTech, 2020).

However, as a result of FinTech, SMEs have access to alternative banking solutions and financial management. This includes access to digital banking, digital lending, increased personalization, omni-channel banking and data sharing (Keary, 2020). Figure 4 illustrates the use of four different FinTech solutions adopted by SMEs across five markets. These solutions are ranked based on their functionality and features.

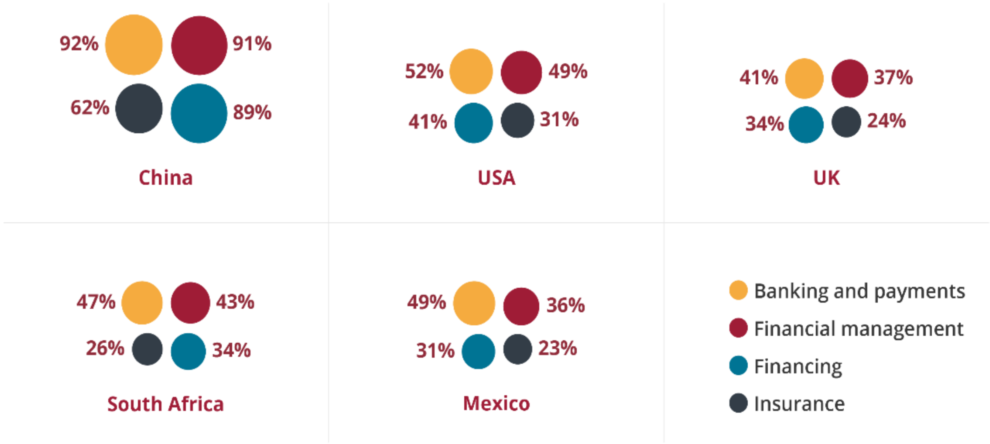

Figure 4: FinTech solutions and services used by SMEs. (Adapted from: Global FinTech Adoption Index, 2019).

SMEs in emerging markets commonly use banking and payment services. China is an example of an emerging market with high users of banking and payment services as seen by its 92% adoption rate. The potential for disruption in emerging markets such as China, is much higher because there is no incumbent in many cases to compete for financial services.

Explore further:

New and upcoming digital technologies are enabling new business models and ways of banking, disrupting traditional enterprises. This affects emerging markets and developing economies (EMDEs) and enables new business models to come to the fore. Read about these next gen FinTech models that are bridging the small business credit gap and consider the applications of this type of technology for both small businesses and emerging economies.

3. Online payment providers in China

The scope and size of China's FinTech market is impressive. Being mindful of this, it is perhaps unsurprising that the world's largest FinTech firm is located there – the previously mentioned Ant Financial. Moreover, it is the size and reach of Alibaba and Ant Financial that are perhaps their most impressive distinguishing features, providing an enormous variety of services to their customers. In 2019, Alibaba's Ant Financial had over 860 million active consumers globally. Their annual profit in 2019 was US$2.6 billion and their proposed IPO value in 2020 was US$30 billion. In 2020, their active monthly AliPay users were 711 million, with a total of US$17 trillion in total payments processed (Guest, 2020). They aim to increase their global reach by serving 1 billion customers and exceeding "$1.4 trillion in annual gross merchandise volume by 2024" (Brennan, 2019). Figure 5 illustrates the growth of Ant Financial in China's mobile payments market in comparison to other FinTech platforms in China.

