

FinTech and FinTech Ecosystem: A Case of Jordan-based SWOT Analysis

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Abstract: The modern economy has a lot of new wheels which turn the fortune of the contemporary era. Financial technology is no doubt one of those. The new cashless economy is based on these digital financial services. Jordan is transitioning into a dynamic ecosystem offering Fintech start-ups a platform to grow. Fintech in Jordan is pursuing multiple targets. The traditionally cash-driven Jordanian economy has responded well to the Fintech opportunity, primarily triggered by a surge in e-commerce, and Smartphone penetration. However, Jordan's growth is still not comparable in scale to its global counterparts but is stacked well, due to a strong talent pipeline in the tech workforce. The study on Jordan's FinTech sector was based on the strengths, flaws, opportunities, and threats (SWOT) framework. Hence, adopting an exploratory approach, based on an in-depth literature review, the chapter aims to identify the challenges and deliberate on the outlook for Fintech in Jordan.

Keywords: Banking, Fintech, financial inclusion, financial crisis.

JEL: G2, G22, G23.

INTRODUCTION

In recent years the business landscape in banking has changed dramatically. After the financial crisis of 2008 the financial market authorities have intensified regulation of the banking sector, introducing new or strengthening existing standards. Besides, innovations and development of information and financial technologies (FinTech) have increased the necessity to look for more innovative solutions also in banking. FinTech have become an integral part of banking, and nowadays banks have started to compete beyond financial services facing increasing competition from nonbank financial institutions.

According to KPMG [1], FinTech transactions in 2018 totaled USD 111,8 billion, which is double the value of the previous year. According to Statista [2], the total transaction value in the digital payments sector amounted to \$4.14 billion in 2019. According to Pollari and Ruddenklau's [3] annual FinTech 100 report, the United States and China have the most FinTech ventures and companies. In addition, the same report revealed that no Jordanian companies are among the top 100.

Due to the difficulty in defining the FinTech sector's boundaries, the available data on FinTech is somewhat controversial, dependent on the companies included in the report. FinTech companies are defined by a report by Accenture and CB Insights as those that "offer technologies for banking and capital markets, corporate finance, payments, financial data analytics, and personal financial management" [4].

Contradictory perceptions of the FinTech revolution exist. Some members of the financial services industry view

FinTech's expansion as a threat to the traditional banking sector. Others believe that FinTech has become a challenge that can be transformed into an opportunity because it offers greater flexibility, improved functionality in certain areas of the financial industry, and the aggregation of services. Thus, the development of FinTech and its influence on the future of finance are of utmost importance in the present day.

Jordan is regarded internationally as having a successful E-Government program; it scored well on the Online Service Index (OSI), indicating that its infrastructure is appropriate for FinTech ecosystems [5]. This article's remaining sections are organized as follows: First, we present the literature review, which encompasses FinTech's historical context. The FinTech ecosystem at the international and Jordanian levels is then discussed, including all stakeholders such as FinTech entrepreneurs, technology developers, financial consumers, and traditional financial institutions. Finally, the strengths, weaknesses, opportunities and threats are identified and discussed.

2. LITERATURE REVIEW

The onset of the Internet revolution in the 1990s had a profound impact on the global financial markets. One crucial consequence was the substantial reduction in financial transaction costs due to the Internet's emergence. The advent of electronic financial services, which encompass various financial activities such as retail banking, insurance, security, and trading, enabled individuals and organizations to obtain information about financial products and services and conduct transactions without the need for physical interaction with financial institutions. Additionally, this period saw the emergence of novel business models within the digital finance industry, such as internet and mobile banking, cost-effective online brokerage services, and mobile payments.

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The majority of these changes have resulted in fewer bank branches and offices [6].

IMF representatives continuously monitor the characteristics and hazards of FinTech and its implementation. [7] examined the positive and negative effects of FinTech on China's banking sector system and devised a method for preventing risks. [8] emphasised the competitive advantage of blockchain technology, but they are concerned that it may result in improper and unstable participant coordination. According to economists from Sydney and Stockholm, the cryptocurrency market is among the least regulated in the world [9].

