

## **Financial technology (Fintech) in the Arab countries “Challenges and Opportunities”**

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### **Abstract**

The modern financial technology market “Fintech” has witnessed remarkable growth in recent years, as the total investments in financial technologies worldwide increased from 19 billion dollars in 2013 to nearly 130 billion dollars during the first half of 2019.

This research aimed to shed light on one of the important topics, which is fintech in the Arab countries, focusing on Egypt and Saudi Arabia, and to identify the most important opportunities and challenges. the research presents the review of the previous studies in this field and make a positive contribution to understanding of Fintech and its importance and the future of it in Arab countries.

The study used the descriptive analytical method by observing, collecting data describing and analyzing ideas related to the subject of financial technology from all various aspects and knowing opportunities and challenges that facing Arab counties.

The study concluded that financial technology is growing in Arab countries and there are many opportunities for Arab countries, especially in Egypt and Saudi Arabia, which the study focused on. Although it faces some challenges, the chances of proliferation depend on several initiatives by countries to encourage a regulatory environment and encourage SMEs not only to start but also to stay and grow.

Keywords: Financial technology, Fintech, Saudi Arabia, Egypt, emerging technology. Arab Country, Business Innovation, Financial Services.

## 1 -Introduction

The financial services of the twenty-first century are referred to as fintech (**Todorof, 2018**). Fintech's inclusion in the global financial sector has been hinted at by the recent growth of mobile applications and website usage among users. With the use of computer-based technology, the financial services sector has undergone a change thanks to fintech development. In order to increase the effectiveness of the financial services sector, Fintech is thus frequently described as a combination of digital innovation with financial services (**Zavolokina, Dolata and Schwabe, 2017**). As a result, Fintech is thought of as the union of financial innovation with technical innovation, which has the potential to propel the financial services sector to a new level.

The most common ideas employed at the time for research in the finance sector were called fintec. Using cutting-edge, innovative technologies in the financial industry is known as fintech. Fintech became a thing at the end of the 2010s. (**Haddad, 2019**).

The need for financial services at a more affordable cost that offers mobility and quicker speed may be attributed to the other explanation for Fintech's emergence (**Anikina et al., 2016**). The main explanation for FinTech's rise was the 2008 global financial crisis (**Haddad, 2019**).

The reason of why FinTech is now happening is that developments in FinTech are more real and are unlike past innovations in financial services (**Rupeika-Apoga et al., 2018; Thalassinos et al., 2015a; 2015b**). These technologies are transforming people's lives and connecting the common people that they are real, with an effect on infrastructure.

Latest studies have demonstrated many benefits of the financial service industry's Fintech movement. Fintech will ensure operational performance, boost customer-centric services (**Gomber, Kauffman, Parker, & Weber, 2018**) in addition to the disruption of conventional financial markets (**Lee & Shin, 2018**), and contribute to better transparency in the financial service sector (**Loo, 2018**) is more enthusiastic about Fintech's position in the financial services sector and assumes that by reducing the risk of a financial crisis, this revolution will positively accelerate the growth of the financial services industry.

The importance and purpose of the study

The importance of this study is to shed light on a very important topic, which is what financial technology is and its current importance in Arab countries. While the study aims to explain the nature of financial technology and focus on the most important opportunities and challenges for the Arab countries, especially in Egypt and Saudi Arabia, and their effects on the conduct of financial transactions as well as the innovations it offers, which will have a clear impact on the Arab countries.

## **2- Literature Review**

By addressing a wide range of customers, fintech has established itself as a useful innovation for the financial services sector and boosted the level of financial inclusion. Fintech is a relatively new concept, yet it has already had an impact on the financial sector. The growth of fintech has created the door for the creation of cutting-edge consumer products that may give the finance industry a stronger competitive advantage. It is critical to emphasize how Fintech differs from conventional Fintech because of the criteria. But the development of Fintech solutions has given financial