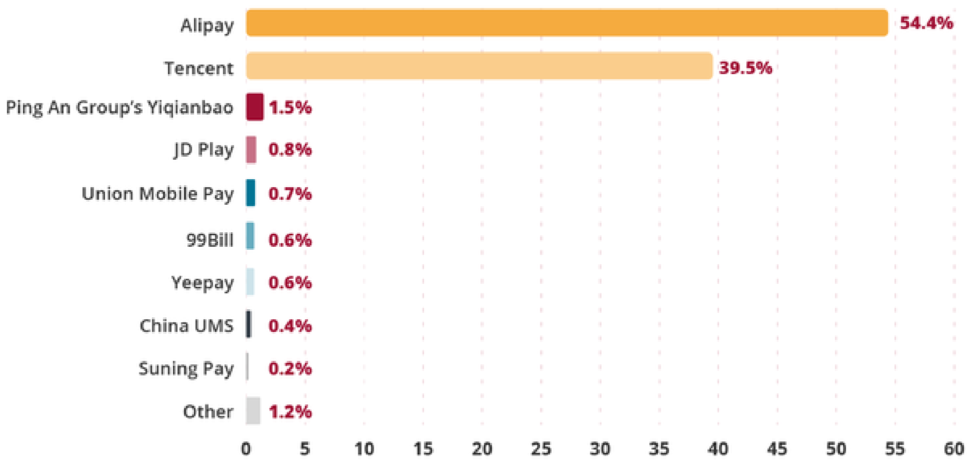

Figure 5: Market share of payment providers in China. (Source: China Banking News, 2019).

As shown in Figure 5, Alibaba's Ant Financial is the leading financial services provider in the Chinese market and has a mobile payment market share of 54.4%, with the second largest FinTech firm – Tencent (which is not purely a FinTech firm) – holding a market share of 39.5%. These two FinTech giants leave little room for other payment platforms in China and dominate the payment and financial services. It's important to note that Alibaba and Tencent offer a variety of different financial and technological services both online and offline. Some of these services are directly available in their apps (Alipay and WeChat Pay) which allow users to use services such as money transfers, credit card payments, wealth management, micro loans and insurance. Its users are also allowed to use a number of add-on services such as fitness tracking and healthy lifestyle tracking, healthcare services and bookkeeping management (Mobile payment report, n.d).

In the following section, the business strategies and challenges faced by Ant Financial are addressed through discussions with the course conveners.

4. Ant Financial's role in revolutionizing payment processing

To help you understand the role of Ant Financial in leading the online payment revolution, the following videos introduce Professor Lauren Cohen, who outlines what services the company offers. Professor Cohen discusses how Ant Financial has managed to position itself as a global leader in the FinTech industry, examines some of its competitors, and discusses the proposed growth strategies of the company.

Video 1: How Ant Financial has contributed to the payment processing revolution. (Access this casebook on the Online Campus to engage with this video).

Video 2: Ant Financial's strategy for growth, and its business prospects. (Access this casebook on the Online Campus to engage with this video).

Consider Ant Financial's strategies for growth and engage with the poll that follows.

Poll 1: Which of these strategies do you believe will be most effective for Ant Financial's future growth? (Access this casebook on the Online Campus to engage with this poll and view your peers responses).

Which of these strategies do you believe will be the most effective for Ant Financial's future growth?
Financing small businesses
Expansion into rural China
International expansion

4.1 The future of FinTech in China

Since 2019, the People's Republic of China (PRC) has continued to take steps to regulate FinTech through the adoption and implementation of national standards. The People's Bank of China (PBOC), which is the PRC's central bank, along with governmental support, has sought to guide the adoption of FinTech in the country through the implementation of three-year plans (Jia, 2019). The 2019–2021 plan not only aimed to strengthen FinTech regulation and compliance, but also to expand these regulations to six new cities as part of a FinTech "regulatory sandbox" (Jia, 2019).

A regulatory sandbox is a structure created for experimentation in a contained environment for new FinTech innovators and startups (CGAP, 2019). The goal of the sandbox was to have cities, starting with Beijing, become hubs of innovation and financial regulation. Although the increased regulation around FinTech adoption in China was expected to provide the safe testing of new and innovative technologies, products and services, the use of sandboxes would also greatly minimize the risk of fraud and further strengthen consumer protection.