[10] state, "The expanded use of smartphones has increased demand for m-banking services, prompting many more banks, microfinance institutions, software houses, and service providers to offer this innovative service alongside new sets of applications designed to extend their client reach, provide new e-services, improve customer retention, increase market share and enhance operational efficiency. As discussed in the preceding paragraph, the introduction of internet banking marked the debut of FinTech. Later-introduced online trading of securities is another instance of digital financial services.

[11] Provides an explanation in his article titled "Top 5 Fintech Trends that will shape financial markets in 2021" that the year 2020 proved challenging for many businesses. However, several FINTECH companies experienced growth by offering virtual financial and Fintech solutions. The paper focuses on five trends expected to have an impact on financial services in 2021, namely autonomous finance, open banking, digital-only banks, financial literacy, and voice technology. [12] details the five business continuity challenges facing the retail industry during the coronavirus pandemic. The five challenges for digitally transforming businesses are the expansion of e-commerce, supply chain logistics, retaining talent resources, inventory management, and a sustainable business model. In his report "Future of Work: NEO Banks poised to take Fintech to the next level," [13] explained and shared the views of RRajorpay's co-founder, who stated that the time has come to move beyond digital payments, and that 2021 will mark the beginning of a new financial world in which banking and technology will collaborate to create the NEO banking system. NEO Banks have digitized inactive processes and offer specialized, customized and personalized.

Information technology is transforming financial trading, reducing costs, and increasing market transparency, according to Albarrak and Alokley [14]. As a consequence, transaction costs will be reduced and merchants will have access to markets. [15] describes the five components of India's Fintech Ecosystem in his research paper titled Fintech- Opportunities and Challenges. Traditional Financial Institutions, Fintech startups, technology developers, financial customers and government are these five elements. FINO Paytech, Policybazar, Bankbazar, and Mobikwik are among the top-ranking Fintech companies in the study.

FinTech drew the attention of academics in the wake of the 2008 financial crisis, although it is difficult to pinpoint exactly when it emerged. This was not the only cause, however, as new technologies such as artificial intelligence and

blockchain were being developed at the same time. Due to the incorporation of these technologies with social media networks, FinTech has become a trending topic. FinTech firms were observed to offer new services and products or to provide traditional services to clients who lacked access to or were unable to work with banks and financial institutions. In addition, some FinTech companies have utilized new technologies to provide new services that incorporate new data and advanced analysis.

Numerous banks and financial institutions today, both globally and locally, are paying close attention to FinTech, with some demonstrating a significant level of interest in FinTech, as well as the cooperation, competition, strategy and regulations with FinTech ventures. In general, banks are positioning themselves as providers of financial services and as payment and transaction platforms. They are also attempting to become financial services marketplaces. We attempted to cover a gap in the literature by analyzing FinTech developments in a small nation with a robust traditional banking sector. In addition, we took a slightly different approach to analysis. Taking into account the literature review and our personal insights.

3. METHODOLOGY

The nature of this investigation made selecting the appropriate methodology difficult. The lack of data and inability to reach the stakeholders were obstacles. Firstly, we tried to motivate why we chose such a small country as Jordan for our analysis. In 2022, Jordan was rated 66th in the global FinTech Index Ecosystem Ranking of nations constructed by startup ecosystem report. The study will begin with an extensive review of existing literature on FinTech and the FinTech ecosystem in Jordan. This will involve collecting and analyzing academic papers, research articles, reports, and industry publications related to the topic. The literature review will help establish a theoretical foundation and provide insights into the current state of FinTech in Jordan. Moreover, SWOT analyzes of the FinTech sector were performed, the purpose of which was to help to form the present and future perspectives of the FinTech sector and to anticipate their strengths and weaknesses. SWOT analysis is a qualitative method of analysis of market processes that allows to identify the strengths and weaknesses of the analyzed object and to reveal the opportunities and threats arising from the environment [16]. According to Sammut-Bonnici and Galea [17], "internal analysis is used to identify the resources, capacities, key competencies, and competitive advantages that are specific to the object being analyzed". The purpose of SWOT analysis is to use the knowledge available about the internal and external environment and to formulate the strategy of the analyzed object accordingly. The primary objective of this investigation was to identify the components of the Jordan FinTech Ecosystem.