institutions more chances to enhance their infrastructure and product lineup (**Jamil & Seman, 2019**). Consequently, there has been a rise in recent years in study on the use of Fintech in the financial industry (**Abojeib & Habib, 2019; Biancone et al., 2019; Jamil & Seman, 2019**). By examining the impact of Fintech and crowdfunding on client retention among banks in Malaysia and the United Arab Emirates, (**Baber, 2019**) has made an important contribution. Malaysia was chosen for this analysis because it scored best in the Finance Country Index. The comparative analysis was focused on the United Arab Emirates because it has the biggest market share for Islamic finance. The survey of 535 clients of a few Islamic banks produced the following findings: Fintech-based services do not improve customer retention among Islamic banks. However, for Islamic banks operating in Malaysia and the UAE, services based on crowdsourcing have a beneficial effect on customer retention. These results are at odds with those of (**Aisyah, 2018**), which claim that Islamic Fintech may enhance financial transactions, service offerings, and convenience, increasing customer loyalty for Indonesian banks. as previously stated,. When considering the potential convergence of fintech and Islamic finance, adherence to Shari'ah takes center stage. Fintech companies have done a fantastic job of ensuring that their business models are in line with Shari'ah regulations by adhering to Shari'ah norms that are applicable to all situations and by undergoing regulatory audits. However, Islamic Fintech continues to conduct extensive study in the area of Shari'ah compliance (**Biancone et al. ,2019**), For instance, research into the Shari'ah-compliant business models of crowdfunding platforms and Fintech companies has led to the conclusion that these platforms invest in halal items, share investment risk, and don't charge interest

(**Biancone & Radwan ,2019**) The importance of the interest prohibition for the approval of Fintech-based business models as Shari'ah compliant was further stressed. By establishing a direct connection between the client and the investors right away over the course of the project, fintech also enables IFIs to become more transparent. The Shari'ah element of bitcoin, a well-known cryptocurrency, has received most of the attention in previous literature. The initial perception of cryptocurrencies is that it is prohibited in Islam. Shaykh Shawki Allam, Egypt's Grand Mufti, claims that bitcoin has been associated with criminal activity and utilized to make investments that are not kosher with Shari'ah (**Abu-Bakar, 2018**). According to the fatwa issued by the Turkish government, trading in virtual currency violates Shari'ah law since it has aspects of speculation (excessive Gaharar). Bitcoin and other cryptocurrencies have been labeled as haram by the Palestinian Fatwa Center, who share the same viewpoints as the Turkish government (nonpermissible). This opinion is mostly supported by bitcoin's lack of oversight and ability to track its creator, which renders it unreliable and untrustworthy. According to Sheikh Imran (2017), intrinsic worth should be considered when analyzing money, therefore bitcoin fails the test of intrinsic value. Shaykh Haitam further said that since cryptocurrencies like bitcoin are formed out of nothing and have no backing, they ought to be illegal. (**Abubakar et al., 2018**).

Some academics, on the other hand, have the opposite opinion about cryptocurrencies and consider bitcoin to be against Shari'ah. For instance, (**Oziev and Yandiev, 2018**) claim that there is no proof that bitcoin violates Shari'ah but rather that there may be excessive risk (Gharar) and speculation due to the exchange rate's significant instability (Maysir). (**Bakar, 2018**) concurs that

bitcoin complies with Shari'ah and suggests using blockchain-based solutions to lessen claims that it is being used for money-laundering and other illegal activities. Eliminating the volatility of bitcoin exchange rate can therefore improve its Shari'ah compliance feature. This can be done by adjusting it with major world currencies (**Kahf, 2015**) In conclusion, bitcoin functions just like any other currency within its community, hence same rules for currency exchange should apply when exchanging bitcoin for other currencies. The location of the exchange and the ban on speculating over such exchanges are just two examples of such conditions.

### **3-Infrastructure elements supporting retail electronic payment technologies**

The activity of financial technology companies in a number of Arab countries has witnessed a remarkable growth in recent years, supported by the great development recorded in the telecommunications and information technology sector, and the availability of advanced communication networks, which helped to achieve a leap in the rates of individuals and companies using Internet networks. The significant increase in the number of smart phone users also contributed to the acceleration of the adoption of electronic payment applications in the Arab countries.

