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## **Fintech's Impact on Payments Domain**

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### **\*The Payments Market\***

**What is driving Fintech's interest in payments, and what has been the impact on the payments market so far in terms of market structure, competition, and efficiency?**

Although the association with *fintechs* and *in-house development* are the two options most used by industry players at the international level, there are other desirable practices for the sector that, in addition to being part of the *manual of good practices* applicable to a hyper-technological and competitive environment and, they can become differentiators. One of them is the *planned incorporation* strategy, that is, the one that aligns the organizational objectives and takes into account the resources and capacities of each entity in particular<sup>1</sup>.

The development of Digital Banking is still in its early phase, although several entities have taken steps in this direction, and there are digital bank projects planned for the future. Under this new model, different opportunities emerge to promote the development of the financial system and deepen its economic and social benefits. These include financial inclusion, that is, the greater incorporation of individuals into the financial system ( *onboarding* ); the remission or replacement of bureaucratic processes by more agile ones; the reduction of transaction costs that, at the same time, will allow digital banking to offer its products at a lower price than traditional banking (which will generate more competition); a focus based 100% on the customer experience (which fosters loyalty), optimization of costs and a faster process of adapting the product to customer needs.

**How are digital payments and Fintech improving societal welfare, and what is the evidence for this?**

Entering Fintech is not difficult, but it requires the bank's commitment to change certain processes. A huge percentage of banking and financial services executives say that in 2016, their business will undergo a disruptive change stemming from digital technologies. However, it is not something specific to that industry; there are examples in many other areas, such as Kodak and digital photography or Blockbuster and streaming<sup>2</sup>. This is something that can happen to any company in any industry. Today, *fintech companies* focus on the following business areas:

#### **Financial transactions:**

These fintech platforms allow funds to be transferred at costs notoriously lower than those of other financing alternatives. One of the best-known business models is Paypal. This platform allows you to send money, receive payments, and control your balance and movements from your mobile with the same ease and security as ever. The repercussion that this business has had on other websites is the creation of this service in, for example, Appel with Appel pay, Aliexpress with Alipay facilitating transactions between users.

### **Financing services, new financial approaches:**

They allow financing between companies and individuals. This type of service includes, for example, the financial modality of *crowdlending*, which is in charge of putting investors in contact with those in need of financing. MytripleA is a *crowdlending* platform for companies and investors.

### **Investment consulting and marketing platforms:**

This type of service is responsible for optimizing the investment portfolio of its private clients. Unlike banks, once again, the cost is significantly lower, and, in addition, the quality of the advice provided by these platforms is higher.

### **Personal finance management:**

These *fintech* companies are exclusively dedicated to managing your own financial information. Its methodology is based on the automatic extraction of all that financial information that your accounts contain, compiling it in such a way that it allows you to visualize it easily and clearly to understand. An example of this type of company is Fintonic.

### **Are Fast Payment services the new normal will they overtake other traditional payment services in terms of both usage and value of payments?**

Business agility is the key factor in Fintech. An agile company is one that is able to detect and respond to change quickly and with confidence. As in many sectors, the financial sector is evolving rapidly. Now, the competition does not only come from the new local bank; There are new actors like Paypal, Amazon, Google, ApplePay, Bitcoin, etc. that represent disruptive proposals for the generation of innovative financial services. That is why it is key to change with the agility to compete or ally with Fintech and evolve.

However, it is not about changing everything without thinking. In fact, this change must be strategic and planning each step so as not to waste human and financial resources in the process. It is necessary to analyze well the type of startup with which the bank will partner, that share its same values , and have joint medium and long-term goals so that they grow in the same direction<sup>3</sup>.

### **What are the key success factors for Fintechs in the payment's domain what is the empirical evidence for this?**

To achieve success, what they do is analyze the financial field and solve the problems detected, in part or in full, and turn them into more efficient and effective services by incorporating new technology.