4. JORDANIAN FINTECH ECOSYSTEM

Before we can comprehend the competitive and collaborative dynamics of Fintech innovation, we must examine the ecosystem. A stable, symbiotic Fintech ecosystem is vital to the expansion of the Fintech industry. Entrepreneurs, the government, and financial institutions are the participants in a

Fintech ecosystem, according to Baporikar [18]. In the context of Jordan, we have identified the following five components of the Fintech ecosystem:

These elements contribute symbiotically to facilitate collaboration, stimulate economy, innovation and competition in the financial industry, and ultimately benefit the financial industry's consumers. The five elements of the Fintech ecosystem are depicted in Fig. (1). Following is a comprehensive description of the five distinct categories and their respective responsibilities within the Jordan FinTech Ecosystem.



Fig. (1). Elements of Fintech Ecosystem.

4.1. FinTech Startups

FinTech ventures comprise the core of the FinTech ecosystem; these companies are entrepreneurial. They are innovative in certain fields, such as international transfer, crowdfunding, insurance lending, capital market and remittances, and they operate at lower costs than their conventional counterparts. In addition, they target niche markets and offer customised services that traditional financial institutions struggle to provide. According to Basole and Patel [19], one of the key characteristics of FinTech, which is causing a massive disruption of the entire financial sector, is that the services traditionally offered by traditional financial institutions are being rapidly unbundled by a growing number of startups, resulting in new collaboration models and a significant shift in power. Globally, FinTech startups are on the rise; according to Kijkasiwat [20], the number of FinTech startups increased to 20,000 in 2020 from 10,000 in 2018. Approximately 37% of these 20,000 firms are located in the Middle East, Europe and Africa. The approximate number of FinTech ventures in Jordan, which was 51. This is regarded as adequate.

4.2. Technology Developers

Jordan has a growing technology developer ecosystem. The UAE has launched a \$100 million technology-focused venture capital fund in collaboration with the Jordanian Ministry of Digital Economy and Entrepreneurship to support Jordan's digital economy by investing in high-growth companies with