The availability of these applications has also been enhanced by the supervisory authorities 'endeavor to develop payment and clearing systems, and enact the necessary legislation to encourage the growth of electronic payment systems, especially regarding the adoption of electronic signature, cybersecurity, and data protection, as follows:

**In Jordan**, there are several infrastructure elements that support the spread of financial technology solutions in the field of electronic payment at the technical level, the most prominent of these elements are the development of communication networks, and the existence of an advanced infrastructure for Electronic National Payment Systems Infrastructure, linked to each other. Digital payment technologies in the Kingdom of Jordan also benefit from the supportive legal environment represented by the acceptance of electronic payment systems for electronic signature, the adoption of the Electronic Crimes Law, and the Cyber Security Law. In addition to the presence of the instructions and policies necessary to regulate the work of companies operating in this field, which helped prepare systems, tools and payment channels used in the field of electronic payment in the retail sector.

**In the UAE**, the advancement of the telecom sector's infrastructure, the proliferation of smart phone devices, the ease and speed of accessing the Internet, the availability of cloud computing, and the presence of start-up support bodies are among the most important factors supporting financial technology companies in the field of electronic payment.

**In Saudi Arabia**, the most prominent elements of the infrastructure supporting financial technology solutions included the presence of a national payments operator under the umbrella of the Saudi Arabian Monetary Agency, the "Saudi Central Bank", operating under the presence of appropriate regulations and instructions to develop such technologies.

**In Syria**, the infrastructure elements are the Internet and its applications, points of sale, and the mobile phone and its applications.



**In Iraq**, the infrastructure for electronic retail payment is the national division, and the adoption of interoperability of financial systems.

**In Kuwait**, Shared Automated Banking Services (KNET) companies provide the infrastructure for financial technology companies to obtain electronic payment services for the products and services provided, such as the electronic payment gateway.

On the other hand, **in Lebanon**, the infrastructure elements supporting the spread of financial technology solutions in the field of electronic retail payment are distinguished by the existence of a clearing system for retail payment transactions, including clearing checks, small transfers of less than twenty thousand dollars, and collection of bills in addition to a number of payment applications Immediate transfer by mobile phone for transfer between individuals and payment between merchants within specified amounts.

**In Egypt**, the Egyptian Banks Company provides the basic infrastructure for electronic payments systems, for example the debit and ATM network “123”, the automatic clearinghouse for payments “ EG-ACH “, and the network of mobile payments.

#### **4- Fintech in Saudi Arabia**

Kingdom of Saudi Arabia has taken steps to diversify its economy over the last few years The renewed emphasis on financial services is a part of its Vision 2030 broader diversification strategy. Finance is one of the eight sectors which has been earmarked for driving its future growth. in line with Saudi Arabia’s Vision 2030 to support entrepreneurship and the enhancement of financial technology (FinTech) services, the Saudi Arabian Monetary Authority (SAMA) launched the Fintech Saudi initiative.

The initiative aims to accomplish a variety of goals, the most prominent of which are: introducing the first edition of the Kingdom's FinTech system; educating and encouraging individuals to improve their FinTech expertise and skills; and promoting local banks, foreign FinTech firms, and partners to set up various FinTech activities in the Kingdom (Mittal,2019).

Banks and FinTechs are working together in Saudi to develop technologies that enhance customer experience. For example, to introduce a variety of contactless payment wristbands, Riyadh bank partnered with Gemalto. Saudi Arabia is focusing on becoming a blockchain-powered country.

In May 2017, using Blockchain, Al Rajhi Bank completed a cross-border transaction within a few seconds. Saudi Arabia's central bank signed a deal with U.S.-based Ripple in February 2018 to enable banks in Saudi Arabia to use Ripple's software to settle payments sent into and out of the country immediately.

Saudi Arabia's government initiated a Financial Sector Growth Program as part of its Vision 2030. The program aims to achieve five goals: financial diversity, financial inclusion, financial stability, digital transformation, and financial sector depth.

### Regulators

The Saudi Arabian Monetary Authority (SAMA) and the Capital Market Authority (CMA) are the key financial regulators in the country. In May 2017, SAMA released a Cyber Security Policy outlining the values and priorities for the initiation, implementation, maintenance, monitoring and enhancement of Member Organizations' cyber security controls.

The aim of the CMA is to encourage financial technology in the capital market through the provision of a streamlined regulatory structure conducive to financial technology innovation within the Kingdom of Saudi Arabia.