The highlight of his triumph is:

- Development of new technologies
- Easy to use
- The comfort of your services, without the need for travel
- Adaptation of services to customer needs
- Speed and transparency of its services
- Flexibility to adapt to technological innovations
- Adoption of *smartphones* as a tool for relating

### **What is Fintech's role in the emerging 'faster' and 'immediate' payment systems?**

With this, *fintech companies* aim to achieve some objectives that could be summarized as:

- Offer these technology-backed financial services.
- Add value. Make current financial services more efficient.
- Offer financial products online, avoiding traps, and using your own *smartphone*.
- Cost reduction to enhance the attractiveness of these financial alternatives.
- Transparency.

### **Is Fintech making payments a commodity business that is to be provided for free?**

The challenge for the new Digital Banks has several edges: on the one hand, adapting to the country's regulatory framework, which often works as an entry barrier; and on the other, to have the financial capacity to cover all the risks of the business, even in stressful scenarios, and to capture profitable sources of financing, while simultaneously working to earn the credibility of the client. For their part, the challenge for traditional banks is no less: fundamentally, they need their collaborators and employees to adopt a highly customer-oriented digital culture, seeking to integrate new digital processes into their risk management and achieve an agile structure that allows them to adapt processes and developments with equal speed. Also, in the event that the financial institution incorporates a *Fintech*, it is crucial that the new firm has similar practices and culture<sup>4</sup>.

The Fintech sector includes the following business segments: loans, *crowdfunding*, investments, financial advice, insurance, payments and transfers, digital currencies/*blockchain*, and computer security. One of the objectives is to strengthen the relationship with banks based on a cooperative relationship, providing services and complementing strengths with the aim of achieving synergies between financial entities and *Fintechs* allow to open the market and make it grow. The world is changing, and in that new wave that has already arrived thanks to technology, the term fintech appears again and again.

### **What are the key attributes of fast payment services that influence adoption?**

Following are the steps for a bank to become dynamic as a fintech startup:

Understanding clients well: This advice is key because although banks serve many segments, they must be clear about their strengths. In other words, they are 'millennials' or the microfinance sector or automotive loans. With a clear picture of who the client is, a strategy is designed to serve that specific segment and, thus, specialize.

Partner with technology companies: Banks must change their schemes to be more dynamic in the market. Although partnering with a startup is a good initiative, one needs to be clear about the competitive advantage that an alliance will provide because it's not just about shaking hands to have an agreement. A bank that partners with a startup must manage resources for research and development and thus implement a new system. This does not guarantee success, as one can only know if you had positive or negative results after a strong investment of time and money<sup>5</sup>.

Support flexibility: Banks that are committed to financial disruption work to energize their areas. How do they do that? Implementing a culture of giving constant feedback and fostering innovation. This sounds simple but requires methods to do it.

### **What is the impact of Fintech on remittances and cross-border payments, and what needs to be done to fully leverage the potential of Fintech for these payment streams?**

The current society presents continuous changes as brilliant minds begin to develop products that enhance more and more the profits that are reported to the citizen. One of those great innovations that have been gaining great importance is *Fintech*. The *Fintech* born years ago only that, not having just technological advances were not expanded. They arise from the concept of *financial technology* or *end finance*, *tech* technology.

Currently, we are in the “era of digital revolution” in which we must stick to the mythical saying, renew or die, involving adaptation to new technologies that are being developed. For this reason and after the crisis that Spain had been suffering, the resurgence of this form of alternative financing has been promoted so attractive that it will mark a turning point in the country's financial sector.

It is necessary to point out that a key factor for the emergence of Fintech companies is the economic crisis that we have been suffering. With it, a panorama of general discontent was generated towards the banking sector that causes the need to create a financial alternative, Fintech. In conclusion, it is a sector that is continuously growing due to the number of advantages that they offer users. In addition, the confidence that these platforms are achieving is increasing, which further favors this rise in *fintech*<sup>6</sup>.

### **Are digital payments and Fintech only relevant for consumer payments? What is the potential of digital payments and Fintech for Business-to-Business payments?**

The term fintech has been defined by the Financial Stability Council as the process of innovation in the financial sector led by technology. As a consequence, new processes, applications, or business models are being developed that change the production or supply of financial services. New technology is changing areas of established entities, and new purely technological financial services companies appear.

