

The Saudi Fintech Industry: A New Era of Financial Innovation

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Abstract. The Saudi Financial Technology (FinTech) industry, in recent years, has undergone a transformative evolution, heralding a new era of financial innovation. This paper provides an in-depth exploration of the journey, trajectory, and growth of the Saudi fintech sector. A comprehensive sectoral analysis sheds light on the dominant fintech fields, highlighting the leading fintech companies paving the way in the kingdom. To further delve into the experiential aspects of the industry, a quantitative research approach was adopted, capturing the lived experiences and challenges faced by fintech entrepreneurs in Saudi Arabia. A target sample of 400 entrepreneurs from diverse regions in Saudi Arabia was sought, and an impressive response rate of 92% was achieved, with 368 complete responses. Notably, among the myriad of challenges identified, "Talent and Recruitment" was discerned as a pivotal concern for the majority, closely trailed by issues related to "Regulation" and "Access to Customers". Interestingly, the "Technology/Product Development" facet wasn't as concerning as the aforementioned. Envisioning the future of the industry, we outline a forward-thinking trajectory and present a tailored set of solutions and recommendations to address the prevalent challenges, equipping stakeholders with strategic insights to navigate this dynamic industry landscape.

Keywords: Financial Technology, Saudi Arabia, Innovation in Finance, Fintech Entrepreneurs, Challenges and Pain Points, Opportunities, Strategic Recommendations.

Introduction

The onset of the digital age has not only reshaped traditional industries but has also catalyzed the emergence of entirely new sectors. One of the most potent manifestations of this transformation is the financial technology (fintech) industry, which leverages advanced digital solutions to drive efficiency, accessibility, and innovation in the provision of financial services (Razzaque & Hamdan, 2020; Suryono et al., 2020). While the advent of fintech has had a global impact, its effects are particularly pronounced in regions undergoing rapid economic diversification and digitization. Among these, Saudi Arabia stands out as a compelling case study.

The Saudi Arabian fintech sector, bolstered by the nation's Vision 2030 strategy, has recently witnessed a significant surge. The industry's development is central to the Saudi Arabian government's ambition to transition away from oil dependency towards a more diverse, technologically-driven economy. The fintech industry in Saudi Arabia is not just a reactive adaptation to global trends, but a proactive effort towards economic diversification, signaling a new era of financial innovation (Almuhammadi, 2020).

This paper aims to explore this burgeoning industry in Saudi Arabia, which is playing a transformative role in the Kingdom's economy and the financial world at large. We will delve into the key drivers behind this growth, the unique challenges faced, and the innovative solutions being implemented. The purpose is to provide an understanding of the dynamics that are shaping the fintech landscape in Saudi Arabia, along with its implications on the global fintech ecosystem. By doing so, the study offers a forward-looking perspective on the opportunities and potential trajectories that lie ahead for the Saudi fintech industry, serving as an important cornerstone for future research in the field.

Significance of the Research

The significance of this research is manifold. Firstly, by studying the Saudi Arabian fintech industry, this research contributes to the broader understanding of financial innovation in emerging markets. Emerging markets often possess unique economic, social, and regulatory contexts, leading to distinct fintech trajectories that deviate from the patterns observed in mature markets. This research, therefore, provides much-needed insights into these alternative trajectories, complementing existing fintech literature that is predominantly based on developed markets.

Secondly, Saudi Arabia represents an interesting case study due to its national Vision 2030 strategy. The commitment of the Saudi government to establish a technologically driven economy presents a unique environment that fosters the development of fintech. This research will help illuminate how such high-level strategic initiatives can shape the innovation landscape, particularly in the fintech domain.

Thirdly, by identifying the key drivers, challenges, and responses within the Saudi fintech industry, this research offers practical insights for policymakers, entrepreneurs, investors, and other stakeholders involved in fintech in Saudi Arabia and similar contexts. For instance, this research could guide regulatory developments, investment decisions, strategic choices, and partnership opportunities.

Lastly, as the financial world is becoming increasingly interconnected, developments in one part of the globe can have repercussions elsewhere. A deep dive into the Saudi fintech industry can thus shed light on potential global implications, including opportunities and threats for foreign businesses and investors.

In sum, this research not only adds a novel dimension to the fintech literature but also provides actionable insights for various stakeholders, both within and beyond Saudi Arabia. It is hoped that this paper will serve as a launching pad for further academic and practical exploration into the promising and fascinating world of fintech in Saudi Arabia.

