



FUTURE OF TELCOS: WINNING THE CLIENT EXPERIENCE BATTLE

THE CASE OF MOBILE FINANCIAL SERVICES



MAZARS

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FOREWORD



What exactly is the business of telecommunications? The obvious answers – carrying information and connecting people – could soon be too narrow and fail to define the true capabilities of telecommunication companies (telcos.)

At Mazars, we believe that ‘shaping customer experiences’ is a more accurate and complete description of telcos’ evolution and potential today.

Connectivity and digital access will, without a doubt, remain an integral part of telcos’ offering, but they do so much more, and will only pivot further from this in the years to come.

As technology evolves at a rapid pace, ubiquitous connectivity will become the norm. In this increasingly merged physical and digital world, connectivity could soon be viewed as a commodity. Creating distinct, memorable and useful customer experiences will be the key to satisfying consumers and growing businesses.

So, what does such an experience look like? Who will shape and brand it? And who will own the relationship with the customer? These are the stakes of the upcoming battle.

As telcos seek to take centre stage in the customer experience journey, they find themselves in the enviable position of being able to build on existing, valuable assets: infrastructure, data, strong client bases and a track record of divesting.

But they will also need to constantly acquire new capabilities – mobile financial services being a perfect example of that.

By providing customers with frictionless payment options alongside other mobile financial services, telcos can add considerable value, and play a leading and diverse role in the customer experience. In some cases telcos can even change lives entirely, for example empowering previously unbanked people to access financial services for the first time.

Still, mobile financial services are a complex business requiring specific know-how and a commitment to keeping up with fast-moving technological developments. What’s more, telcos are not alone in seeing their future success wrapped up in the customer experience.

Technology firms (old and new), retailers, mobility companies – and others – are all looking for ways to integrate mobile financial services into their business models and play a part in shaping the customer journey.

To offer a comprehensive view of the battle that rages, we brought together experts from different countries, services and sectors and asked for their insight on the future of telecoms and how technology is changing the game – not just for telcos but also wider industries, including mobile financial services. We have also created the ‘Mazars Mobile Payments Index’ to highlight global growth opportunities and show how market maturities differ around the world.

We are excited to share our findings with you and, possibly, help you lay the foundations for your own business transformation journey.



JULIEN HUVE

Partner
Head of Telecommunications Services, Mazars

EXECUTIVE SUMMARY



What does the future hold for the telecoms industry? Extensive infrastructure investment, certainly. But that's just a small part of the story. In fact, if infrastructure remains at the centre of the telecommunications business model, operators will need to leverage other assets to increase profitability.

Given the breadth of their assets: data, strong client relationships (after all, who else can claim to be in everyone's pocket?) and technological expertise, telcos can do much more than build connectivity pipelines. Indeed, they have the opportunity to shape customer experiences that are more integrated than ever. And they can do so on their own or through partnerships with other organisations and industries.

In the new 5G era, high speed connections, low latency technology and ubiquitous connectivity will soon be the norm. Consequently, value may come less from connectivity and more from seamless customer experiences. This will be achieved by bringing together the building blocks of the customer experience, such as smart and real time recommendations, entertainment offerings, social networking and hassle-free and omnichannel retail.

Mobile payments are a standout example of how mobile technology can enhance the customer experience around the world. And looking ahead, mobile financial services at large will be the key to providing fully integrated, seamless and unrivalled customer

experiences - whether it's through entertainment (pay per view), mobility (hop in, hop out) or retail (shop and go.)

Therefore, mobile financial services should not just be viewed as a tactical way for telcos to diversify their offering but should be seen as a strategic and pivotal route to growth for years to come.

Telcos must also bear in mind that players from other industries have a lot at stake in this field and they will be seeking to shape and own the customer experience.

The battle for the customer experience will be crowded and players will likely have to compete and cooperate with each other along the way.



Network technologies increasingly put customer experience at the core of many industries' business model – including telcos themselves.



ACHOUR MESSAS

Partner
Head of Audit, Industry and Services,
Mazars France

IN THE BEGINNING IS 5G

Contrary to what its name suggests, 5G is much more than an incremental change from previous network technologies: it is, in fact, a change in nature and not merely in degree. 5G stands to reshape the world of business into one that revolves entirely around the customer experience.

That's because 5G enables mobile data transfers at a higher speed, but it also shrinks latency - the time it takes for technology to be stimulated and to respond - to almost zero. 5G also allows more accuracy and flexibility in bandwidth allocation.

As a result, cloud computing and Internet of Things (IoT) applications will be available instantly and virtually everywhere. This will spark a massive wave of innovation, the ripples of which are being seen today. Computing will become ambient: appliances will communicate with Artificial Intelligence (AI) in the cloud

and satisfy our needs before we have to ask them to do anything. Some real-world applications are already in use – autonomous vehicles and smart homes – while others will emerge as the technology matures.

Client-facing industries, along with many others, will be transformed. Today, customer journeys remain largely fragmented. Typically, a consumer's awareness is captured through media content and then interest might develop through social networks. Later, purchasing happens through a platform or at a retailer's shop and payment goes through a credit card. Limited information is shared at each step of this chain.

But with 5G those steps will be more integrated and serve to provide customers with seamless experiences. Players who are in the position to build, shape and brand those experiences will be the ones that stand to seize the commercial opportunities.



MOBILE FINANCIAL SERVICES: A LEVER TO ENHANCE THE CUSTOMER EXPERIENCE

Mobile financial services offer one of the best illustrations of how technology can create integrated customer experiences. From frictionless payments in store to micropayments and online advice, mobile financial services have already begun to deliver better customer experiences.

The potential for telcos to get further involved and create better value for themselves and the consumer is huge.