Market infrastructures are nuclei that facilitate transactions between economic agents, allowing a multilateral relationship between them. Its value lies precisely in its power of interconnection in its scope. But therein also lies its systemic importance, given that the failure of one entity could spread to others, interrupting many processes of financial exchanges with serious consequences for the real economy. As stated, payments are in the current crosshairs due to the wave of innovation they are experiencing.

Thus, some online trading companies have integrated payment mechanisms on their platforms. Its use is linked to the platform, but if it achieves a considerable expansion or agreements with other companies, it could create a virtual money circulation, although specific and limited, parallel to legal money<sup>7</sup>.

In a world in which online transactions are constantly increasing and extend to non-durable goods for daily consumption, the use of digital currencies linked to goods distribution networks does not seem to be a fad. Financial regulators and supervisors and international organizations are already continuously monitoring technological developments, and it can be said that the term fintech is giving way to the term regtech, according to which the new technology will also facilitate the work of monitoring the financial sector.

#### **\*Response of Regulators\***

### **How are regulators responding to the rapid developments in digital payments and Fintech? What regulatory approaches are working, which ones are impeding market development, and which ones are challenging the traditional regulatory constructs?**

Blockchain technology began to be structured as support for cryptocurrencies, especially Bitcoin, but both the private sector and the States have found potential in this technology, without the financial markets being the exception. Thus, within capital markets, *blockchain* technology can have applications both in the provision of goods and services offered by financial institutions and in the development of the internal

processes of entities and in the activities of inspection, surveillance, and control of the financial supervisor. On the other hand, a possible answer to the problem of low levels of access to financial services could be the application of *blockchain* technology, in order to give a large part of the population access to financial services. For this reason, through regulatory processes, the application of *blockchain* technology can be potentiated in order to generate efficiency, market-entry, and access to financial resources that a high percentage of the American population currently lacks<sup>8</sup>.

### **What significant adjustments to e and m money could regulations introduce to enable new payment schemes to emerge (such as the likes of AliPay, WeChatPay, and other schemes such as iDEAL and Swish)?**

WeChat started as an instant messaging platform, but gradually concentrated different services to users. In today's Chinese society, it is unthinkable not to be a user, enjoying more use and popularity than Facebook or WhatsApp in Europe. The WeChat payment option is called Wallet; it has several options to load balance, views payment history, or to carry out economic transactions.

The first option is from customer to seller. The user (payer or customer) generates a QR code that indicates the amount to pay. On the other side of the operation, the vendor uses a barcode-like gun that we're used to seeing in stores around the world. This hardware has a specific QR code reader that sends the payment order for that amount. In some establishments, they do not have this gun. When they do not have this option, the seller uses the camera of the smartphone itself to receive the charge information. A good option to adapt your business to the Chinese tourist is to install WeChat on your mobile device and thus be able to receive payments<sup>9</sup>.

Another way is also using QR codes, but it is the seller who generates the amount to be collected. The address where the information is sent/received is backward. It is the payer who uses the camera on their smart mobile device to receive the bill.

AliPay lacks the social character that WeChat has, but on the contrary, the suite of services it offers is greater than that of its competitor. This app focuses on the individual operation of the user against the tint of the social network that WeChat has. This software belongs to Alibaba (which has a well-known AliExpress company). Its first idea was a suite of financial services: Loans, credits, insurance operations in investment funds. Based on income/expenses and the behavioral data that AliPay has on the user, the application scores with values between 0 and 1000 at the user. In this way, it allows you to be able to obtain or not obtain credits or loans with a series of conditions and an amount limit instantly. Even to rent a car, the deposit that the user must leave (or even whether or not to leave a deposit) determines you (in many companies). This all sounds like a Black Mirror chapter, but it is the daily bread in China, so we want to remind you of the importance of accepting payments with these applications to tourists from this country since it will be easier for both parties<sup>10</sup>.