In the early 2020s, the PRC began to clamp down on large FinTech conglomerates, such as Ant, to manage their systemic financial risk to the broader Chinese financial system. By 2018, Ant had become a major supplier of credit to consumers and small businesses who were formerly underserved by the traditional banking sector (Calhoun, 2020). Using its analytical technology, Ant would qualify users for an unsecured loan, manage the user's loan application process, collect a service fee and hand the loan to an established bank who would carry the liability (Calhoun 2020). The credit division became over 40% of Ant's revenue by the first half of 2020 with an estimated 500 million customers (Calhoun, 2020).

However, in September 2020, the PBOC issued a new regulation that required loan originators to fund and retain 30% of the loans they originated and to cap loans at the lower end of RMB300,000 (US$44,843) or a third of the user's annual salary (Sender et al., 2020). This would require Ant to maintain approximately US$20 billion in capital reserves as collateral for its loan's portfolio (Kynge, Sender & Yu, 2020).

In October 2020, Ant Founder and Chairman Jack Ma criticized China's regulatory authority, suggesting that the establishment had a "pawnshop mentality" that was perceived by regulators as a "punch in their faces" (Zhai, Zhu & Leng, 2020). As a result, regulators suspended Ant's expected US$37 billion IPO indefinitely, and the company entered a lengthy restructuring period to comply with regulations to become a financial holding company (Reuters, 2022).

Further regulatory inquiries led to the merger of Ant's consumer credit and microloan services, Huabei and Jiebei, with a Chongqing government consumer credit vehicle and the shuttering of Ant's health care crowdfunding platform, Xianghubao, in December 2021 (Ng, 2022; Bloomberg, 2021). Ant's parent company, Alibaba, faced similar regulatory challenges, including an April 2021 US$2.8 billion antitrust fine for punishing merchants on its e-commerce platform that sought to also sell their goods on rival platforms (Zhai, 2021). Combined with falling revenues due to the COVID-19 economic slowdown, Alibaba and Ant's roles in China's evolving digital economy, their future profitability, and the prospect of a future IPO all remain uncertain.

In its Fintech Development Plan for 2022 to 2025, the PBOC reaffirmed its prioritization of FinTech through four general principles: Data and digitally driven, smart and people-oriented, green and low-carbon and fair and inclusive (Liu & Cheng, 2022). Of particular focus was the challenge of the digital divide between unequally involved regions and demographic groups and the Matthew effect, an aspect of network theory where, over time, the strong become stronger and the weaker become weaker (Zhou, 2022).

In the context of new data protection and privacy laws that require all companies conducting business in the PRC – including technology companies – to protect a user's personal data (Burgess, 2021), the initiative also seeks to balance privacy-preserving measures with a need for interoperability between market players to increase competitiveness and unleash data as a factor of production for all areas of China's economy. Overall, government support for FinTech's development and its oversight is expected to continue for the foreseeable future. The next section will explore the disruption of Equity Bank's mobile banking services and the awareness and usage of mobile money and payment services.

5. Equity Bank's disruption of Sub-Saharan Africa's mobile money payment system

In October 2014, Equity Bank partnered with the Airtel Kenya network to launch Equitel, the first mobile virtual network operator (MVNO) in Africa to offer a full suite of banking services. Like Ant Financial, Equitel branched out beyond the previous industry norms to expand its service offerings and inclusivity. After tremendous success in Kenya's mobile money market, Equity Bank began to consider what was next for its mobile money platform. This section examines mobile money payment systems, how Equity Bank is looking to change these systems and the service offerings the bank is using to grow its business.

5.1 Mobile money payment systems

A mobile money payment system permits the transfer of money between cell phone devices. Typically, this technology functions via SIM cards that can be used on any phone with internet access. Consequently, users can send or receive money, check their balance and withdraw cash without using a formal bank intermediary. Prior to the rise of mobile money in Kenya, for example, unbanked populations often relied on informal processes, such as sending physical cash to their loved ones via buses or *matatus* (Parekh & Hare 2020).