Overview of the Research

This research is a comprehensive examination of the fintech industry in Saudi Arabia, its evolution, and its potential future trajectories. The paper is structured to provide an in-depth understanding of the industry and its broader implications on the economy and the global fintech landscape.

The study begins with an exploration of the genesis and evolution of the Saudi fintech industry. This includes a review of the significant milestones and turning points that have shaped the industry, highlighting the factors underpinning its growth and development. Particular emphasis is placed on the

impact of Vision 2030 and other strategic initiatives that have been instrumental in fostering a conducive environment for fintech innovation in Saudi Arabia.

Following this, the research delves into the contemporary landscape of Saudi Arabia's fintech industry. We perform a sectoral analysis, identifying the most prominent subsectors and the novel solutions they are introducing. This includes a discussion on the leading fintech companies in Saudi Arabia, their innovative business models, and the key value propositions they offer.

We then move to the critical evaluation of the opportunities and challenges faced by the Saudi fintech industry. This section not only examines the regulatory, economic, and technological factors influencing the industry but also investigates the social and cultural dimensions that affect its uptake and use among different demographic groups.

Subsequently, the research probes into the global implications of the Saudi fintech boom. This involves an examination of how developments in the Saudi fintech sector are reverberating beyond its borders and the potential opportunities and threats it poses to the global fintech ecosystem.

Lastly, the study concludes with a forward-looking perspective, suggesting future directions for the Saudi fintech industry based on current trends and emerging technologies. It also outlines the potential avenues for future research, thereby contributing to the ongoing academic discourse on fintech.

This research presents a holistic view of the Saudi fintech industry, its intricacies, and its larger implications, creating a valuable resource for academics, policymakers, investors, and industry professionals alike.

Literature Review

The fintech landscape in Saudi Arabia has captivated the attention of scholars, policymakers, and industry experts alike. To lay the groundwork for this study, this literature review seeks to amalgamate the collective wisdom present in the existing body of knowledge on this topic.

Delving into the evolution of Saudi Arabia's fintech trajectory, several sources, including Abumughli et al. (Abumughli & Aysan, 2021), have charted out significant milestones, such as the emergence of the first digital-only banks and the advent of peer-to-peer lending platforms.

The landscape's expansive growth can be attributed to several factors: Saudi Arabia's youthful demographic profile, its significant internet penetration, and the vigorous push to diversify its economy have all served as pivotal catalysts, as noted by Lukonga (Lukonga, 2018).

Complementing this, an uptick in financial literacy has also played a fundamental role in this growth trajectory (Magdy Rezk & Halim, 2022). Saudi Vision 2030, emphasized by scholars like Akmal (Akmal et al., 2023), stands out as a testament to the country's commitment to fintech, driving government initiatives to reform regulations, invigorate fintech startups, and foster international synergies (Belouafi, 2021).

In the contemporary scenario, A. Almuhammadi (Almuhammadi, 2020) has profiled market leaders like STCPay, Geidea, and Halalah, focusing on their influential trajectories, while the sector at large, as pointed out by N. S. Shirazi et al. (Shirazi et al., 2023) and R. M. Shafi et al. (Mohamad Shafi & Tan, 2023), boasts an array of innovative business models from digital banking to e-wallet solutions.

Alshater et al. (Alshater et al., 2022) further underscore that user-centric features, such as convenience, security, and the allure of financial inclusivity, are the driving forces behind consumer adoption. Yet, the road is not devoid of challenges.

The Saudi Central Bank (SAMA) has been instrumental in shaping a supportive regulatory environment, as documented by W. M. Rezk et al (Magdy Rezk & Halim, 2022). Simultaneously, hurdles like the nation's economic oil dependence and rapid technological metamorphoses pose unique challenges (Frad & Jedidi, 2023). Cultural nuances, as described by Makki et al. (Makki & Alqahtani, 2022), particularly the juxtaposition of technological enthusiasm with traditional conservatism, play a role in shaping the market's adoption and resistance patterns. Furthermore, K. Bajunaied et al. (Bajunaied et al., 2023) highlights pressing concerns, from cybersecurity threats and a dearth of specialized talent to the hesitancy of established financial pillars to integrate with fintech newcomers.