When paying with AliPay, it can be done in two ways. By generating the QR code, the buyer or the seller, and, in both cases, accepting the operation. In AliPay the user can also recharge a wallet or if it is easier, faster, and more comfortable. Or, conversely, you can directly connect the payment system offered by this app with a credit card.

### **Could Fintech play a significant role in addressing new emerging trends in payment fraud?**

Technology has allowed a revolution in systems, and the financial sector has not been excluded. Thanks to this evolution, many institutions have improved their services, positively impacting users to the extent of including them financially. Likewise, *Fintech* companies have created disruptive and innovative products and services as a consequence of new technological trends. Financial Fraud has also entered this revolution and has been evolving, which is why it has become increasingly more sophisticated and complex since today it is not necessary to have a physical card to carry out financial Fraud, issues such as theft identity and the extraction of personal data on the *dark web*, are key points to combat.

Scammers and fraud systems are in a constant arms race. While fraud management solution providers are constantly developing new tools, scammers hone their craft by exploring new ways to get around any wall that is raised to keep them away. For example, mule scams used to be fairly simple, and scammers used basic packet redirection efforts to receive their stolen goods. But today's mule scams have social engineering tactics to target potential victims<sup>11</sup>.

Scammers now not only seek to escape Fraud, but also invest more time and resources to scale their operations and increase their ROI by exploiting three primary e-commerce customer touchpoints: shopping, payment, and recovery. They must appear to be legitimate customers in each of these steps, so they are concentrating their efforts on finding new vulnerabilities.

### **Could Fintech enhance the modernization of RTGS systems?**

Although these are only a few applications of the technology, for central banks, they are some of the most affected. Even as cryptocurrencies work to deliver the same technical performance as the Visa network, making it suitable for use globally, banks are testing and refining the technology and looking for ways to integrate it into national systems.

The BIS report has asked banks to share the results of their pilot programs to better determine what would be an ideal decentralized system for banks. This decision comes as a new form of private payment solutions arrives, potentially making incumbent financial institutions obsolete.

By saying that decentralized systems have to prove themselves technically, the wave of new solutions is underpinned by constant adoption rates, especially in the world of decentralized financing (Defi). This includes events such as Bitcoin, exponential growth in institutional investment, positive regulatory information, and, of course, the seemingly highest lower support levels in the market.

These events have created a kind of existential threat to existing financial institutions, which have largely decided to follow the new technology and see how it can reinvent itself.

While synthetic CBDC implementation proposals are currently being examined by central banks around the world, stablecoins are the only one of the three forms of central bank digital money that is currently active and on the market. Stablecoins are maintained and transferred using digital wallet applications. Issuers are either regulated banking institutions themselves or are backed by regulated banking institutions. Our research indicates that the total addressable market for CBDCs and their affiliates exceeds \$ 18 trillion, which is the cumulative value of money currently held in bank accounts worldwide, and that can be ordered instantly, according to Trading Economics data<sup>12</sup>.

### **How do we measure the development of digital payments and Fintech in a country?**

The most notable contrasts between traditional bank accounts and stablecoins are in the speed, cost, and accessibility improvements that stablecoins offer compared to traditional bank accounts. In a traditional environment, even the most basic banking features for storing, sending, and receiving funds are only available to bank customers and are often associated with archaic processing times and fees. Stablecoins address these issues through their open access designs, allowing consumers around the world to store, send, and receive fiat currencies at no cost with just a smartphone and an Internet connection.

A particularly noteworthy feature of the stablecoin market is its efficiency relative to traditional emerging economies that operate with parallel currency markets. Specifically, the differential between market exchange rates and official exchange rates has registered double-digit percentage points in traditional emerging economies, although it continues to be a factor throughout the stablecoins market. This has effectively created some of the most efficient parallel currency markets in history, largely due to its digital nature. For those who today are contained in inefficient parallel currency markets, stablecoins offer a viable alternative to local monetary and payment systems that is particularly resilient to monetary policy

setbacks. When considering the possibility of complete closure of the banking system, stablecoins and Bitcoin offers the only viable, functional, and large-scale alternative to traditional bank accounts.