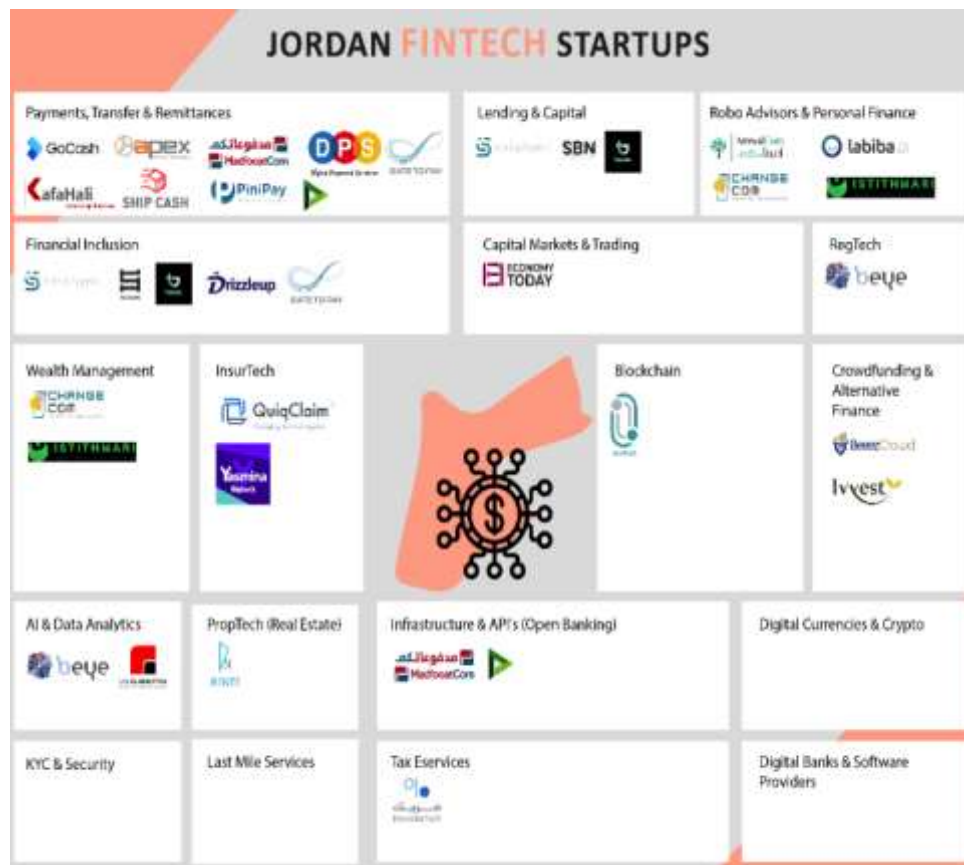


Fig. (2). FinTech startups in Jordan.

proven business models. Jordan and the UAE have also launched a \$100 million technology-focused venture capital fund. The Middle East and North Africa tech startup scene is sizzling, with new entrepreneurial energy from Rabat to Riyadh, accelerated by the rise of sovereign wealth funds as major investors and growing smartphone penetration.

4.3. Financial Customers

When it comes to the customers they target, FinTech startups stand out as highly distinctive. Unlike other conventional financial institutions have many types of customers, FinTech companies tend to focus on end-users customers, to a certain degree. In fact, these end-users are the primary revenue source for FinTech companies. According to study conducted by Gulamhuseinwala et al. [21], early adopters of FinTech tend to be young and high-income users. The Global FinTech Adoption Index 2019 (GFAI) reported that global consumer adoption in 2019 reached 64%. In Jordan, there are specific characteristics to consider regarding financial customers, including: Jordan's GDP per capita is \$5,373[22], making it a lower-middle-income country. The population of Jordan was approximately 10 million people in 2020 [23], with around 36% of the population aged between 15 and 34 years old [24]. Overall, FinTech companies in Jordan should focus on targeting young, tech-savvy customers with the potential for high incomes. However, it's worth noting that Jordan's population size and income levels may present unique challenges for FinTech companies in terms of customer acquisition and growth.

The level of education in Jordan is relatively high, with a literacy rate of 98.2% as reported by UNESCO [25]. In terms of mobile penetration, Jordan also has a high rate of 83% according to a report by GSMA (2021). Jordanians are also generally receptive to technological changes, with approximately 7.5 million active internet users in 2020. In terms of social media, Jordanians are active users, with around 69% of the population using at least one platform [26]. consumers in Jordan are heavy users of digital banking channels, with a study by Bain & Company [27] reporting that 90% of respondents use digital banking channels. Specifically, 73% of respondents used online banking and 64% used mobile banking. Additionally, Jordanians are open to the idea of digital-only offers, as reported by Bain & Company [28], with 44% of respondents willing to open an account with a digital bank.

According to Table 1, population makes the Jordanian market more attractive. The median age in Jordan is an additional distinguishing feature that may be crucial to the growth of the FinTech ecosystem.

Table 1. Financial customers in Jordan.

| | Jordan | source |
|--------------------|--------------|-------------------|
| Population | 10.2 (2021) | WB |
| Literacy | 98.2% (2018) | WB |
| Median Age | 23.7 (2021) | WB |
| Mobile penetration | 82% | GSMA Intelligence |

4.4. Traditional Financial Institutions

Jordan's Traditional financial institutions have also played a significant role in the country's financial system. The Central Bank of Jordan has been regulating and supervising the banking sector in the country, which is considered to be stable and sound. The banking sector has consistently shown a high level of liquidity and solvency, as the Central Bank of Jordan reported. Traditional financial institutions in Jordan have also faced challenges in providing financing and credit to SMEs. However, these institutions have been exploring opportunities to collaborate with FinTech startups to improve their credit supply to SMEs. Jordanian banks have offered their customers various digital banking services, including online and mobile banking. In addition, many banks in Jordan have been investing in and partnering with FinTech startups to offer innovative financial products and services. For instance, in 2020, Arab Bank announced its partnership with Tarabut Gateway, a Jordanian FinTech startup, to enable secure and seamless access to Arab Bank's financial services through Tarabut's open banking platform.