Though promising, the mobile financial services market is still nascent, which is made clear in our Mazars Mobile Payments Index. In developed economies, the adoption of mobile financial services has begun smoothly with a majority of customers already engaged, although seldom

using them for sophisticated transactions such as credit or investment. As for mobile payments, they are generally fragmented due to the number of systems in use and apart from early adopters – namely people living in urban areas – customers show limited interest. Adding value through seamless customer experiences, therefore, could be the key to unlocking engagement and growth.

In emerging markets, mobile financial services have developed rapidly. China, for example, is already on track to becoming a cashless society. Meanwhile, millions of people in emerging markets are using mobile services to access financial services for the first time. East Africa is often

cited as a hotspot for innovation in mobile financial services, but in North Africa, Southern Africa, Brazil and South-East Asia, we have seen swift uptake of mobile solutions to financial matters.

In these markets, telcos are now offering services beyond payments and leveraging customer relationships to deploy innovative solutions in healthcare, education, and even agriculture and energy.

KEY IMPLICATIONS FOR TELCOS: MANAGING COMPLEXITY

To build relevant and integrated customer experiences, telcos will need to venture into new industries and new geographies. This will lead to increased operational complexities as telcos remove any siloed ways of working internally in order to offer fully integrated experiences externally. It will similarly lead to increased regulatory and fiscal complexities, and data protection issues given customers' sensitivity around disclosing financial information.

THERE IS NO BLUE OCEAN

While telcos possess assets that allow them to claim a central role in the customer experience, they will face fierce competition from other players in other industries. Banks, tech companies, retailers and others are all set to integrate new financial services into their offerings in a bid to shape the customer experience.

Each player brings their own competitive advantages to the table. Banks can leverage the trust clients have in them as well as their expert management of risk and complexity. Large technology companies will use their global reach, agility and ability to leverage network effects. Retailers will benefit from their proximity to the consumer and their experiences with logistics

and selling. What's more, start-ups might further disrupt the customer experience game, in unexpected ways such as super smart voice assistants or extended reality systems.

Each one must consider how they can apply new technologies to financial services and to mobile payments, in particular, to enhance the customer experience and set their organisations up for success.

A key debate to also consider is whether these players – telcos included – will cooperate, compete or engage in 'co-opetition' with each other.

THE 5G-ENABLED CUSTOMER EXPERIENCE REVOLUTION



The pairing of 5G with IoT promises a digital leap into the future – with telcos at the very centre of developments. While 3G led to the mass adoption of smartphones and 4G fostered new, varied uses of mobile technology, the combination of 5G with IoT-enabled devices will have a potentially deeper and longer lasting impact on business ecosystems.

Why? The rollout of 5G means data can be generated, processed and used to create user value with no perceptible delay. The sheer speed at which 5G makes data useful opens the door to a whole new era of telecoms: one in which mobile financial services have a key role to play in creating opportunities for customers and businesses alike.

5G and IoT will transform business models across

industries by making them more customer-centric than ever. In manufacturing, the car industry will have sophisticated knowledge of what customers do and don't use – thereby enabling them to design relevant mobility experiences. Meanwhile, production platforms will be able to pivot with changing tastes and trends and assemble models on demand, in real time.

But the impact of 5G does not stop there: it could have far reaching implications for societies around the world. The speed and sophistication of 5G means services, such as healthcare and education, could be delivered in regions that are hard to access or less densely populated. It is now possible to pay for medicine with your mobile phone and have it delivered via drone, for example.



5G is a breakthrough technology, not just an incremental innovation. Marginally, its benefits do stem from increased bandwidth. But, more essentially, they come from near zero latency, plus decentralised and precise network resources management. As a result, powerful cloud services become instantly accessible. It will be an enabler for autonomous driving, remote medicine, smart energy grids, and much more.



JULIEN HUVÉ

Partner, Head of Telecommunications Services, Mazars

25 gigabit/s

average data speed of 5G
(vs 3 Gigabit/s for 4G) ⁽¹⁾

<1 millisecond

latency of 5G (vs 50 ms for 4G) ⁽¹⁾

41 billion

number of IoT devices worldwide
by 2025 ⁽²⁾

(1) Source: Viavi, *The State of 5G Trials 2018*

(2) Source : IDC Forecast

IoT powered by 5G will shift the paradigm in mobile financial services. Sensors located in mobile phones, wearables, household appliances, cars and the shopping environment stand to revolutionise customer authentication and payments. These sensors will

provide AI with the necessary data to give way to accurate financial advice, recommendations and heightened security.

Australia's Commonwealth Bank, for example, recently introduced a service that enables potential home

buyers to view property profiles as they pass them on the street – as well as providing instant mortgage simulations. Meanwhile, back office operations will be further AI-optimised, freeing up employees' time for more customer interactions.

INTERVIEW



GRÉGORY DEROUET AND CHRISTIAN BACK,
PARTNERS, CO-HEADS OF AUTOMOTIVE SERVICES,
MAZARS

Why is 5G such a major breakthrough for the automotive industry?

The industry is already undergoing several massive changes: from ownership to mobility, from oil to renewables, from manufacturing to services, and more. 5G will catalyse each and every one of them. Indeed, 5G is going to advance the level of vehicle automation – potentially – up to the 5th level, which is a totally driverless car. Such a level of automation requires cars to communicate with one another and with their environment without interruption in order to guarantee safety. Imagine traffic lights warning cars they're about to change colour, or the car in front warning yours that it has to urgently brake. 5G is expected to be reliable enough to enable that level of information exchange and decision making.

Driverless cars don't just change the user experience – they transform the business model of car manufacturers. Without having to pay permanent attention to the road, users can instead focus on social interactions, entertainment and

catching up with work. Essentially, the car becomes another device, like a smartphone or tablet. As a result, 5G is a cornerstone of the business model evolution and we expect a large part of the auto-industry to move towards a 'mobility-as-a-service' model. The race is already on to offer the most enjoyable, integrated and hassle-free mobility experience.