### **Are stablecoins and global stablecoins (like Libra) inevitably poised to overtake traditional payment systems?**

There is a long way to go for synthetic stablecoins, CBDCs, and CBDCs to hit the mass market and become serious competition for traditional bank accounts outside of emerging markets, especially considering the lack of service providers that offer a complete set of financial services for the end-users of these solutions. However, the proven demand for these solutions is undeniable in emerging markets that suffer from parallel currency markets or inefficient payment systems and in any market that applies overly restrictive monetary policies.

### **Are CBDCs relevant for financial inclusion?**

Despite its birth, central bank-issued digital currencies (CBDCs) and their derivatives have rapidly evolved into a serious alternative to typical bank accounts. A CBDC is an electronic money issued by a central bank to be used by consumers and businesses instead of traditional money. The concept was popularized in a particularly interesting paper published in 2016 by Warren Weber, a research consultant at the Bank of Canada, which explored in detail a currency issued by a central bank and backed by Bitcoin (BTC)<sup>13</sup>. Since then, central banks around the world have begun to explore the concept by creating research and working groups, as well as international organizations such as the International Monetary Fund, the Bank for International Settlements, and the CBDC Group think Tank.

The various ramifications of CBDCs have gained traction in recent years as they offer a gradual approach to central banks interested in eventually launching a CBDC. Among the various types are synthetic CBDCs and stablecoins, which are tokens denominated in national currency but issued by a private sector company in association with a central bank or a regulated financial institution.

### **What would be the effect of CBDC, multi-currency CBDC, and synthetic CBDC on the payments market?**

Synthetic CBDC is gaining momentum, but challenges remain. The best way to create a public-private partnership is an ongoing debate, as well as for deciding who should have the ability to issue the tokens. Collaboration between stablecoins and banks looks promising.

However, innovative banks will adopt many of the new technologies, such as blockchain-compatible stablecoins. These stable currencies are irreversible, safe, fast, and capable of processing transactions with a global reach for the settlement of final payments. There are likely to be associations between banking and payment services. The Bank of China seems to believe that digital yuan could eventually replace the money. Stablecoin experts noted that privacy, custody, and financial stability would be the three most challenging elements a CBDC would face.

Tommaso Mancini-Griffoli, vice president of the Capital Markets Department of the International Monetary Fund (IMF), believes that a public-private partnership may be the best way to advance for the Central Bank Digital Currencies (CBDC). He also said that the idea of creating a CBDC backed only by and fully under the control of a central bank is outdated. A synthetic CBDC, through a partnership of the public and private sectors, is gaining popularity in the world of digital currencies and will allow the private sectors to continue innovating with, for example, blockchain-based stablecoins. It is suggested that the private sector focus on innovation, interface design, and customer management. The public sector



remains focused on regulation and confidence-building. This will encourage innovation to continue, but within a regulated framework for financial stability<sup>14</sup>.

According to researchers, unlike the original idea of CBDCs, which requires central banks to issue a liability directly to the public, a synthetic CBDC allows the private sector to issue a liability used by individuals to buy assets for payment. The liabilities would be fully backed by the central bank's reserves. Central banks also issue licenses for liabilities, which would help regulate and supervise companies and institutions. A regulated environment can offer the same conditions for all innovators in the stablecoin private sector to continue to grow. This could also mitigate potential risks to financial stability that they pose. There are several different stablecoins available. It is difficult for consumers to know which ones are fully compatible and which offer a claim on the underlying reserves and how liquid and safe these reserves are and whether they are liquid and safe enough in every state in the world.

The debate over the impact of Distributed Ledger (DLT), Cryptocurrency, and Defi technologies has not ended in the past year. Once mocked and ridiculed by the headlines, the technology is now widely recognized and proven. The banks themselves have gradually realized that the benefits of DLT cannot be overstated, improving traditional systems in almost every way.