4.5. Governments

Traditional financial institutions are subject to more stringent rules, capital requirements, and reporting obligations from government authorities after the financial crisis in 2008. Governments play a crucial role in the FinTech ecosystem since this sector necessitates the creation of new rules or changes to those that already exist. There are differences in how various countries regard fintech overall. While some governments, like those of the UK and Singapore, are proactive, other countries are still cautiously monitoring the experiences of other countries. The level of government support for FinTech relies on the country's economic growth strategy and policies.

In general, governments either issue new FinTech regulations or relax certain laws. These loosened regulatory requirements for FinTech firms enable them to offer consumers more customized, affordable, and convenient financial services. According to the IMF [29] policy document, the majority of respondents, approximately 76% of countries, stated that they had modified their regulatory approaches in order to facilitate the growth of FinTech and supervisory capacity. In 2018, the EU, for example, introduced the General Data Privacy Regulation (GDPR) and Payment Services Directive 2 (PSD2). According to the Central Bank of Jordan, the country's regulatory sandbox, which was launched in 2019, has allowed for 24 FinTech startups to test their products and services. The sandbox covers a variety of sectors, such as payment solutions, digital banking, and peer-to-peer lending. The government has also established the Jordan FinTech Bay, a hub for FinTech startups and companies that provides them with networking and training opportunities.

Moreover, the Jordanian government has passed laws to support FinTech, such as the Electronic Transactions Law of 2001 and the Personal Data Protection Law of 2019. The Personal Data Protection Law is particularly important as it provides a legal framework for data privacy and security, which is crucial for FinTech startups that handle sensitive financial information.

The Jordan Investment Commission, the country's investment regulator, has also introduced a streamlined licensing process for FinTech startups, making it easier for them to operate in Jordan. In addition, the Jordanian government has partnered with international organizations such as the International Finance Corporation (IFC) and the World Bank to provide funding and support for FinTech startups.

Overall, the Jordanian government has demonstrated a commitment to supporting and promoting the FinTech industry, and the country has become a hub for FinTech startups in the Middle East. With the government's continued support and the country's favorable regulatory environment, Jordan's FinTech industry is poised for growth and success.

5. SWOT ANALYSIS OF FINTECH SECTOR

FinTech valuation concerns are crucial right now since the sector is developing quickly and having a significant impact on the financial sector, the economy, and our daily lives. In his work on FinTech valuation difficulties. [30] Placed a strong emphasis on SWOT analysis in his article about FinTech valuation. [31], wrote an article titled "The Rise of FinTech" SWOT analysis was suggested as a useful technique for the FinTech sector. SWOT analysis was utilized by [32] in their research on FinTech firms in Lithuania. SWOT analysis is used in practice to recognize and accurately appraise the FinTech ecosystem. Therefore, we decided to analyze the FinTech sector in Jordan using that methodology.

In order to better understand the FinTech ecosystem, it is appropriate to conduct a SWOT analysis, which will reveal FinTech's strengths, weaknesses, opportunities and threats (Table 2). The most important strengths, weaknesses, opportunities, and threats in the financial technology industry are enumerated in the table below, as presented in the scientific literature.

| Strengths | Weaknesses |
|---|---|
| Quality services | Lack of data privacy Regulatory rigor High risks for the sector |
| Easily accessible services | |
| Government support | |
| Openness and transparency | |
| Faster and simpler processes | |
| Opportunities | Threats |
| Attractive labour market | Cyber-hacking and data protection failure. |
| Decreasing costs of the services provided | |
| Risk reduction | Unfavourable regulation. |
| The growing popularity of technologies | Abuse of services. |