FinTechs will deploy and test their disruptive capital market relevant FinTech products, services, and business models under defined parameters and timeframes. The CMA issued the Financial Technology Experimental Permit Instructions in January 2018 to include a regulatory environment that is conducive to the capital market innovation of financial technology ('FinTech') within the Kingdom of Saudi Arabia. Companies apply for permission to participate in the FinTech laboratory where they can introduce and test their creative capital market related FinTech products, services, and business models under defined criteria and timeframes. Investors

Gulf Capital, an asset management company, purchased a US\$266.6m stake in Saudi Geidea, a provider of electronic payment solutions, in 2018.

The Public Investment Fund (PIF) of Saudi Arabia is a SoftBank Vision Fund member. SoftBank Vision Fund revealed in May 2017 that it had raised more than 93 billion dollars to invest in technology. Other fund members include Mubadala Investment of Abu Dhabi, which pledged US\$15b, Apple Inc, Qualcomm, Foxconn Technology of Taiwan and Sharp Corp of Japan. The fund is targeted at long-term investments in undertakings and foundational platforms aimed at facilitating the next age of innovation.

Saudi Arabia revealed plans to build a \$500bn new mega-city, named NEOM, in the northwest region of the country in Oct 2017.

The goal of the megaproject is to draw investment from global financial players, including J.P. By 2030, Morgan and BlackRock will add \$100 billion to gross domestic product. Through the Vision 2030 initiative, its adjacent attempts to establish a FinTech hub in Riyadh will become a catalyst for building a vibrant ecosystem of financial services.

#### -Talent

A variety of seminars, educational and awareness programs targeted at university students, investors, companies, and banks are expected to be launched by Fintech Saudi to implement the initiative and its contribution to a qualitative shift in the provision of financial technology services. The KAUST-SABB University Entrepreneur Accelerator TAQADAM was set up at Saudi Universities by the Saudi British Bank (SABB) and King Abdullah University of Science and Technology (KAUST). The purpose of the program is to support university students and faculty entrepreneurs at an early stage to develop their ideas into high-potential start-ups.

Fintech firms and Saudi Arabia are transforming the financial landscape. Traditional banks, insurers and fund managers are growing competition and pushing innovation. Regulatory changes are also spurred by the growth of fintech operations. Regulatory bodies are examining and introducing banking regulatory reforms in countries around the world to attract existing fintech players and facilitate the development of local fintech companies. SAMA unveiled its regulatory sandbox environment in 2018 to help turn Saudi Arabia into a smart financial center, allowing local and international financial technology companies to test innovative digital technologies they plan to introduce in the kingdom.

E-wallets, peer-to-peer (P2P) transactions, lending and direct foreign transfers provide services and goods currently being evaluated or have been successfully tested. At present, there are 26 applicants undergoing sandbox testing with SAMA.

SAMA launched regulations regulating the provision of payment services in Saudi Arabia in January 2020. The proposed regulations would enable payment service providers or licensed banks to provide electronic money issuance and payment services. The Provisions

The goal is to create a supervisory and supervisory system to ensure that transactions in the payments sector are secure and effective. In addition, after successfully completing their testing in the regulatory sandbox area, SAMA announced the issuance of the first license for an Electronic Wallet Company and the first license for a payment services company in SAMA also released rules regulating insurance aggregation activities in February 2020.<sup>3</sup> These rules are aligned with the Kingdom's 2030 Vision to encourage entrepreneurship and develop Saudi Arabia's insurance industry.

SAMA is also collaborating with the UAE Central Bank to develop fintech solutions for Cross-border settlements, including a project on a digital currency.

In addition to SAMA, the Capital Market Authority of Saudi Arabia (CMA) has also dedicated itself to encouraging financial technology innovation in the capital market. The Fintech Lab has been introduced by CMA, which also provides innovators with an opportunity to test their creative capital markets-related fintech products, services and business models under defined parameters and timeframes. To participate in the Fintech Lab,

businesses may apply for the Financial Technology Experimental Permit. In the fields of equity crowdfunding, robot advisory, sukuk fractionalization and the use of distributed ledger technology to arrange and provide custody services, 10 companies are currently undergoing tests with the CMA Fintech Lab (**FinTech Saudi Annual Report, 2020-2019**).

### Attributes of a Successful Fintech Hub



Source: Fintech Saudi Annual Report, 2020-2019.

KPMG: The Fintech Industry in Saudi Arabia

## Pillars of a Fintech Ecosystem



Source: Fintech Saudi Annual Report, 2020-2019.