Figure 6 indicates the percentage of overall financial access in Kenya from 2006–2021. As shown in this graph, formal access to financial services has increased despite the impacts of COVID -19 in 2020. However, the exclusion to financial services has increased slightly from 11% to 12% in 2021, and the informal access to financial services has been decreasing with its most significant decrease from 2006 and 2013.

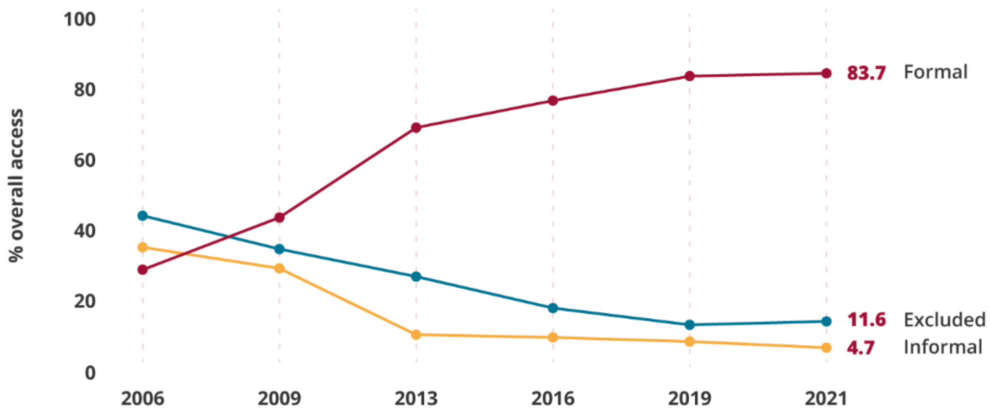

Figure 6: Kenya's financial access. (Adapted from: Central Bank, 2021)

Figure 7 visualizes those who are financially excluded by their demographic in the year 2021. The youth (below 25 years of age), the poorest and rural residential groups show the highest levels of exclusion.

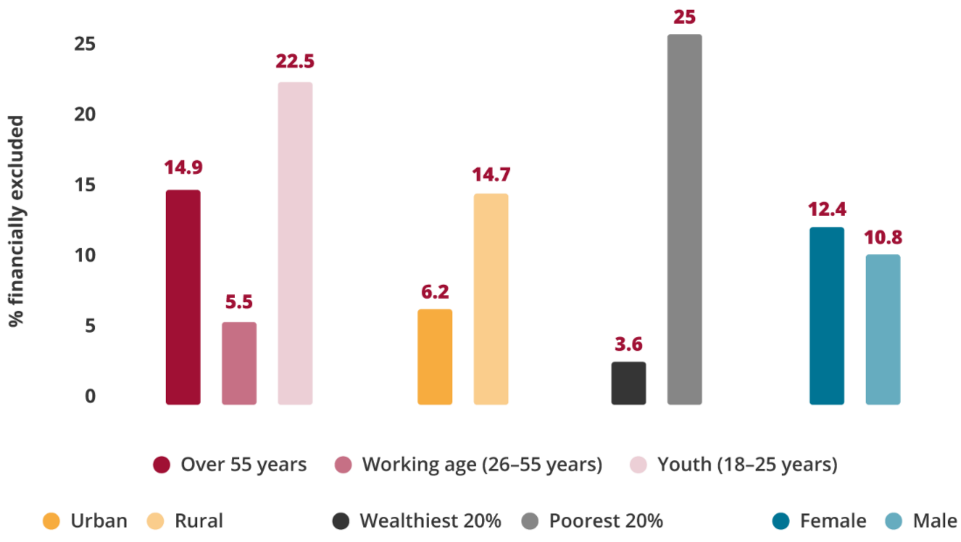

Figure 7: Percentage of Kenya's financially excluded groups (Adapted from: Central Bank, 2021).

Prior to Equity Bank's MVNO offerings, the telecommunications giant Safaricom had launched its M-Pesa money transfer service in 2007. In its name, "M" stood for mobile while "Pesa" translated to "money" in Swahili. It offered limited banking services by combining Safaricom's mobile infrastructure with 110,000 brick-and-mortar agents throughout Kenya, where users could top up their balances in-person. Users would send money via text message and did not need to rely on a stable internet connection to access their funds.