According to Nicoletti [33], the availability of services enabled modernized financial infrastructure, enable more effective risk management, consumers to raise efficiency, and expand access to financial services in a number of areas, such as payments, lending, personal finance and home insurance. Complex processes, such as the provision of financing, were facilitated and simplified by financial technologies. According to Zavolokina et al. [34], the FinTech sector is

renowned for its high level of financial transaction transparency and openness. This has led to an increase in customer confidence and market integration. The growing popularity and profitability of FinTech have not only attracted customers and investors, but also national governments [35]. Promoting economic growth frequently necessitates that nations invest in promising innovations, and FinTech is one such innovation. Due to FinTech's potential to stimulate economic growth, national governments are actively supporting its development. While the FinTech sector possesses numerous strengths, it also faces certain weaknesses. The weakness was the regulatory rigour. [36] notes that FinTech regulation is initially stringent and tends to grow more stringent over time.

Today, the privacy of personal information that consumers provide online is also a major concern. With the implementation of the Data Protection Act, the protection of the personal information of customers, employees, and other associated parties is of paramount importance. Also considered a weakness of financial technology is the risk of fraud or financial risk associated with consumers who do not completely comprehend new financial products. According to Agarwal et al. [37], ensuring data privacy and mitigating risks in the sector are highly relevant areas of activity in the FinTech sector and are among its vulnerabilities, as substantial resources are required to mitigate these risks.

Risk reduction was the next opportunity [38]. FinTech could provide risk mitigation solutions to key risk anxiety factors, such as the Know Your Customer policy, or eradicate the banking industry entirely. FinTech companies have devised a variety of solutions for regulatory issues, particularly security concerns. Thus, finTech companies can aid in the development of a more automated KYC policy. [39] note that falling prices for online services and rising mobile penetration in small and developing countries provide an excellent opportunity to use FinTech to promote financial inclusion among the roughly two billion people who lack access to official financial services. Even though opportunities outnumber threats, they should not be questioned. Cybercrime: hacking or data protection inadequacies, which can severely compromise the integrity of the entire financial system [40], is one of the most frequently cited threats in scientific literature. Many minorities and developing nations lack the infrastructure and capacity to ensure cybersecurity. There are also concerns that many start-ups place too much emphasis on the rapid delivery of their products at the expense of security.

The following threat is unfavorable regulation. Regulatory work is ongoing because, according to Anagnastopoulos [41], financial technology is relatively new. Regulatory frameworks vary from country to country, taking into consideration various risks, data provision, and other essential factors. In developing countries, however, where the regulatory framework for FinTech is still being established, there is a substantial danger that regulation will be extremely unfavorable to entrepreneurs, preventing them from competing with traditional financial institutions. Abuse of financial technologies is also not a recent phenomenon. In the absence of appropriate regulation, readily available financing can result in hazardous behaviors such as excessive borrowing and a high accumulation of personal debt. There are also

valid concerns regarding market competition. Multiple new entrants can rapidly expand and attain a substantial monopoly position. On the other hand, an excessive number of market participants offering similar services may also distort the market and make supervision more challenging.