What kind of relations will telcos and – should we call them “mobility companies” – establish?

“Co-opetition” would be the best way to describe those relations. There will be a lot of joint innovation and partnerships. We've seen it already within the 5G Automotive Association, for instance, where the telecoms industry and vehicle manufacturers cooperate to develop end-to-end solutions and standards for future mobility services. At the same time, there will be fierce competition to create the best mobility experience for the customer and to secure outstanding tech talent for the company.

MOBILE FINANCIAL SERVICES: A LEVER TO ENHANCE CUSTOMER EXPERIENCE



A BLOSSOMING MARKET

Banks and incumbent financial institutions have traditionally kept up with developments in communication technologies. They have often, in fact, acted as the initiators, helping customers get familiar with channels to assist in the management of their finances, such as cash machines and credit cards. However, in the digital era, customer use has started to precede, rather than follow, the actions of traditional players.

Legacy IT systems and cumbersome organisational structures have meant that although incumbents own the data and technology, newcomers have proven more agile and able to exploit two customer sweet spots: user experience and cost.

Payments offer a clear example how quickly a service considered the remit of a financial institution can be taken out of its hands. In largely unbanked markets, mobile phone-based money transfer services M-Pesa (launched in

Kenya in 2007) and Orange Money (launched in Ivory Coast in 2008) have expanded to over a dozen countries and cover several tens of millions of customers. Their success is based on their ability to radically reduce the costs involved with accessing traditional financial services.

In more developed economies, meanwhile, disruptors focus on ease of use - trying to remove as many pain points as possible from the payment and money transfer process. The smooth integration of financial services into existing products has been a particularly successful approach, as evidenced by PayPal and eBay, Alipay and Alibaba, WeChat Pay and WeChat, and Apply Pay and Google Pay. Owning the payments interface means owning the client relationship. This puts more established banks at risk of being bypassed by newcomers and relegated to a production role.

Credit, savings and investment services are similarly undergoing



Payments and money transfers have historically always trailed communication technologies. American Express started as a freight company and its spin off, Wells Fargo, operated on the Pony Express. Western Union used to be a telegraph company. What we are seeing today are new forms of a rich, historical trend.



EMMANUEL DOOSEMAN

Partner
Head of Banking, Mazars

disruption – Amazon has recently started to offer financing to SMEs, for example. However, regulators have displayed a cautious attitude to such activities. Dooseman explains, ***“Banking is a business unlike any other. If money is the blood of the economy, then banks are the heart. Regulators worldwide are looking to strike the right balance between innovation and risk mitigation.”***

As a result, disruptors should expect barriers to arise: when Facebook announced the launch of its Libra cryptocurrency in 2019, regulators greeted the news coolly.

Nevertheless, the past decade has seen an impressive rise in the use of mobile financial services across markets. ***“Looking at the***

global landscape we can distinguish three market types where mobile financial services have really taken off in different forms,” says Mazars’ Julien Huvé. “As a result, opportunities and priorities for telcos are diverse.”

In ‘forerunning markets’ like China, the ‘future’ customer experience is already happening: seamless payments, facial recognition, AI-powered product recommendation and deep social network integration. Large technology firms in China are the ones taking control of the ecosystem and the lead on introducing innovation to the market.

Mature markets in transition, like the UK, find themselves in a different position. Most customers there already have

access to financial services so the opportunity for telcos resides in creating improved experiences through partnerships with large financial institutions and fintechs.

Finally, in developing economies, mobile financial services continue to stay ahead of traditional institutions. It is in these economies where telcos are leading on innovation. They were the first to offer financial services to many unbanked people and are now able to leverage their existing customer base to offer more sophisticated services and replicate their earlier success across new sectors like agriculture, health and education.

These diverse global opportunities are shown below in Exhibit 1.

EXHIBIT 1: THREE MARKET TYPES WITH DIFFERENT MOBILE FINANCIAL SERVICES ADOPTION PROFILES OFFER VARIOUS OPPORTUNITIES FOR TELCOS

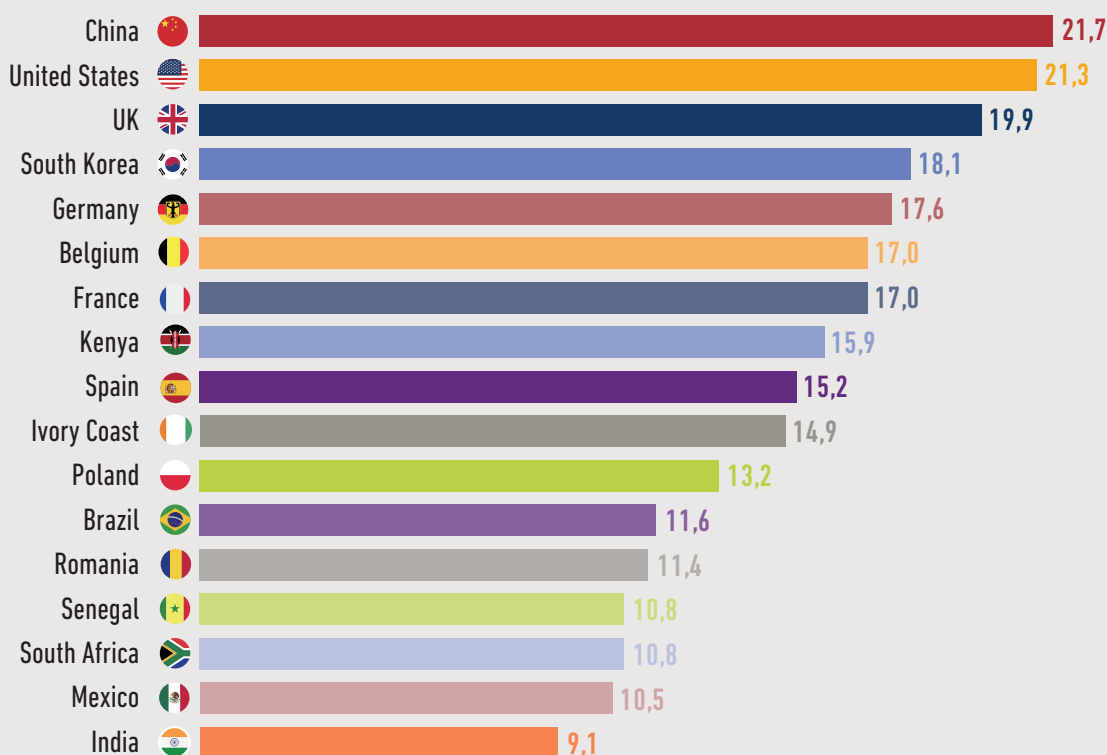
Market types	Examples	Mobile financial services primary leaders	Opportunities for telcos
“ Forerunners ”	China, South Korea	Big Tech, fintech	- Partner with Big Tech - Take part in cutting-edge innovation ecosystem to co-invent the fully integrated customer experience of the future
“ Mature and in transition ”	US, UK	Incumbent banks, fintech, Big Tech	- Partner with incumbent players and fintechs - Make the customer experience smoother by making payment more fluid.
“ Leapfroggers ”	Kenya, Ivory Coast, Senegal, Morocco	Telcos	- Partner with public authorities and regulators to foster growth and social development - Offer full range of daily services, including financial