## 5-Developments of Saudi banking technology

### Clearing House Operations

The number of commercial and personal checks cleared by clearing houses in the Kingdom decreased in 2019 by %14.6, a decrease of 491.9 thousand checks, and their value decreased by %8.6 to 260.5 billion riyals, while the average value of the check in 2019 increased by %7, from 84,625 riyals in 2018 to 90.576 riyals in .2019

In general, the decline in commercial and personal checks is due to the expansion in the use of banking technology, including point of sale devices.

### 2- MADA

The Saudi Payments Network (MDI) also achieved positive growth in all of its operations in 2019, and the number of public ATMs in the Kingdom increased by %1.1 to reach 18,882 machines, compared to an increase of %1.9 in 2018. The number of ATM cards issued increased by %10.4 To reach at the end of 2019 about 31.5 million ATM cards, compared to an increase of %0.6 in 2018.

The number of POS devices in 2019 increased by %24.7 to reach 438,618 devices, compared to an increase of %15.9 in 2018. The number of sales transactions executed through POS devices increased by %56.5 to reach 1.614 million transactions, compared to an increase of about %45.7 in 2018. 2018.

The following is a table and chart showing the statistics of ATMs in the Kingdom from 2015 to 2019:

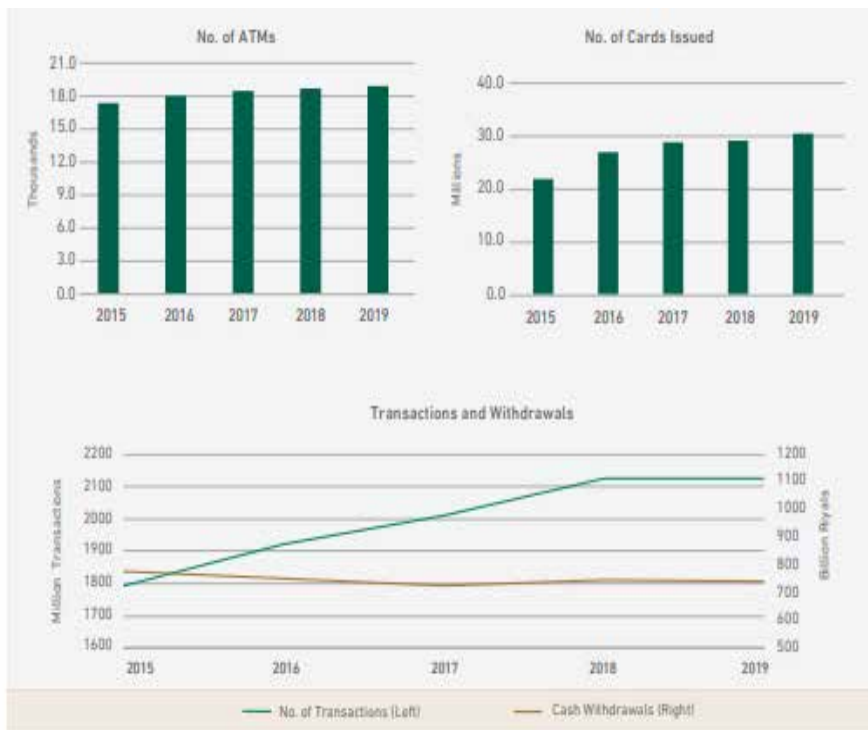


**Table ( 1 )**  
**ATM Statistics**

| Year | No. of ATMs | No. of issued ATM cards | No. of transactions (Million) |               |       | Cash withdrawals (Million SAR) |               |         |
|------|-------------|-------------------------|-------------------------------|---------------|-------|--------------------------------|---------------|---------|
|      |             |                         | Mada                          | Bank networks | Total | Mada                           | Bank networks | Total   |
| 2015 | 17,223      | 22,459,275              | 727                           | 1,069         | 1,796 | 435,177                        | 342,023       | 777,200 |
| 2016 | 17,887      | 26,537,349              | 822                           | 1,300         | 1,923 | 446,300                        | 307,149       | 753,449 |
| 2017 | 18,333      | 28,402,914              | 870                           | 1,142         | 2,012 | 440,729                        | 287,782       | 728,511 |
| 2018 | 18,685      | 28,559,828              | 949                           | 1,177         | 2,126 | 452,931                        | 295,394       | 748,325 |
| 2019 | 18,882      | 31,540,067              | 983                           | 1,342         | 2,125 | 468,849                        | 271,791       | 740,640 |

Source: Saudi Central Bank, Annual Report, 2020, P. 74.