On a futuristic note, F. Al Hudithi et al. (Hudithi & Siddiqui, 2021) envisions a promising role for Artificial Intelligence and Blockchain, with potential ramifications spanning across remittances, loans, and wealth management services. Such technological inclusions are poised to craft a more streamlined, transparent, and inclusive financial vista for the Kingdom in forthcoming years, as suggested by C. Baliker et al. (Baliker et al., 2023).

To encapsulate, while the literature is abundant in chronicling the Saudi fintech realm's past and present, a comprehensive understanding of its future awaits exploration. This study is poised to navigate this uncharted domain, offering a holistic and progressive perspective.

1) Evolution of the Saudi fintech industry

The Saudi fintech industry, in its nascent years, seemed like a mirage in the vast economic desert, but it has since matured into an oasis of innovation, drawing global attention. A series of transformative milestones mark its journey, from the inception of rudimentary digital payment platforms to today's sophisticated robo-advisors and blockchain-driven solutions (Dewasiri et al., 2023; Nadeem & Shaheen, 2021). The undercurrents propelling this swift evolution are multifaceted. Saudi Arabia's ambitious youth, hungry for modern financial tools and enriched by a digital upbringing, have proven to be the backbone of the industry's rapid expansion. Simultaneously, the nation's visionaries recognized the latent potential, harnessing the confluence of a tech-savvy populace, robust digital infrastructure, and an economy ready for diversification beyond its oil-rich sands. Pioneering strategic moves, notably the Vision 2030 blueprint, became the compass guiding the fintech voyage (Frad & Jedidi, 2023). Through a blend of progressive regulations, incubation hubs, and global partnerships, Saudi Arabia has not only nurtured its home-grown fintech innovators but has also beckoned international stakeholders to partake in this exciting financial renaissance. As such, the nation's fintech landscape, once overshadowed by traditional financial behemoths, now sparkles as a beacon of innovation in the Middle East's financial horizon (Alshater et al., 2022).

2) Sectoral analysis of the Saudi Fintech Industry

The Saudi fintech tapestry is intricate, mirroring the complex interplay of tradition and modernity that characterizes the Kingdom itself. At its forefront, a legion of innovative fintech companies rise, each carving a niche and challenging the paradigms of the conventional financial sector (*Fintech Saudi – فنتك السعودية*). These flag bearers of change have not only adopted business models that cater to the unique socio-economic fabric of Saudi Arabia but have also incorporated

value propositions that resonate deeply with both the tech-savvy youth and the more conventional older generation. The intersection of localized solutions with global technological advancements is what defines their success.

Below is a hypothetical table (Table 1) showcasing leading fintech companies, /permitted by SAMA or CMA in Saudi Arabia:

Table 1. State-of-the-art of leading fintech companies in Saudi Arabia with their fintech field, business model key value proposition.

Company	Fintech Field	Business Model	Key Value Proposition
STCPay	Payments and Currency Exchange	Digital Wallet	Convenience; Security
Geidea	Payments and Currency Exchange	Payment Solutions	Seamless transactions; Diverse payment methods
Halalah	Payments and Currency Exchange	Digital Wallet	User-friendliness; Quick transfers
Solfa	Lending and Finance	Peer-to-peer lending	Quick disbursement; Transparent terms
Tameed	Lending and Finance	Online microloans	Instant approvals; Flexible repayment plans
Tabby	Lending and Finance	Buy Now, Pay Later	Interest-free periods; Immediate purchase access
Buthoor	Private Fundraising	Crowdfunding	Diverse project support; Community engagement
Foodics	Business Tools and Information Provision	POS Systems	Comprehensive analytics; Inventory management
Bonat	Business Tools and Information Provision	Loyalty Program Software	Enhance customer retention; Real-time rewards
Derayah	Capital Market	Online Investment Platform	Divers' assets; User-friendly interface
BCare	Insurance	Digital Health Insurance	Instant claim; Tailored health plans
Mozn.AI	Regulation and Risk Management	AI-powered Compliance Software	Real-time regulatory updates; Predictive risk analysis
Wally	Personal Finance and Treasury Management	Budgeting App	Expense tracking; Financial insights
Greenbill	Personal Finance and Treasury Management	Digital Invoicing	Automated invoicing; Payment reminders
Rabet	Infrastructure	Blockchain Solutions	Secure transactions; Transparent ledgers
STC Bank	Digital Banking	Neobank	24/7 services; multi-currency accounts
D630 Bank	Digital Banking	Online Banking Solutions	Seamless digital experience; Enhanced security
Saudi Digital Bank	Digital Banking	Neobank	Virtual card offerings; Instant transfers

Source: Saudi Fintech, EMW Advisory Research & Analysis.