THE MAZARS MOBILE PAYMENTS INDEX

Mobile financial services are developing in different ways and at different speeds across the world. This is because distinct market conditions, such as maturity, technological preferences, devices available, infrastructure and regulation, all influence how financial services can be delivered.

Mazars has created its Mobile Payments Index¹ to provide an equivalent basis on which to compare mobile finance opportunities. The Index analyses 17 markets that are relevant in size and/or representative of a sub-region. Each market is assessed on ten different variables related to three fundamentals: regulation and infrastructure, consumer behaviour and mobile payment penetration. Variables are measured using Mazars' proprietary data or public data issued by international organisations².

EXHIBIT 2: MAZARS MOBILE PAYMENTS INDEX



1 The scope of the Index focuses on payments, as definitions of other financial services are too dependent on local specificities to provide a base for robust comparative analysis

2 The regulation and infrastructure dimension is weighed on four factors: efficiency of the legal system in challenging regulations; effectiveness of law-making bodies (data from the World Economic Forum); GSM connectivity; mobile network download speed (both data from the GSMA). The consumer behavioural dimension is weighed on three factors: smartphone penetration (data from Newzoo's Global Mobile Market Report 2018; spread between banked population and population using internet to access an account (data from World Bank), technology readiness score (data from World Economic Forum). Finally, the mobile payments dimension is weighed on three factors: active users (share compared to total population of country); mobile payment transactions in million USD per registered account; mobile vs non-mobile payment share. All these are proprietary Mazars data, provided by IHS Markit. Scores are normalized by applying the min-max method.



CHINA: A CASHLESS SOCIETY RISING

Ranked first in the Mazars Mobile Payments Index, China is well ahead in terms of usage, although regulations and infrastructure need to keep up with the pace of innovation. Mobile payments have seen a tenfold increase^{*} since 2012 in China, a market that is continually shaped and driven by its two tech giants: Tencent's WeChat Pay and Alibaba's Alipay.

"In China's main cities, it is now common for merchants not to accept cash nor credit card", says Liwen Zhang, Partner, Mazars China. "It can be quite surprising for foreign travellers. People now use WeChat Pay or Alipay to pay for basically everything, from electricity and phone bills to small daily expenses like subway tickets."

The level of convenience and the integrated service they offer largely explain the tech giants' success and market share. But social considerations also play a role: customers in China tend to trust mobile applications more than credit cards and, by proxy, contactless payments; they similarly favour QR-code-based and other "scan to pay" technologies.

^{*}IRResearch

Last but not least, in rural China - home to some 600 million people - traditional banking is costly and time consuming because there are few ATMs and local branches can be difficult to access.

While services remained virtually unregulated until 2016, there was a switch in 2017/2018. Now customers have to provide their national ID number, which is linked to their mobile phone number and bank account number, in order to access financial services. The regulator is currently engaging with players and various think tanks with a view to strike the right balance between innovation and customer protection. ***"It is in China that the most exciting experiments on digital financial services are taking place", according to Zhang. "It is the ideal lab to design and test new services, as consumers are open to novel experiences and confident that their data will be used responsibly. For instance, Alipay has launched a test of its "smile to pay" in partnership with KFC. The retailer Carrefour is trying a similar technology in its hypermarkets in partnership with Tencent. Public authorities are also supportive of innovation, which***

they see as creating opportunities to optimise people's use of public services. Take Futian's subway station, for example, where facial recognition is being tested as a form of transportation payment."

The mobile banking market in China is dominated by the five big state-owned banks, which report over 1 billion users of their apps. In the final quarter of 2018, China's mobile banking user transactions were worth a total of 11 trillion USD, a quarterly rise of 8.8%, according to the People's Bank of China.

The shift in China from cash to mobile financial services saw people 'leapfrog' their browsers and move straight to apps, which were developed by either tech or banking behemoths. Phone operators have a lot of ground to make up if they want to be part of this stage of the process. However, even if they stay one step removed, there are clearly very strong motivating factors for them to get involved and be part of the booming cashless society in China.



LIWEN ZHANG
Partner, Mazars China.