REFERENCES

- KPMG International. (2019). Regulation and supervision of fintech. (November), 28. Retrieved from <https://assets.kpmg/content/dam/kpmg/xx/pdf/2019/03/regulation-and-supervision-of-fintech.pdf>.
- Statista (2019). Retail e-commerce sales worldwide from 2014 to 2021. <https://www.statista.com/statistics/479046/worldwide-retail-fintech-sales/>
- Pollari, I., & Ruddenklau, A. (2018). The pulse of fintech 2018: Biannual global analysis of investment in fintech. KPMG International. Retrieved, 27, 2018.
- Skand, J., Lumb, R., Masood, S., & Conway, S. K. (2014). The boom in global Fintech investment: A new growth opportunity for London, Accenture report. Retrieved from <https://www.cbinsights.com/research-reports/Boom-in-Global-FinTech-Investment.pdf>.
- Albarrak, M. S., & Alokley, S. A. (2021). FinTech: Ecosystem, opportunities and challenges in Saudi Arabia. *Journal of Risk and Financial Management, 14*(10), 460.
- Al_Kasasbeh, O., Khasawneh, O., & Alzghoul, A. (2023). The Real Effects of Fintech on the Global Financial System. *International Journal of Professional Business Review, 8*(3), e01725-e01725.
- Azarenkova, G., Shkodina, I., Samorodov, B., & Babenko, M. (2018). The influence of financial technologies on the global financial system stability. *Investment Management & Financial Innovations, 15*(4), 229.
- Abadi, J., & Brunnermeier, M. (2018). Blockchain economics (No. w25407). National Bureau of Economic Research.
- Foley, S., Karlsen, J. R., & Putniņš, T. J. (2019). Sex, drugs, and bitcoin: How much illegal activity is financed through cryptocurrencies?. *The Review of Financial Studies, 32*(5), 1798-1853.
- Shaikh, A. A., & Karjaluoto, H. (2015). Mobile banking adoption: A literature review. *Telematics and Informatics, 32*(1), 129-142.
- Jorner, J. (2021). Top 5 Fintech trends that will shape financial markets in 2021. <https://www.entrepreneur.com/article/362981>.
- Alexander, M. (2020). Covid 19: Five business continuity challenges coming to the retail industry. Retrieved from <https://www.techrepublic.com/article/covid-19-five-continuity-challenges-coming-to-the-retail-industry/>.
- Al-Kasasbeh, O. M. (2022). The Emergence of Digital Economy and New Business Models in the Era of Digital Transformation. *New Innovations in Economics, Business and Management Vol. 7*, 161-168.
- Albarrak, M. S., & Alokley, S. A. (2021). FinTech: Ecosystem, opportunities and challenges in Saudi Arabia. *Journal of Risk and Financial Management, 14*(10), 460.
- Vijai, C. (2019). FinTech in India—opportunities and challenges. *SAARJ Journal on Banking & Insurance Research, 8*(1), 42-54.
- Phadernrod, B., Crowder, R. M., & Wills, G. B. (2019). Importance-performance analysis based SWOT analysis. *International journal of information management, 44*, 194-203.
- Sammut-Bonnici, T., & Galea, D. (2015). SWOT Analysis SWOT ANALYSIS. vol. i, no. 5-9.
- Baporikar, N. (2021). Fintech challenges and outlook in India. In *Innovative strategies for implementing FinTech in banking* (pp. 136-153). IGI Global.
- Basole, R. C., & Patel, S. S. (2018). Transformation through unbundling: Visualizing the global FinTech ecosystem. *Service Science, 10*(4), 379-396.
- Kijkasiwat, P. (2021). Opportunities and challenges for Fintech Startups: The case study of Thailand. *ABAC Journal, 41*(2), 41-60.
- Gulamhuseinwala, I., Bull, T., & Lewis, S. (2015). FinTech is gaining traction and young, high-income users are the early adopters. *Journal of Financial Perspectives, 3*(3).
- World Bank (2020). Jordan launches regulatory sandbox for fintech startups. Retrieved from <https://www.worldbank.org/en/news/press-release/2019/10/24/jordan-launches-regulatory-sandbox-for-fintech-startups>
- Agarwal, R., Chandrasekaran, S., & Sridhar, M. (2016). Imagining construction's digital future. McKinsey & Company, 24(06).
- Arner, D. W., Barberis, J., & Buckley, R. P. (2015). The evolution of Fintech: A new post-crisis paradigm. *Geo. J. Int'l L., 47*, 1271.