Methodology

This research has adopted a quantitative approach to understand the experiences of fintech entrepreneurs in Saudi Arabia, focusing on their market access experiences and perceptions of challenges. The objective was to gather, analyze, and interpret data from fintech entrepreneurs regarding their journey in the fintech market and the potential pain points they encounter. A total sample size of 400 fintech entrepreneurs from different regions in Saudi Arabia have been targeted

for this research. A structured questionnaire has been designed which included a mix of close-ended questions (Likert-scale, multiple choice) and a few open-ended questions for deeper insights. The questionnaire has been divided into sections to address different facets of the entrepreneurs' journey; i.e., 1) Demographic Details: Region, age, gender, educational background, years in fintech), 2) Market Access: Questions assessing how entrepreneurs navigate the Saudi fintech ecosystem and the barriers they face, 3) Pain Points: A Likert-scale section ranging (from 1: Strongly Disagree to 5: Strongly Agree) to rate challenges like: Talent and Recruitment / Regulation / Access to Customers / Technology / Product Development / Mentors and Advisors / Funding / Business Plan Development / Competition, any other challenges (open-ended).

The questionnaire has been hosted on an online survey platform. A link to the survey has been disseminated through fintech associations in Saudi Arabia, entrepreneurial forums, and social media channels dedicated to fintech. The survey has been kept open for responses for a duration of one month (mid-April until mid-May 2023). Once the survey was closed, responses has been exported, and the data has been cleaned to remove incomplete or outlier responses.

Results and Data Interpretation

The survey was distributed to 400 fintech entrepreneurs by mid-April until mid-May 2023. Respondents are aged between 18 to 51 years old with gender ratio equal to 50% for male and females. The location of the participants was distributed based on the geographical distribution of the population of fintech entrepreneurs in Saudi Arabia (Table 2). In fact, the geographical distribution of entrepreneurs in Saudi Arabia is highly concentrated in the major cities. Riyadh, Jeddah and Dammam are the three most populated cities in Saudi Arabia and also have the largest concentrations of fintech entrepreneurs. Other cities such as Makkah, Madinah, Tabuk, and Al-Qassim also have significant numbers of fintech entrepreneurs, although their share of the population is much lower.

Table 2. Distribution of respondents for the online survey among the largest concentrations of fintech entrepreneurs in Saudi Cities.

City	Respondents			Responses (Filled questionnaires with no missing information)				
	Male	Female	Total	Male	Female	Total	Resp. rate	
<i>Riyadh</i>	75	62	137	65	57	122	89%	
<i>Jeddah</i>	56	40	96	55	37	92	96%	
<i>Dammam</i>	30	27	57	28	24	52	91%	
<i>Makkah</i>	33	10	43	25	16	41	95%	
<i>Madinah</i>	20	18	38	22	14	36	95%	
<i>Tabuk</i>	14	4	18	8	7	15	83%	
<i>Al-Qassim</i>	9	2	11	7	3	10	91%	
						Total	368	92%

Source: This work

In the survey conducted across various cities, Riyadh had the highest number of respondents with a total of 137 participants, consisting of 75 males and 62 females. Out of these, 122 filled out the questionnaires without any missing information (65 males and 57 females), leading to a response rate of 89%. Across all cities, there were a total of 368 filled questionnaires, resulting in an overall response rate of 92%.

The distribution of fintech entrepreneurs across cities in Saudi Arabia as it is show in Table 2 offers valuable insights into the ecosystem's dynamics. Riyadh, being the capital and a major economic hub, understandably leads in respondent numbers. This indicates the city's prominent role in the fintech landscape, aligning with its stature as a central locus of commerce and innovation in the Kingdom. Jeddah, another major city, follows closely with a nearly flawless response rate of 96%. This high engagement suggests a deeply invested and active fintech community in the city. Dammam, Makkah, and Madinah demonstrate considerable participation, reflecting their growing importance in the fintech sector. The high response rates across these cities, especially Makkah and Madinah, underline the seriousness and commitment of fintech entrepreneurs in these regions.