To withdraw funds, M-Pesa users could visit an agent who was a member of a network of existing retail outlets to convert their mobile balance into cash. Since its launch, M-Pesa has been applauded for expanding the access to formal financial services to millions of people, including 48 million users in 2021 (O'Dea 2021). Since 2007, Sub-Saharan Africa's mobile money market reached a volume of US$13 billion monthly transactions across approximately 548.46 million accounts in 2020 (Onukwue 2021).

Figure 8 indicates Kenya's financial trends in usage by provider type.

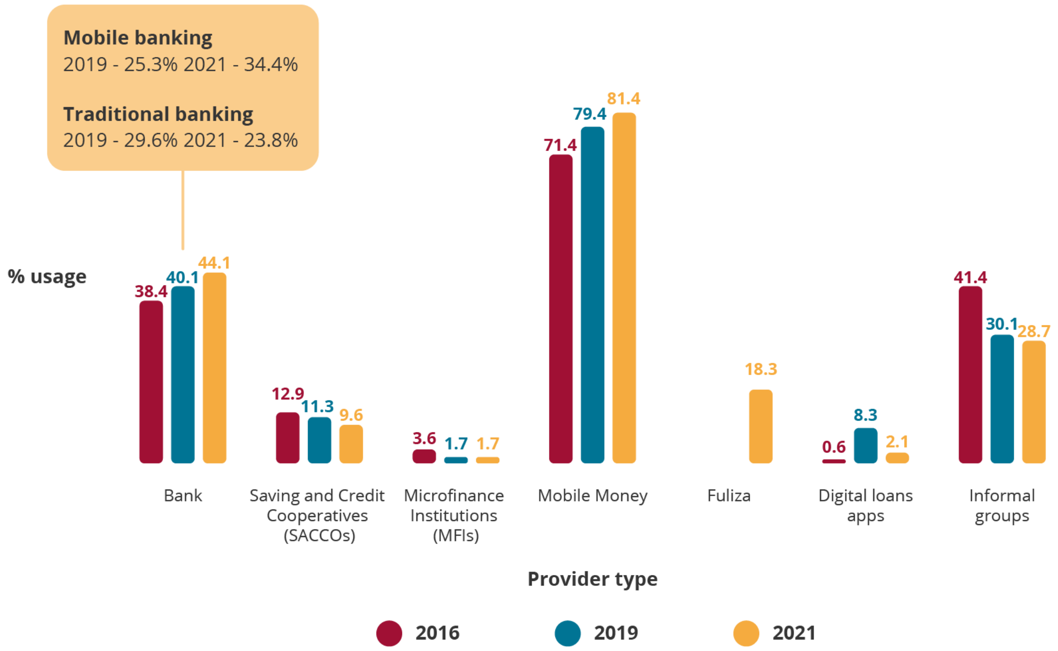

Figure 8: Kenya's trends in usage by provider type. (Adapted from: Central Bank, 2021)

Note:

As shown in Figure 8, M-Pesa is another mobile money provider. Fuliza, also shown in Figure 8 as Mobile Money, is M-Pesa's overdraft facility.

5.2 Enter Equity Bank's Equitel

Equity Bank CEO Dr. James Mwangi pushed the bank to implement new technologies and strategies to serve previously unserved populations, and Equitel continued this commitment through focusing on universality of Equity's financial services. As a banking entity, the MVNO platform gave its users access to a full suite of banking services. These services included loans, insurance packages, credit, savings accounts and a range of traditional financial products that M-Pesa was initially unable to provide in their offerings. Users would attach Equitel's Thin SIM chip to their mobile SIM cards, which enabled them to access Equity's banking interface. To boost the adoption and customer trust in Equitel, it sent agents into the most remote areas of Kenya and focused particularly on promoting Equitel in areas where other banks and telecommunications companies had declined to go.