- Bain & Company. (2019). The future of retail banking in Jordan. Retrieved from <https://www.bain.com/insights/the-future-of-retail-banking-in-jordan/>.
- Central Bank of Jordan. (2021). Regulatory Sandbox. Retrieved from <https://www.cbj.gov.jo/RegulatorySandbox.aspx>.
- Central Bank of Jordan. (2021). Statistics database. Retrieved from https://www.cbj.gov.jo/EchoBusV3.0/SystemAssets/PDFs/statistics-Database_EN.aspx.
- DataReportal. (2021). Digital 2021: Jordan. Retrieved from <https://datareportal.com/reports/digital-2021-jordan>
- GSMA Intelligence. (2021). Jordan: Mobile market outlook. Retrieved from <https://www.gsmainelligence.com/research/?file=0522d636e0f548a9b306ca0b0d1796d4&download>.
- Hoppe, S. (2018). The Rise of FinTech. Threats and Opportunities for the German Retail Banking Market, Munich, GRIN Verlag.
- Jordan Department of Statistics. (2021). Population statistics. Retrieved from https://www.dos.gov.jo/dos_home_e/main/population/census2015/2015.htm.
- Jordan Investment Commission. (n.d.). Investment Guide. Retrieved from https://invest.jo/Contents.aspx?sec_id=179.
- Jordan Times. (2019, November 26). Jordan unveils fintech hub. Retrieved from <https://www.jordantimes.com/news/business-club/jordan-unveils-fintech-hub>.
- Moro Visconti, R., & Borroni, M. (2020). Matching financial closeness with social distancing: Networking digital platforms within a corporate governance ecosystem. *Corporate Ownership & Control, 18*(1), 96-109.
- Nicoletti, B., & Nicoletti, B. (2017). Fintech innovation. The Future of FinTech: Integrating Finance and Technology in Financial Services, 81-159.
- Personal Data Protection Law No. 30 of 2019. (2019, July 17). Retrieved from https://www.legislationline.org/download/action/download/id/10963/file/Jordan_Personal%20Data%20Protection%20Law%20No%2030%20of%202019.pdf.
- Pu, R., Teresiene, D., Pieczulis, I., Kong, J., & Yue, X. G. (2021). The interaction between banking sector and financial technology companies: Qualitative assessment—A case of Lithuania. *Risks, 9*(1), 21.
- Saxena, A. (2021). Future of Work: NEO Banks set to take Fintech to the next level, says Rajorpay Founder. Retrieved from <https://yourstory.com/2021/03/future-of-work-neobanking-india-razorpay-shashank-kumar-fintech>.
- Scott, S. V., Van Reenen, J., & Zachariadis, M. (2017). The long-term effect of digital innovation on bank performance: An empirical study of SWIFT adoption in financial services. *Research Policy, 46*(5), 984-1004.
- Shao, X. F., Gouliamos, K., Luo, B. N. F., Hamori, S., Satchell, S., Yue, X. G., & Qiu, J. (2020). Diversification and desynchronicity: An organizational portfolio perspective on corporate risk reduction. *Risks, 8*(2), 51.
- Siddiqui, Z., & Rivera, C. A. (2022). FinTech and FinTech ecosystem: A review of literature. *Risk Governance and Control: Financial Markets & Institutions, 12*(1), 63-73.
- Skand, J., Lumb, R., Masood, S., & Conway, S. K. (2014). The boom in global Fintech investment: A new growth opportunity for London, Accenture report. Retrieved from <https://www.cbinsights.com/research-reports/Boom-in-Global-FinTech-Investment.pdf>.
- UNESCO. (2018). Jordan: Literacy rate, adult total (% of people ages 15 and above). Retrieved from <https://data.worldbank.org/indicator/SE.ADT.LITR.ZS?locations=JO>.
- United Nations Development Programme. (2020). Human development data center. Retrieved from <http://hdr.undp.org/en/countries/profiles/JOR>.

Welch, C., Piekkari, R., Plakoyiannaki, E., & Paavilainen-Mäntymäki, E. (2020). Theorising from case studies: Towards a pluralist future for international business research. *Research methods in international business*, 171-220.

Zavolokina, L., Dolata, M., & Schwabe, G. (2016). The FinTech phenomenon: antecedents of financial innovation perceived by the popular press. *Financial Innovation*, 2(1), 1-16.

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