However, smaller cities such as Tabuk and Al-Qassim, while having fewer respondents, show a significant engagement level with response rates over 80%. This suggests that even in areas with potentially nascent fintech ecosystems, there is keen interest and active participation among entrepreneurs. The overall high response rate of 92% across all cities indicates a vibrant and committed fintech community throughout Saudi Arabia, eager to provide input, share experiences, and contribute to the broader discourse on financial technology in the region.

Figure 1 illustrates the development phases of fintech companies owned by Saudi fintech entrepreneurs who responded to the survey (a total of 368 Saudi fintech entrepreneur). A significant majority, accounting for 55%, are still in the ideation stage. This implies that a large proportion of respondents are still in the process of refining their ideas, validating their concepts, or are potentially on the brink of launching their initial offerings. Following this, 20% of the companies are in the early stages, which includes the pre-seed, seed, and pre-Series A phases. These businesses might have already tested their concepts in the market and are possibly seeking or have recently procured initial funding. The companies that have reached the Series A stage constitute 3% of the total, suggesting a more mature stage of development and a successful round of significant funding. Those that have surpassed Series A and are at Series B or beyond are limited, representing just over 1% of the total. This minimal number underlines the competitive and challenging nature of scaling up in the fintech sector. Lastly, a substantial 21% of respondents preferred not to disclose their company's stage.

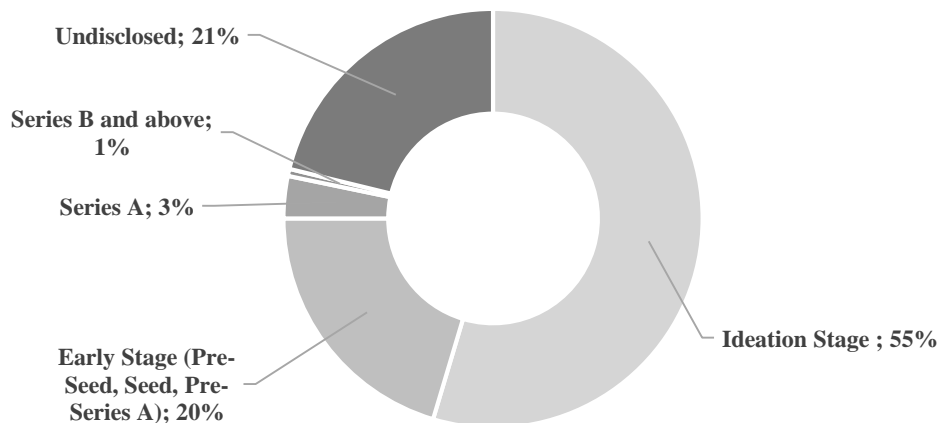


Fig. 1. Stages of Development: A Breakdown of Saudi Fintech Companies (based on the survey data).

The fintech landscape in Saudi Arabia, as per this survey, appears to be in a budding phase, with a considerable number of entrepreneurs still shaping their ideas. While there are a few that have reached more mature funding stages, they are a minority, highlighting the nascent stage of the fintech ecosystem in the region and the potential opportunities for growth and development in the sector (Belouafi, 2021).

In the other hand, the survey provides insight into the sectors within the fintech domain that have caught the attention of Saudi fintech entrepreneurs (Fig. 2). Among the identified fintech ideas or companies, the domain of Payments and Currency Exchange stands out as the most prominent, accounting for 52% of the responses. This prominence suggests a burgeoning interest or potentially a perceived gap in this sector that entrepreneurs are eager to address. Following this, Lending and Finance emerges as the second most popular field, capturing 28% of the entrepreneurial initiatives. This could hint at the evolving lending landscape in the region, with alternative financial solutions gaining traction. The Business Tools and Information Provision sector represents 12% of the identified ideas or companies, indicating a growing awareness of the need for tools and analytics in the financial space. Lastly, Personal Finance and Treasury Management occupies 8% of the entrepreneurial landscape, pointing to the increasing emphasis on individual financial management and planning in the Saudi market (Belouafi, 2021).