Explore further:

Watch this video that demonstrates how to send money to an account by using the Equitel Thin SIM chip technology to gain access to the banking interface and perform transactions.

5.3 Equitel's pathways for growth

Equity Bank came to the realization that, despite Equitel being behind Safaricom in its market reach, its fast-paced growth had established them as one of the top mobile money providers in Kenya within their first five years. CEO James Mwangi could see how the bank's current success could be used as a guidebook for future growth tactics, but he was also aware that an unshifting strategy would neglect rapid innovation and exploration, which were the core factors behind Equitel's success. How should he ensure that Equitel's future growth did not stall like many of its competitors?

Mwangi was cautious about allocating Equitel's full resources to competing against Safaricom and other mobile money providers, as this could cost potential opportunities for other innovations. At the same time these other potential ventures also contained their own considerable risks. Opportunities for growth included venturing into other industries to combine a physical branch presence with a virtual MVNO and agent network, for example, through e-vouchers for farmers or various mobile-based health care services. In a more straightforward alternative, Equitel could replicate its model in other countries where Equity Bank had an existing presence, namely Tanzania, Uganda or Rwanda. The question was whether the entry into international markets could provide a way forward considering the opportunity their large unbanked populations provided for instant Equitel mobile customers.

Developing into the true dominator of any market would eventually mean sacrificing the ability to become a disruptor, but this would mean giving up its innovative finesse.

Figure 9 demonstrates Equitel's innovation and digitization. This figure shows that the majority of transactions are actioned through digital channels, which has continued to grow.

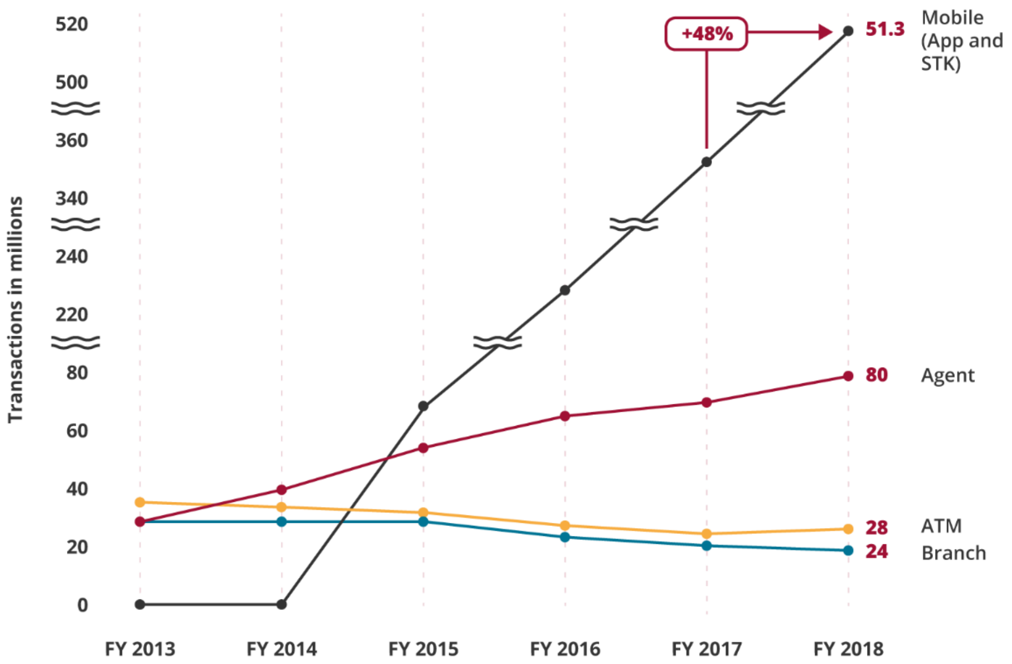

Figure 9: Equity Bank and Equitel's innovation and digitization. (Adapted from: Equity Bank Kenya, 2019)

Explore further:

The US has always been the core innovator of new global financial technology. However, China and African countries such as Kenya are swiftly taking over as leaders in FinTech innovations, particularly with their developments in connection with mobile phone, SMS messaging and other technologies. Kenya is rapidly becoming a global hub of FinTech innovation, as local companies increase the scope of financial inclusion.