**Chart ( 1 )**  
**Automated Teller Machine Statistics**



Source: Saudi Central Bank, Annual Report, 2020, P. 74.

### 3-The Saudi System for Express Money Transfers (SARIE)

The total number of transactions executed through the Saudi system for fast money transfers (SARIE) increased in 2019 by %17.1 to reach about 159 million transactions, compared to an increase of %31.2 in .2018

### 4- Payment system

The total number of billers linked to the SADAD system until the end of 2019 reached 211 from various sectors such as (electricity - water - telecommunications - airlines - insurance - credit cards) and others. The following chart shows the number and amounts of bills paid through the SADAD system:

### 5- Fintech in Egypt

The Central Bank launched “Fintech Egypt”, which is the first regulatory laboratory for financial technology applications in the local market, taking its headquarters in the historic building in downtown Cairo. It is an official gathering of emerging financial technology companies to obtain technical and organizational support from the central bank and become ready to work in the market. This was preceded by the launch of the features of the National Financial Technology Strategy, which aims to transform Egypt into an important regional center, about financial technology applications.

The first digital bank was opened in Egypt, and the door was opened for banks to submit requests to establish digital banks that rely mainly on electronic financial services. Electronic financial services.

In Egypt, there are many models that have achieved great successes in using financial technology to affect the lives of

citizens, most notably the Fawry company, which controls more than %50 of the points of sale in the market, in addition to the two companies B and Masry, and Aman, which recently joined the market, unlike emerging companies such as “Hoshli” is the application that helps citizens to save. T-Pay, Dubai, Pay Me and Edfa3ly.com, in addition to many other projects that are still in a small stage and need technical and financial support.

The inauguration of the Central Bank of Fintech Egypt and the launch of the Innovation Fund, which aims to achieve financial inclusion and expand its umbrella, is based on the National Council for Payments’ endeavor to transform Egypt into a digital economy in the coming years.

The banking sector will achieve positive returns from these applications by developing banking services in accordance with the latest technologies, increasing its ability to include more citizens within the financial inclusion system, reducing the use of cash, and continuously modernizing the infrastructure of the Egyptian banking sector.

Several initiatives have been adopted aimed at supporting digital financial inclusion by encouraging the role of modern financial technologies and switching to electronic payment systems to ensure the safety and accessibility of financial services. In this context, the Central Bank of Egypt adopted, in May 2020, a huge initiative for electronic payment, within the framework of precautionary measures to confront the emerging corona virus and maximize the contribution of the banking sector in implementing the state’s plans to deal with the potential repercussions of the virus. The initiative comes within the framework of the importance of providing all financial services to citizens in a fair, safe, easy and

affordable manner, and in light of the challenges facing electronic acceptance in Egypt, on top of which is the need to increase the number of points of sale, and to rely more on the QR code and the geographical distribution of electronic acceptance points. Programs to increase awareness of the importance of electronic collection. The initiative depends on a number of axes, the most important of which is the deployment and activation of electronic points of sale (POS) through (Acquirer Banks) banks that are eligible for electronic acceptance through electronic points of sale, as the Central Bank of Egypt, within the framework of the new initiative, will finance the deployment of one hundred thousand new electronic points of sale, to be distributed geographically in all governorates and activate them from the date of the initiative until the end of December 2020 **(Egypt Central Bank, 2020)**.

Some indicators of the ICT sector in Egypt and what Egyptian financial technology companies represent within the Middle East and North Africa region express important opportunities for the Egyptian user to obtain financial services and reduce the digital financial access gap of both types **(Hussein, 2020)**.