In drawing conclusions from this data, it's evident that the Saudi fintech scene is predominantly driven by innovations in Payments and Currency Exchange, showcasing both its dominance and the market's appetite for such solutions. However, the diversity across other sectors like Lending and Finance, Business Tools, and Personal Finance underscores the multifaceted nature of financial innovation in the region. This spectrum of interest indicates a maturing fintech ecosystem with a wide array of opportunities for startups and innovators (Hassan et al., 2022).

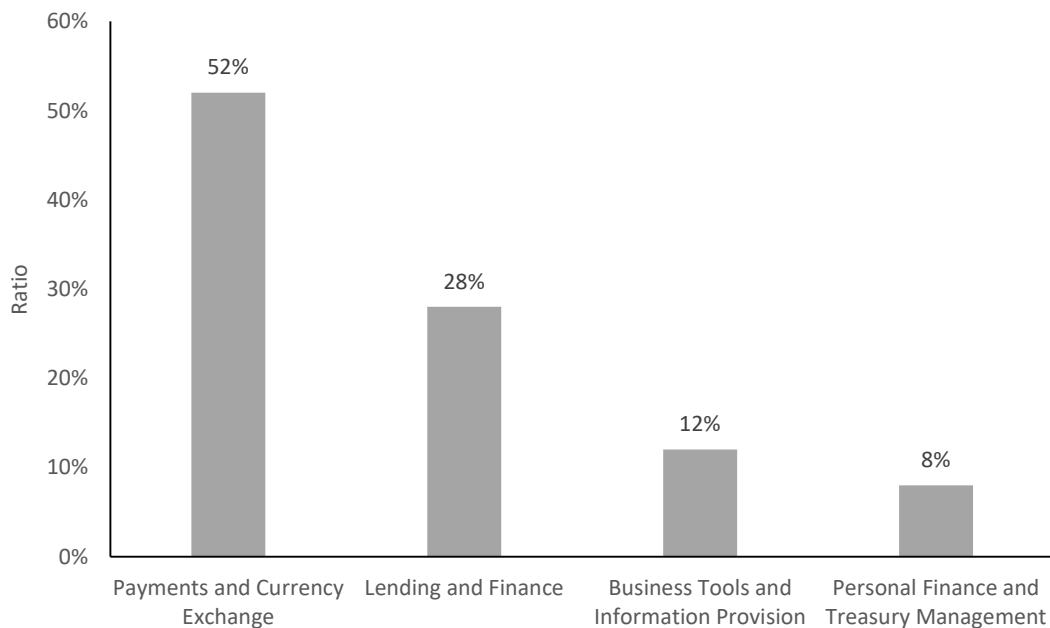


Fig. 2. Distribution of Fintech Sectors Among Saudi Entrepreneurs: A Focus on Key Areas (based on the survey data).

1) Opportunities and challenges faced by the Saudi fintech industry

The following Table 3 shows a descriptive analysis of the pain points section (Fintech Entrepreneurs Survey Data).

Table 3. Statistical data analysis results for challenges and pain points facing fintech entrepreneurs (based on the collected data).

Challenge	Mean	Median	Mode	Standard Deviation
Talent and Recruitment	3.95	4	4	0.92
Regulation	3.85	4	4	0.99
Access to Customers	3.80	4	4	0.96
Technology / Product Development	3.62	4	4	1.08
Mentors and Advisors	3.58	4	4	1.03
Funding	3.45	3	4	1.07
Business Plan Development	3.32	3	3	1.10
Competition	3.28	3	3	1.12

Source: This work.

In evaluating the challenges faced by stakeholders in the fintech industry, "*Talent and Recruitment*" emerges as a significant concern, as reflected by its high average score of 3.95. This suggests that, on average, participants view this area as a prominent hurdle. The median and mode both stand at 4, further underscoring the consensus on this challenge. The spread of the responses, as indicated by a standard deviation of 0.92, is relatively narrow, suggesting a general agreement among respondents.

Close on its heels is "*Regulation*" with an average score of 3.85. This indicates that regulatory challenges are also at the forefront of concerns for fintech professionals in the area. The fact that the median and mode both rest at 4 points towards a broad agreement on the gravity of this issue. However, with a standard deviation of 0.99, there's a slight increase in variability in responses compared to "*Talent and Recruitment*".

"*Access to Customers*", with a mean score of 3.80, signifies that market accessibility remains a crucial challenge. Similar to the prior categories, both the median and mode are 4, indicating a shared sentiment among participants. The dispersion in responses, as indicated by a standard deviation of 0.96, is consistent with the previous categories, showing relative agreement.