6.8

trillion USD value of mobile payments market in China (2018)

132%

rate of registered mobile payment accounts reported to adult population (2017)

13.5%

share of mobile payments market for telcos

9.2%

share of population using mobile-only banking

Sources: Mazars Knowledge Center, IHS Markit



US: A MATURE MARKET IN GRADUAL TRANSITION

Ranking second in Mazars' Mobile Payments Index, the US offers a starkly different view of modern mobile financial services to China.

Most US customers already had access to a full range of financial services, including payment, investment and wealth management. The digitisation of financial services in the US has therefore been gradual – in contrast to the rapid transformation seen in China. While the US market is fragmented, it nevertheless offers excellent conditions for the implementation of mobile financial services.

American consumer behaviour is still largely influenced by habits inherited from pre-digital years. About one third of all consumer transactions are still paid in cash: the average American, in fact, writes 38 cheques a year. According to the Bank of International Settlements that compares to about 18 in Canada, eight in the UK and almost zero in Germany.

Americans also still vastly rely on credit cards – even for contactless payments. Credit cards amounted to over 70% of online payments in 2017. American consumers tend to trust plastic cards over digital solutions when it comes to security,

and although that trend may not reflect the technical reality, it's a fact of which players must take note.

There are, however, signs that the digital transition is underway. ***"The race is most definitely on between banks and big tech to lead the US market evolution towards a cash-free society," says Emmanuel Dooseman, Head of Banking, Mazars.***

When pioneers like PayPal started offering third party payment tools, they came with the main disadvantage of being confined to online transactions. Those same pioneers have since pivoted to acting as e-wallets and have been joined by competitors including Apple Pay and Google Pay.

The use of those e-wallets, which virtualise credit cards, is now slowly rising. However, one big challenge stands in the way of them going mainstream: market fragmentation and the consequent lack of investment in infrastructure.

Over 14,000 financial institutions using 16 different payment processors operate in the US and most offer mobile payment possibilities. This huge variety means it's common for merchants not to invest in new payment terminals,

which means customers are discouraged from trying new ways of paying.

Faced with that barrier, organisations offering digital wallets are creating incentives in partnership with Visa, Mastercard and others to promote equipment and get customers to use them. For example, the Apple Card, launched in partnership with Goldman Sachs, offers 2% cash back rewards, while the Amazon Prime Rewards Visa card proposes up to 5% for purchases at Amazon or Whole Foods.

Therein lies the key to standing out from the pack, says Dooseman, who believes businesses have to create distinct experiences to win in the US's competitive environment. ATMs and public transport, he adds, could offer a vision of the future.

"At cardless ATMs, you can just scan a QR code with your smartphone and withdraw money. The process takes 40 seconds on average, instead of the previous 80. Since spring 2019, some NYC subways and buses let passengers tap a contactless bank card or their mobile wallet to pay for fares."



EMMANUEL DOOSEMAN
Head of Banking, Mazars

36%

share of adult population actively using mobile payments (2017)

3.8%

share of mobile vs non-mobile payments (2017)

+55%

US consumers reporting their concern about data privacy year over year between 2016 and 2017



UK: A EUROPEAN TRAILBLAZER

The United Kingdom emerges as the European trailblazer in the Mazars Mobile Payments Index mostly thanks to its strong performance on regulation and infrastructure. The sandbox approach promoted by the UK regulator appears to be extremely effective in fostering innovation.

“Merchants are quickly adopting mobile payment terminals. In high-profile commercial locations, some are even accepting AliPay or WeChat Pay to serve their Asian clientele. In parallel, customers are gradually deserting bank branches, preferring the simplicity of mobile banking. Some early adopters are also turning to contactless mobile payments like Apple Pay.” says Mazars’ Grégory Marchat.

Despite initial challenges from newcomers, UK banks have capitalised on their assets, expanding their offer and building partnerships to stay on top. Their

pre-eminence in the mobile financial services landscape is a distinctive feature of the UK market, as Marchat explains.

“At first, banks were disrupted by fintechs, which offered a more attractive experience – with more ergonomic interfaces and better leveraged data. But they have partly closed the gap since and could close it further thanks to inherent advantages.

The first advantage is their existing client portfolio, which start-ups do not have. After all, acquiring clients and building trust in the financial industry is costly and takes time. The second is their mastery of regulation complexity. Compared to payment licenses, credit licenses are restricted and difficult to obtain. This is where telcos probably have an edge over fintechs as the former are more credible in terms of the capital, teams and processes that are necessary to manage risks and compliance.”



The UK is well on its way to becoming a cashless society



GRÉGORY MARCHAT

Partner
Co-head of Global Banking,
Head of UK financial services,
Mazars

+225%

increase rate of contactless transactions (2016)

40

competitors on mobile payments

14%

mobile vs non-mobile payment share (compared to <8% European panel average)

Sources: Mazars Knowledge Center, IHS Markit





AFRICA: A CONTINENT OF TELECOMS OPPORTUNITIES

Over the last decade, Africa has become a global leader in mobile financial services. In fact, more than half the world's mobile money companies operate on the continent. The Mazars Mobile Payments Index reflects this, with several countries performing well on infrastructure, regulation and digital literacy. Kenya and Ivory Coast were the continent's best-in-class - reaching second and fifth place, respectively, in terms of mobile financial services usage.

We asked Zied Loukil, Mazars Partner and Head of African Banking Platform, why Africa offers such fertile ground for mobile financial services providers.

"First of all, there is immense consumer appetite" explains Loukil, "in 2017, there were 390 million people who were still unbanked in Africa. Those people are excluded from basic financial services, such as paying bills or transferring money other than by cash – let alone saving or borrowing. By contrast, the penetration rate of mobile phones has skyrocketed over the last decade, sometimes exceeding 100%."