### **\*Payments during COVID-19 \***

#### **How have countries leveraged digital payments in the COVID-19 response?**

Millennials are a generation that has been shaped by recessive forces. With employment levels since the COVID-19 pandemic now falling to 2000 levels, Millennials, who have already gone through a post-September 11 recession and yet another after the 2008 global financial crisis, are now they face another episode of slower economic growth since the labor force entered than any other generation in US history.

Among the oldest group of the millennial generation, slow growth and jobless recovery defined their previous working life after the Global Financial Crisis. The recession that will result from the pandemic this year will now define the entry into the job market of the youngest group of Millennials. Poor job prospects and slow wage growth will have defined the working life of an entire generation. With the effects of COVID-19 about to hit them again, the generation least prepared for another crushing recession already has zero net home values.

The CoronavirusCoronavirus could not have come at a worse time, because, despite the fact that the economy was not entirely bad before its arrival, it was evident that economic growth was in the process of deceleration. But the worrying thing was not that. The thing was, the stimuli are not working. Despite the aggressiveness of the stimuli, the patient did not react. This year came under a tense calm as many saw a storm approach. And suddenly, this virus came to put the cake. With a drop, the glass spilled, but the universe exaggerated and brought us a waterfall. The cessation of activities has been an arrow in the heart.

A demand crisis creates a collapse of prices in financial markets and a deflationary spiral in the real economy. A business with no income cannot pay wages. A person without a job cannot consume much. And that decreases business income. Everything is a circular chain like an avalanche. When the first domain falls, it is a matter of time for everything to escalate. Here is the relevance of all this for Bitcoin. Not only that, one can potentially make a fortune in currency arbitrage in this dollar, euro, bitcoin love triangle. I also mean that Bitcoin is a global asset that benefits from the stimulus in the United States, stimulus in Europe, and stimulus in the rest of the world. That money inflates the markets and the price of things. Yes, Bitcoin enters the list of beneficiaries<sup>15</sup>.

### **What lessons can countries draw from the performance of digital payments in COVID-19 pandemic for their future national payment strategies?**

COVID-19 presents great challenges for the world in securing the necessary funds to combat the pandemic and minimize effects on growth and fiscal sustainability. The *coronavirus* pandemic has left the whole world in airplane mode and with no navigation details like flight time or destination. Already many sectors have felt the blow of a lack of activity. Sports and entertainment events are canceled. The tourism sector is falling over due to the closure of borders. And social distancing is paralyzing the consumption of products and services. The price of oil continues to fall; operations on Wall Street have been suspended, and trade is falling between China and the US.

While the governments of more than 150 countries are trying to flatten the growth curve of those infected with COVID-19 through various measures, the economy is entering a period of uncertainty. Yet in retail banking, we were already moving to a contactless world. The fact that fintech companies attracted investment of US \$18 billion underscores that<sup>16</sup>.

Despite the bleak outlook, the financial technology sector embraces many of the social distancing measures being promoted today and is well-placed for payments, transfers, e-commerce, and more. The coronavirus pandemic will accelerate the adoption by these segments (traditional banking) that do not have it as their main access channel yet. The old mantra of looking at the crisis as an opportunity does not apply to the pandemic – rather, the move to faster digital channels and disruptive solutions was already necessary.

### **The impact of Coronavirus on the Fintech sector.**

In a new chapter of the virtual economy, the key to maintaining activities will come from powerful software solutions to innovate and enable resources. Companies will have to invest in digital marketing and increase the funnel of opportunities through online channels, with specific messages and information based on the data. Business models are also being revised to meet new consumer needs. “To show the change that many insurance companies have introduced in their policies. By default, most companies did not include pandemic protection in life and credit insurance (which guarantees the payment of loans and debts in the event of death and disability), since these products are intended to cover foreseeable risks<sup>17</sup>. These changes also affect the business model and, once again, converge on the need for a much more defined and structured digital positioning. It is necessary to keep activities fully operational and, at the same time, preserve security at all levels. The treasure at the end of the rainbow Amid the uncertainties surrounding the immediate future, forecasts, and forecasts are not enough to determine the next steps for organizations, particularly financial ones. The post-pandemic universe continues to be a worldwide unknown that is now beginning to face the phase.

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