The previous figure shows the increase in the percentage of Internet users from %17.49 in 2011 to %27.25 in 2014, and then to %33.70 in 2017. It also shows an increase in the percentage of Internet users via mobile phone from %10.49 in 2011 to %21.77 in 2014 and then to %32.79 in 2017. The total mobile phone subscribers in 2011 amounted to about 83.43 million subscribers, then it increased to 95.32 million subscribers in 2014, then it reached 101.27 million subscribers in 2017. In addition, the density of mobile subscribers' penetration increased from 2011 to 2017, where the penetration density was about %102.76 in 2011, then %110.9 in 2014, then %111.64 in 2017 **(Ministry of**

### **Communications and Information Technology - Egypt 2018-2014).**

Egypt also includes %17 of financial technology companies in the Middle East and North Africa, where it comes in second place after the United Arab Emirates, which includes %46 of financial technology companies, according to 2018 statistics. Egypt also accounted for %27 of fintech deals in the MENA region from 2015 to 2019 (**Magnite and ADGM, 2019**). Egypt holds one of the 16 crowdfunding platforms in the MENA region (**Marmore, 2019**).

Despite the significant opportunities these indicators represent for the provision of digital financial services, financial inclusion in Egypt is considered low when compared to many countries in the world, especially African countries (**Demirguc-Kunt et al,2018**).

Perhaps one of the reasons for this is that Egypt has been relying on a bank-centric financial sector with limited regulatory contribution to non-bank payment service providers. The situation is changing with Egypt's recent efforts to modernize the regulatory procedures related to mobile payments (**World Bank Group, 2018**).

Among the most prominent challenges faced by Egyptian financial technology companies and banks to achieve digital financial inclusion:

- Know your customer system: This system enables the opening of financial accounts electronically without the need to go to the bank, as the inclusion of more customers requires knowing their identity, which can be done by agents. But this system was not allowed in Egypt, which hindered the process of financial inclusion (**Naser, 2018**).

- The scarcity of private equity and venture capital that underpins the growth of financial technology in advanced economies **(Harfoush, 2019)**.
- Lack of operability and low daily and monthly limits for transfers: there was no account or operability at the agent level, as the transfer limits were 3000 Egyptian pounds per day, 25000 pounds per month **(Naser,2018)**.
- Trust gap and financial awareness levels: The financial awareness gap constitutes a major constraint for emerging companies in the field of financial technology (Harfoush, 2019). Also, according to World Bank estimates, there are about 44 million Egyptians qualified to enter the formal banking sector and receive financial services. Such as high fees and commissions and fears that banks will not comply with the provisions of Sharia have weakened consumer confidence in financial services **(Naser,2018)**.
- Consumer Protection and Cyber Security: There was a deficiency in consumer protection systems and rules in the old regulations, those systems and rules that protect them from risks, counterfeiting, loss of privacy and crime activities **(Naser,2018)**.
- Internet service quality: the low quality of Internet service and its prices despite the high rate of information technology penetration and compliance in recent years **(Harfoush, 2019)**.
- The prevalence of phone SIMs is not proportional to the rate of internet access: the penetration density represented %111.64 in 2017, which indicates that users have more than one SIM, and it is strange that only %32.9 have access to the Internet according to the percentage of mobile internet users in 2017 **(Ministry of Communications and Information Technology - Egypt 2014 , Naser,2018)**.

## 6- Challenge and Opportunity:

The main challenge for conventional banking is setting high “digital” standards and new expectations from customers. Another challenge facing most banks, especially in the Middle East, is to provide the required investment to develop digital solutions that can compete with other leading solutions. It also needs more supportive regulatory environment, facilitated networking or other targeted interventions from the governments.

A major challenge is building a FinTech ecosystem from scratch with a limited number of FinTech’s and without clear paths for regulation and access to talent. Saudi Arabia have set the goals to tackle such a challenge.

Saudi Arabia has lacked the understanding and know-how to transform ideas into practice in the country. Furthermore, those with the desire and motivation to start their own FinTech company have been confronted with a scarcity of technical and commercial talent to propel local business growth.

As a result, much attention has been paid to how Saudi Arabia will begin to learn these skills, beginning with the educational system. Initially, efforts were focused on developing a FinTech-style curriculum, attending university career fairs, and providing internship opportunities. FinTech clubs and general co-working spaces have also been created, with the goal of inspiring potential entrepreneurs and expanding the talent pool available to FinTechs.

Saudi Arabia has ambitious goals for itself in the next five years. Community, education, and Small-Medium Enterprises are the three pillars of the strategic vision

By a series of events and the creation of substantial new jobs in the industry, the government is firmly embedding the vision in the community. The plans would include education, with the aim of reaching thousands of students throughout the world. For SMEs, efforts are underway to dramatically increase the number of Saudi Arabian FinTech firms, attracting a considerable amount of new funding.