Abdou Diop, Managing Partner of Mazars Morocco, adds "Mobile phone operators had a great opportunity to create the mobile wallet market:

they already had a strong customer base and a dense distribution network. They chose to rely on a simple, yet robust, technology platform that was very similar to SMS – meaning that almost everybody with a mobile phone could access it. After the pioneering initiative of M-Pesa in Kenya, we have seen successful initiatives almost everywhere."

Governments across Africa are now recognising the transformative social impact of mobile financial services and launching initiatives to foster their development. At the same time, they need to ensure adequate level of consumer protection, systemic stability and criminal risk management. Diop explains, ***"For instance, in Morocco, the Central Bank and the National Telcos Regulation Agency launched the M-wallet in November 2018. It is a joint venture between banks, other financial institutions and telcos. It provides customers with payments, wire and basic withdrawal and deposit services. This initiative is designed to boost financial inclusion, which is still lower than other comparable economies."***



ABDOU DIOP

Managing Partner of Mazars Morocco

But mobile payments are only the first step. Building on their success, telcos are now starting to offer more sophisticated financial services, such as deposit and saving accounts, peer-to-peer lending and micro-credit, even investment and insurance products. To that end, they are building partnerships with financial institutions and, in some cases, expressing their interest in applying for banking licenses.

"This is when telcos and traditional banks are going to compete head-on," predicts Loukil. "Banks might be tempted to lobby in favour of restrictive regulations in order to preserve entry barriers on their markets. Still, they also have an interest in being constructive: the market potential is such that everybody can benefit from its growth. Again, the huge social impact should motivate all stakeholders to join forces. When local communities are offered the technology to crowdfund a well for drinking water, or when diasporas can transfer money across borders at a reasonable cost to help their families, we clearly have convincing cases for collaboration."



ZIED LOUKIL

Mazars Partner and Head of African Banking Platform

82%

average mobile penetration rate in Africa

70%

expected smartphone penetration rate in 2024

40

competitors on mobile payments

Sources: Mazars Knowledge Center, IHS Markit, Ericsson

INTERVIEW



ABDOU DIOP, MANAGING PARTNER, MAZARS MOROCCO

ZIED LOUKIL, PARTNER, MAZARS TUNISIA

What is the social impact of mobile financial services?

Their impact has already been tremendous, and it is still expanding. Being unbanked is, ironically, quite costly. Handling cash money usually comes with high intermediation fees and can also generate security issues. It is a barrier that blocks workers from the labour market and merchants from the formal economy. In most economies, vulnerable populations are overrepresented among the unbanked segments: 56% of them are women and a majority are from poor and rural households (World Bank Global Findex Database). For those people, financial inclusion means gaining access to a breadth of new opportunities and reducing the gender gap. Moreover, their level of financial education quickly rises: for instance, we see women starting to manage the household finances, then taking out a micro-loan and becoming micro-entrepreneurs. For them, mobile financial services are nothing short of a major crack in the glass ceiling.

What are the new opportunities and challenges brought about by broadband and 5G?

This could be a significant new stage in social and economic progress on the African continent. More accessible banking reaches far beyond financial services and towards helping solve some of our most pressing issues. In some geographically challenged areas, where infrastructure is lacking, people might get easier access to education or healthcare. For example, students could attend courses via video-conferencing; patients could consult a specialist remotely and access to administration and public services could become easier.

But to get there, telcos, service providers and governments will need to work hand-in-hand. Considerable investments will be required: stakeholders will need to construct effective regulations. Moreover, digital skills need to be developed at all levels of the population: basic skills so that most of the population can access those new services, as well as advanced skills so that a significant part of the technology and the content is created locally.

HUGE POTENTIAL FOR FURTHER INNOVATION

Mobile financial services have made life easier for customers – even allowing some to access critical services they were previously denied. Nevertheless, there is still some way to go before customers are offered fully seamless and integrated experiences.

Anyone who has hopped into a Lyft or an Uber without having to

dig around for their wallet surely hopes that one day that ease-of-use is introduced into other corners of their life. *“Customer experience is the driver on which we expect everybody to invest: banks, telcos, big tech players, retailers and start-ups”*, says Mazars’ Emmanuel Dooseman. “Most of the time, payments, as well as other financial services, are a burdensome process for the

client. Almost always, they involve interrupting what you were doing, taking an object out of your pocket or handbag, identifying yourself, typing a code. Removing those pain points, even in B2B, will be the heart of the matter.”

Exhibit 3 provides an overview of how telcos can create more seamless experiences.

EXHIBIT 3: KEY STEPS TO CREATING A SEAMLESS CUSTOMER EXPERIENCE

1.

STRAIGHTFORWARD CUSTOMER IDENTIFICATION

“The phone number is a great asset to that end,” says Dooseman. “It is unique, short and can be committed to memory. French banks have recently agreed to launch instant peer-to-peer transfers, which use the phone number as the customer’s ID. In the US, JPMorgan, Bank of America and a group of banks launched Zelle, which allows account holders to pay each other instantly.” The smartphone already boasts robust authentication and security functions, which makes it the ideal device to accelerate this step of the client journey.

3.

INVISIBLE TRANSACTIONS

Imagine a shopping experience where retail technology recognises you and can access the necessary data meaning you don’t need your wallet. Businesses with small and frequent payments are at the forefront of experiments to achieve just that: for example, public transport, cafes and grocery shops.

2.

SMART RECOMMENDATIONS

Smart advice on the next product to view or buy has been the cornerstone of some of the most resounding digital success stories: Amazon and Netflix among them. As 5G meets IoT, big data and AI, there are more opportunities to deliver timely and relevant advice to customers. For example, a smartphone could remind the customer they have a coupon for their next purchase, or an algorithm could suggest a customer saves money when their financial situation allows it.

4.