"*Technology/Product Development*" has a mean value of 3.62, suggesting that while it's a concern, it may not be as pressing as the prior categories. However, the median and mode, both at 4, highlight that a significant portion of respondents still sees it as a considerable challenge. The standard deviation of 1.08 reveals a broader spread in responses.

"*Mentors and Advisors*" comes next with an average score of 3.58, indicating that guidance and advisory roles are pivotal for growth and stability in the fintech space. The consensus here is strong too, with both the median and mode at 4 and a standard deviation of 1.03.

"*Funding*", an essential aspect of any business venture, has an average rating of 3.45. Interestingly, the median here dips to 3, while the mode remains at 4. This suggests a possible bifurcation in responses, with some participants feeling it is a less pressing issue compared to others.

The spread in answers, with a standard deviation of 1.07, is slightly more than some previous challenges.

"*Business Plan Development*" and "Competition" are at the tail end of concerns, with mean scores of 3.32 and 3.28, respectively. For both, the median and mode are at 3, indicating a shared sentiment that, while these areas are challenging, they might not be as pressing as the others. Their standard deviations, 1.10 and 1.12 respectively, suggest a bit more variability in responses compared to earlier categories.

2) Future directions for the Saudi fintech industry

Saudi Arabia stands poised as a burgeoning fintech hub, ripe with potential for discerning fintech entrepreneurs and investors. The Kingdom is gradually reaching an entrepreneurial equilibrium, where early entrants can still harness the benefits of being pioneers, yet the landscape is sufficiently evolved to provide a conducive environment, mitigating extreme challenges. While the fintech sector in Saudi Arabia and the broader Middle East remains relatively young, the region witnessed the rise of its first Fintech Unicorn in the Kingdom in under four years. Such achievements underscore that stakeholders can no longer view Saudi Arabia with mere speculative interest, a stance that might have been prevalent just a few years ago. Historically, global corporations have often established their Middle Eastern base in Dubai due to its strategic location and infrastructure, even though the bulk of business opportunities lay in tapping the Saudi market. However, observing the fintech momentum in Saudi Arabia suggests a potential paradigm shift. It boils down to basic macroeconomics: Saudi Arabia, housing 35 million people, accounts for 65% of the entire GCC population. Additionally, the demographic profile of Saudi citizens, characterized by youthfulness, affluence, tech-savviness, and a drive for modern solutions, presents an enticing proposition for fintech ventures. Coupled with the ambitious Vision 2030 spearheaded by the Crown Prince, which champions the Kingdom's digital evolution towards a predominantly cashless economy, Saudi Arabia is no longer just another market to consider—it emerges as the prime gateway to the broader Middle East and North Africa region.

Currently, numerous fintech companies have rooted themselves initially in the Kingdom, leveraging this early presence to drive exceptional growth and fuel further expansion across the GCC and MENA regions. Notable examples like STCPay and Tamara underscore this trend, yet they are merely the tip of the iceberg. It's evident that the rate of transformation is accelerating, opening doors to unparalleled opportunities. As with all unique chances, the window to seize them remains critical (Banerjee, 2020).

It's important to note, however, that while Saudi Arabia presents myriad opportunities, they aren't suited for every investor or entrepreneur. Navigating the Saudi market necessitates a nuanced understanding of the local dynamics and broader macroeconomic factors. The in-country talent pool, like many emerging markets, is still in its developmental phase. While much of the top-tier expertise is currently sourced from abroad, enticing such talent to reside and work in the Kingdom poses significant challenges. This perhaps explains the remote work models adopted by some local startups, where considerable portions of their tech teams operate from outside the Kingdom, a model which might continue in the future.

These challenges are typical hallmarks of a market in its initial growth stages. With consumer awareness still burgeoning and the Kingdom's intensified efforts to foster a congenial environment

for foreign investments, entrepreneurs might perceive these as hurdles. However, these very aspects underscore the immense potential of the Saudi market. The barriers to entry, though diminishing, still pose complexities, which means only the truly audacious venture into the Saudi market. This landscape, combined with the pro-active measures by the Saudi government, sets the stage for potential fintech giants to emerge from the Kingdom. The path forward involves meticulous data analysis, ensuring alignment with market demands, and collaborating with designated regulatory entities supportive of fintech's growth trajectory (Lee & Shin, 2018).