Poll 2: Where should Equity Bank focus its resources? (Access this casebook on the Online Campus to engage with this poll and view your peers responses).

In its next chapter, where should Equity Bank focus its resources?
Use its success to capture more of the mobile market in Kenya
Venture into other industries (e-vouchers for farmers or healthcare)
Replicate successful products in other markets

6. Conclusion

The payment process revolution has been central to the disruption in the financial services industry by FinTech companies. Companies like Ant Financial and Equity have identified gaps in the market, using technological advances to ease the payment process and make it cheaper for consumers and companies alike. Through this process, they have had some success in challenging incumbent financial institutions.

However, these companies have also faced barriers to growth. For example, Ant Financial has been forced to develop an entire online financial ecosystem to support its online payment system. Equity Bank, on the other hand, has faced difficulties in weighing the risk versus reward of new innovations and competition with mobile money providers who are able to easily enter a relatively open market. Both companies have been required to adopt new strategies to ensure growth, which has led to a diversification of services and product offerings, and also to other expansion strategies, such as looking to international markets. It is vital to consider how these companies foster the adoption of their products by expanding their services and making the process of purchasing cheaper and more efficient.

As Professor Cohen mentioned in Video 1, another important point to reflect on is why the adoption of these products has been so rapid in China, and whether this experience is replicable in other countries. Having examined some of the influencing factors in these two cases, visit the class-wide discussion forum to see what your peers' insights are on the future of payment systems. Focus on discussing how you expect to be paying for everything – from coffee to rent – as the payment revolution evolves.

7. Bibliography

Cohen, L., Chitavi, M., & Hagist, S. 2021b. Equity Bank: Charting the Future. *Harvard Business School*. Case Study. https://hbsp.harvard.edu/product/221105-PDF-ENG [March 4, 2022].

Bloomberg News. 2021. *Ant group shuts mutual aid platform Xianghubao amid crackdown*. Available: https://www.bloomberg.com/news/articles/2021-12-28/ant-group-shuts-mutual-aid-platform-xianghubao-amid-crackdown [March 4, 2022].

Brennan, T. 2019. *Alibaba, Ant offer updated metrics at investor day.* Available: https://www.alizila.com/alibaba-ant-financial-offer-updated-metrics-investor-day/ [2020, September 11].

Burgess, M. 2021. *Ignore China's new data privacy law at your peril*. Available: https://www.wired.com/story/china-personal-data-law-pipl/ [March 4, 2022].

Calhoun, G. 2020. Why China stopped the Ant group's IPO (part 2): Ant's Dangerous Business Model. *Forbes.* 16 November. Available: https://www.forbes.com/sites/georgecalhoun/2020/11/16/why-china-stopped-the-ant-groups-ipopart-2-ants-dangerous-business-model/ [March 4, 2022].

CGAP. 2019. Regulatory Sandboxes: *what have we learned so far?* Available: https://www.cgap.org/blog/series/regulatory-sandboxes-what-have-we-learned-so-far [2021, March 9].

Cohen, L., Michael, C. & Spencer, H. 2021. *Equity Bank: Challenging a giant.* Available: https://hbsp.harvard.edu/product/221080-PDF-ENG [March 4, 2022].

FactSet Financial data and analytics. 2016. [2017, April 13].

Beijing says it halted $37bn Ant IPO to protect market stability. 2020. *Financial Times*. 4 November. Available: https://www.ft.com/content/eb0746f1-51fe-438d-886b-18bb7cc9456f [March 4, 2022].

FinTech, 2020. *What's gone wrong with traditional SME banking*. Available: https://fintechos.com/what-is-wrong-with-sme-banking/ [2020, August 21].