REWARD AND LOYALTY

No one wants to manage dozens of loyalty cards in their wallet but customers with a long-standing bond with a brand want to be treated differently to first-timers. The digitisation of loyalty programmes will lead to hassle-free rewards and build greater brand allegiance.

Creating a seamless customer experience depends on bringing all those steps together and integrating them to serve someone's daily needs. Importantly, those needs will be seen across different sectors: finance, communications, mobility, entertainment, retail and even healthcare and education.

To fully meet those needs, service providers have to be embedded in customers' daily routines, which will only be achieved by connecting proprietary and third-party services across sectors. The shapers of those integrated experience ecosystems could be telcos, but banks, big tech players, or retailers as well – as summarised by Exhibits 4 and 5.

EXHIBIT 4: MOBILE NETWORK TECHNOLOGIES ENABLE MORE INTEGRATED CUSTOMER EXPERIENCES

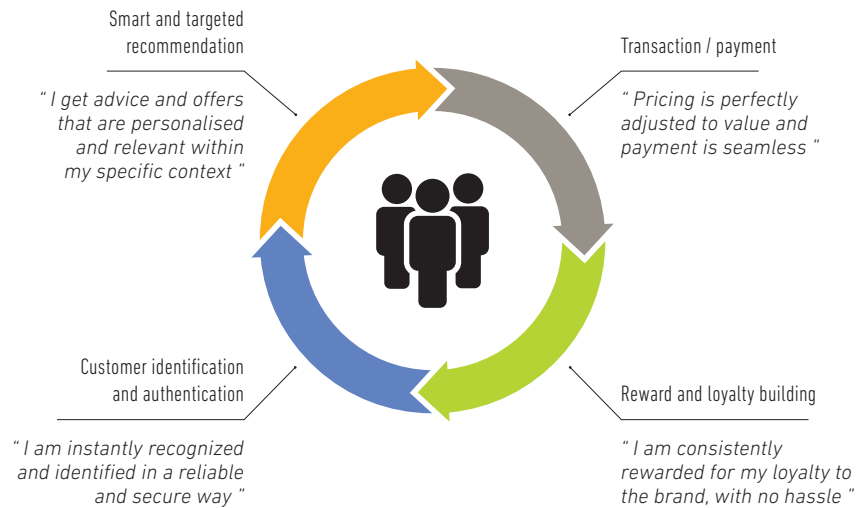


EXHIBIT 5: KEY PLAYERS HAVE DIFFERENT STRENGTHS AND OPPORTUNITIES TO SHAPE AND ENHANCE THEIR CUSTOMERS' INTEGRATED EXPERIENCES

	Customer identification and authentication	Smart and targeted recommendation	Transaction / Payment	Reward and loyalty building
Telcos	- Mobile phone number and mobile access control	- Communications metadata and geolocation - Potentially other data if home, media, financial services and mobility are integrated	- Phone bill - Mobile financial services - Launch own bank (apply for license)	
Banks	- Credit card and PIN - Service login and password for mobile banking	- Transaction data	- Mobile financial services	- Cashback and reward credit cards
Big Tech Players	- Service login and password - Hardware device (e.g. smartphone, smart speaker, wearable)	- Online activity data - Potentially other data if hardware, home, mobility, financial services and the marketplace are integrated.	- Mobile financial services - Digital currency - Launch own bank (apply for license)	- Mobile reward app (e.g. Facebook Rewards)
Retailers	- Loyalty card	- Purchasing data	- Proprietary mobile payment app - Launch own bank (apply for license)	- Digitise own loyalty program

Practically speaking, what could a seamless customer experience look like? Imagine Jane Doe leaves her office to visit a client. In the carpark, she unlocks a shared and autonomous car using her smartphone. When she is seated, the car (which she has granted access to her diary data) asks her to confirm she's going to the client's address.

After telling her the journey will take 20 minutes, given current traffic conditions, the car asks if she wants to work or resume the TV programme she was watching the night before.

When she arrives at the destination, Doe gets out of the car – with the cost of the ride and the downloaded TV

show to appear on her monthly telephone bill. This seamless experience was powered by her telco, working in partnership with a mobility services provider, her phone's OS editor, a media company, and a bank or credit card issuer.

CRACKING THE COMPLEXITY CHALLENGE



Building integrated customer experiences depends on telcos mastering different business techniques and navigating new fields. Network infrastructure and digital capabilities are essential pieces of the puzzle but there is so much more telcos need to do if they want to complete it.

It goes without saying that financial services, wherever you are in the world, are tightly regulated and so new players have to appreciate sensitivities in the ecosystem, as Mazars' Grégory Marchat explains, "**Regulators initially took a rather favourable**

view of the development of digital financial services. In emerging markets, they were a lever for social and economic development. In more mature markets, they helped to boost innovation for the benefit of consumers. But as these services have grown in volume, authorities have realised the issues at play. Regulation and compliance are becoming more stringent, especially for credit activities."

Besides compliance, telcos have to acquire specific know-how in areas like risk modelling and risk management – the liabilities

relating to a monthly phone bill are hugely different to those connected to a mortgage.

The complexity of these risks only increases when venturing into new geographies, where regulations on banking activities, the use of private data and taxation can vastly differ even in neighbouring countries.

Seamless customer experiences also depend on sharing more data. However, unlike that of social media giants, the business model of telecoms operators has (so far) depended on using limited

amounts of personal information. As they collect more and more of their customers' data, telcos need to demonstrate they are responsible and responsive to changing sensitivities. If they manage to do so, they could gain an advantage over large technology companies, which have been rocked by concerns over their handling of data in recent years.

Any organisation that intends to offer an integrated experience needs to develop their own model in parallel. While it can be tempting to operate as a holding company with subsidiaries running different services (financial, entertainment, home), it is unlikely such a setup would deliver a seamless customer experience. After a short time, subsidiaries tend to work in silos – blocking integration opportunities and the chance to build seamless journeys. At least some level of team mixing and talent rotation will be necessary.