The majority of FinTech start-ups expected to emerge from this program are expected to concentrate on the rapidly increasing domestic market, but Saudi Arabia could eventually become a great point of entry for international FinTech's looking to scale in the region.

#### 7- Result and Recommendations:

FinTech is a new business topic in recent years, although the concept is not new this paper tried to submit overview to understanding the rapid and successful growth of newly emerging financial technologies in the Arab countries especially on Saudi Arabia and Egypt.

fintech companies realized that technology can create a great opportunity to innovate new services and products. that offered a faster, cheaper and frictionless experience for customers, by creating convenient and easy-to-use solutions in areas of finance.

This paper highlighting some of the challenges facing FinTech such as: small management teams with insufficient capability, a lack of financial capital that prevents adequate scaling, a lack of credit and startup experience, a lack of an established business model, an inability to attract analytics and personnel talent, and a lack of enforcement expertise are all factors that restrict



development. While fintech face some of these challenges, the industry continues to develop and adjust to its difficulties.

There are many potential benefits from fintech in the future from the openness and speeding of fintech companies and business models that lead to creating more jobs in financial services and associated sectors, increased productivity in the sector, and rising gross domestic product in the Araba countries.

There is an opportunity to apply new technologies in the financial services industry by creating the right environment for the nascent FinTech industry not only to encourage more start-ups to be created in the first place but to encourage them to stay. As well as establishing a regulatory framework creating an environment in which FinTech's could stay, thrive, and scale. Review their internal and external governance mechanisms to ensure the long-term sustainability of their operations and increase awareness about fintech and encourage encouraging SMEs and talented persons, all of that are considered several things that can be done to enhance FinTech growth

## **8- Conclusion**

This research was conducted to review and discuss financial technology as a new era in financial services. The paper sheds light on financial technology industries and their future in Arab countries, with a focus on Egypt and Saudi Arabia, to understand the challenges facing financial technology and the most important opportunities available to both to expand in this field. Due to a lack of data during the study period, the researchers were unable to expand the study, but this research fills the gap of a lack of papers in the new field by providing some understanding of financial technology and clearing the way for other future papers. This paper can be used as a guide for researchers to present more in-depth and expanded papers on this important field.

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# التكنولوجيا المالية (الفتك) في الدول العربية

## « الفرص والتحديات »

الملخص:

شهد سوق التكنولوجيا المالية الحديثة "الفتك" نمواً ملحوظاً في السنوات الأخيرة، حيث ارتفع إجمالي الاستثمارات في التقنيات المالية في جميع أنحاء العالم من ١٩ مليار دولار في عام ٢٠١٣ إلى ما يقرب من ١٣٠ مليار دولار خلال النصف الأول من عام ٢٠١٩.

تهدف هذه الدراسة إلى إلقاء الضوء على أحد الموضوعات المهمة وهو التكنولوجيا المالية في الدول العربية مع التركيز على كل من مصر والمملكة العربية السعودية، والتعرف على أهم الفرص والتحديات. يقدم البحث مراجعة للدراسات السابقة في هذا المجال ومساهمة إيجابية في فهم التكنولوجيا المالية وأهميتها ومستقبلها في الدول العربية.

وقد استخدمت الدراسة المنهج الوصفي التحليلي من خلال الملاحظة وجمع البيانات ووصف وتحليل الأفكار المتعلقة بموضوع التكنولوجيا المالية من جميع الجوانب المختلفة والتعرف على الفرص والتحديات التي تواجه الدول العربية.

وانتهت الدراسة إلى أن التكنولوجيا المالية تنمو في الدول العربية وهناك العديد من الفرص أمام الدول العربية خاصة في مصر والسعودية التي ركزت عليهم الدراسة هذا على الرغم من أن الدول تواجه بعض التحديات، إلا أن فرص الانتشار تعتمد على عدد من المبادرات من قبل الدول لتشجيع البيئة التنظيمية الملائمة، وتشجيع الشركات الصغيرة والمتوسطة ليس فقط على البدء، ولكن أيضاً على البقاء والنمو.

الكلمات المفتاحية: التقنية المالية، الفتك، المملكة العربية السعودية، مصر، التكنولوجيا الناشئة، ابتكار الأعمال، الخدمات المالية، الدول العربية.