Gambe, R. 2020. *Ant Financial to change name*. Available: https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/ant-financial-to-change-name-59168730 [2020, August 3].

Global FinTech Adoption Index, 2019. *As FinTech becomes the norm, you need to stand out from the crowd.* Available: https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/financial-services/ey-global-fintech-adoption-index-2019.pdf [2020, August 21].

Guest, P. 2020. *How Ant Group built a $200 billion financial empire*. Available: https://restofworld.org/2020/ant-group-financial-empire/ [2022, August 1].

Jia, D. 2019. *China Issues 3-Year FinTech development plan*. Available: https://www.caixinglobal.com/2019-08-24/china-issues-3-year-fintech-development-plan-101454461.html [March 4, 2022].

Kynge, J., Henny, S. & Sun, Y. 2020. The party is pushing back: Why Beijing reined in Jack Ma and Ant. *Financial Times*. 4 November. Available: https://www.ft.com/content/3d2f174d-aa73-44fc-8c90-45c2a554e97b [March 4, 2022].

McGregor, G. 2021. *China's society is going cashless. Now its central bank is pushing back*. Available: https://fortune.com/2021/01/26/china-going-cashless-central-bank/ [2022, August 1].

Mead, T., Haltom, R.C. & Blackwell, M. 2011. *The role of interchange fees on debit and credit card transactions in the payments system*. Federal Reserve Bank of Richmond Economic Brief. Available: https://www.richmondfed.org/publications/research/economic_brief/2011/eb_11-05 [2018, December 18].

Ngai, J. L., Qu, J. & Zhou, N. 2016. *What's next for China's booming fintech sector?* Available: https://www.mckinsey.com/~/media/McKinsey/Industries/Financial%20Services/Our%20Insights/Whats%20next%20for%20Chinas%20booming%20fintech%20sector/Whats-next-for-Chinas-booming-fintech-sector.ashx [2018, November 13].

O'Dea, S. 2021. *M-Pesa customer numbers from 2017-2021*. https://www.statista.com/statistics/1139190/m-pesa-customer-numbers/ [March 4, 2022].

Onukwue, A. 2021. *How mobile money grew in sub-Saharan Africa in the last 10 years. Quartz Africa*. 28 September. Available: https://qz.com/africa/2065566/mobile-money-has-grown-13-fold-in-sub-saharan-africa-since-2011/ [March 4, 2022].

Parekh, N, & Aimee, H. 2020. The rise of mobile money in Sub-Saharan Africa: has this digital technology lived up to its promises? The Abdul Latif Jameel Poverty Action Lab (J-PAL). Available: https://www.povertyactionlab.org/blog/10-22-20/rise-mobile-money-sub-saharan-africa-has-digital-technology-lived-its-promises [March 4, 2022].

Rodstrom, C. *Why FinTech is thriving in emerging markets*. Available: https://www.globalxetfs.com/why-fintech-is-thriving-in-emerging-markets/. [2020, August 21].

Wang, Y. 2020. china's $7.6 *trillion online payment market is no longer enough for jack ma's ant financial*. *Forbes.* 17 January. Available: https://www.forbes.com/sites/ywang/2020/01/17/ant-financial-is-shifting-away-from-chinas-76-trillion-online-payments-market/ [2020, August 3].

Zeng, C. 2018. FinTech in China: Untapped market and technological disruption [Lecture slides]. LexinFinTech Company Presentation. Harvard Business School: Boston, Massachusetts.

Zhai, C. 2018. *A technological takeover: undercovering China's FinTech revolution*. Available: https://medium.com/iveyfintechclub/a-technological-takeover-undercovering-chinas-fintech-revolution-337af70e697c [2018, November 8].

Zhu, F., Zhang, Y., Palepu, K.G., Woo, A.K. & Dai, N.H. 2018. Ant Financial (A). *Harvard Business Case Collection*. 617-060, March 2017. Harvard Business School Publishing: Boston, Massachusetts.