Last but not least, realigning a business model to focus on the customer experience requires managerial and cultural adjustments, especially in companies with a strong technical and engineering background. Clients should be observed using

technologies rather than being directly asked about them. Often, due to the fast-evolving nature of tech, people are not able to say what they want, but realise they want it when it is shown to them. Therefore, telcos should spread a test-and-learn culture inside their organisation: for instance, test prototypes – even unfinished ones – to gather feedback and learn from what went well.

Teams, for their part, need to nurture specific skills, such as empathy for customers and take responsibility for anticipating and exceeding their expectations. Companies will also have to look outside of themselves for their next step to growth and customer satisfaction: the innovation that will take them to the next level could be found in another sector, industry or even co-created in partnership with another business.



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NO BLUE OCEAN

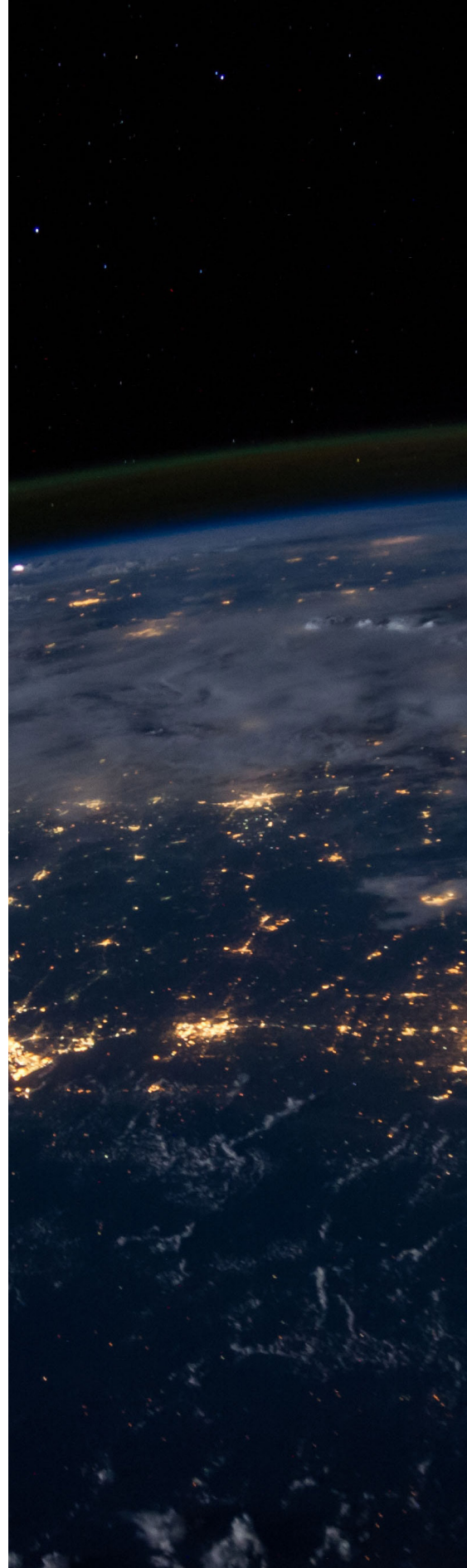
When it comes to payments and other financial services, consumers are already being offered a diverse array of options. Most fundamental needs are being met, even in markets where millions are still unbanked. At this point, offering additional choices is not enough to differentiate yourself from competitors. That's why telcos have to offer outstanding experiences.

Telcos are certainly well-positioned to claim a central role in delivering fully integrated customer experiences as they form the backbone of the services that make it possible: 5G, broadband networks, data collection and safeguarding, for instance. Some of them have already set foot into adjacent businesses – financial services of course, but also smart homes, media content and utility bills and services.

However, the 'customer experience' business is a contested field and the

organisations that shape the experience, brand it and successfully own the customer relationships will be those who gain the most from it, while relegating others to lesser supplier roles.

Big tech makes no secret about its intention to own the ecosystem and they have considerable firepower to turn those intentions into reality: deep pockets, technical and business skills, the ability to attract great talent. What's more, they are agile and can leverage powerful networks. Consider Amazon's recent entry into healthcare. It has launched Haven, a health insurance policy in partnership with Berkshire Hathaway; it has also acquired PillPack, a pharmaceutical distribution group and filed a patent for a medical diagnostic feature via its smart assistant, Alexa. The latter would assess whether a customer is sick by the sound of their voice: creating a fully integrated experience for the 'patient' – from diagnosis to



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remedy and delivery, all through one company following the “health as a service” business model.

Banks are certainly still in the game: clients entrust them with their data, and they have a strong track record in managing risk and regulations. As for traditional retailers, don't count them out: they enjoy close proximity to the customer and have expert knowledge in logistics and sales.

Car manufacturers too could play a major role in shaping and owning the customer experience: freed from driving, car users can enjoy in-vehicle leisure and social activities. Manufacturers also have solid experience in integrating their activities with service components, whether related to communications, entertainment

and even financial services – since some already own banking subsidiaries.

Finally, the customer experience game is not immune to disruption, which could materialise in unexpected forms: consider super smart voice assistants or Second Life 2.0 turbocharged by extended reality.

In such an open game, the key consideration for each player – including telcos – is to determine where the competitive advantage lies. When they find it, they can build their priorities around it and then decide which parts of the experience they want to fully own, and which parts they are happy to partner with others on, so that customers can enjoy the seamless experiences they deserve.



Telcos have developed a valuable know-how in preserving data integrity, and more generally, in challenges related to cyber-security. As customers' sensitivity to digital security issues grows, they should be well positioned to play a role of trusted party, both in the B2C and B2B markets.



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