The increasing investor interest in Saudi's fintech landscape is undeniable. Over the span of 2022 and the first half of 2023, Saudi fintech attracted funding exceeding half a billion USD, accounting for 55% of the total funds accumulated since the inception of fintech tracking. The future trajectory of Saudi's fintech realm remains to be seen, but current indicators are certainly promising (Khalaf et al., 2023).

Discussion and Recommendations

The Saudi fintech landscape, though burgeoning with opportunities, is not without its challenges. Entrepreneurs venturing into this domain often find themselves navigating an intricate web of regulatory nuances, market competition, and technological advancements. Additionally, there's a pronounced need for skilled talent, effective mentorship, and substantial funding, among other concerns. Understanding these pain points is crucial, not just to empathize with the startups but to frame a strategic roadmap that can effectively mitigate these hurdles. Here, we delve into some of these key challenges faced by Saudi fintech entrepreneurs which are involved in the survey and offer a suite of solutions and recommendations tailored to address them.

• Solutions Set for Challenge #1 - Talent and Recruitment:

- + *Develop Training Programs:* Partner with educational institutions to offer specialized fintech courses, creating a pool of skilled local talent.
- + *Global Talent Attraction:* Offer incentives such as competitive salaries, relocation packages, and cultural assimilation programs to entice global talent.
- + *Internship and Apprenticeship:* Collaborate with universities to establish internships and apprenticeships, giving students real-world fintech experience.

• Solutions Set for Challenge #2 - Regulation:

- + *Stakeholder Dialogue:* Organize regular roundtables between fintech entrepreneurs and regulators to ensure clarity and mutual understanding.
- + *Regulatory Sandbox:* Establish an environment where fintechs can test their solutions in a controlled environment without facing immediate regulatory challenges.
- + *Streamline Licensing:* Simplify the licensing process, reducing the time and complexity for fintech startups to get approved.

• Solutions Set for Challenge #3 - Access to Customers:

- + *Public Awareness Campaigns:* Promote the benefits of fintech solutions to the general public through media campaigns.

- + *Partnerships: Encourage collaborations between fintech startups and established financial institutions to tap into existing customer bases.*
- + *Digital Platforms: Create platforms where customers can discover and access various fintech solutions.*
- **Solutions Set for Challenge #4 - Technology / Product Development:**
 - + *Innovation Hubs: Establish co-working spaces equipped with the latest technology where entrepreneurs can develop and test their solutions.*
 - + *Collaborative Forums: Organize tech forums and hackathons to foster innovation and collaboration within the community.*
 - + *Access to Global Platforms: Provide fintechs with access to global platforms and tools at discounted rates.*
- **Solutions Set for Challenge #5 - Mentors and Advisors:**
 - + *Mentorship Programs: Introduce mentorship programs connecting seasoned fintech professionals with startups.*
 - + *Guest Workshops: Invite global fintech leaders to conduct workshops, imparting global insights and experiences.*
 - + *Networking Events: Organize regular networking events, facilitating the exchange of ideas and experiences.*
- **Solutions Set for Challenge #6 - Funding:**
 - + *Venture Capital Forums: Organize forums attracting venture capitalists interested in the fintech space.*
 - + *Government Grants: Introduce special grants and funding for promising fintech startups.*
 - + *Crowdfunding Platforms: Promote and support the establishment of crowdfunding platforms for fintechs.*
- **Solutions Set for Challenge #7 - Business Plan Development:**
 - + *Workshops: Conduct workshops focusing on business plan development, teaching entrepreneurs the essentials of creating a compelling plan.*
 - + *Consulting Support: Provide subsidized consulting services to startups, assisting in refining their business strategies.*
 - + *Templates and Guides: Offer standardized templates and guides to help startups in crafting their business plans.*
- **Solutions Set for Challenge #7 - Competition:**
 - + *Market Research Support: Provide startups with tools and resources to conduct in-depth market research, understanding their competition better.*

- + *Differentiation Workshops: Conduct sessions focusing on creating unique value propositions and differentiating in the crowded market.*
- + *Collaboration Over Competition: Promote a culture where fintechs collaborate, leveraging each other's strengths rather than only competing.*

In our point of view, implementing these solutions and recommendations can significantly enhance the environment for fintech entrepreneurs in Saudi Arabia, fostering innovation and growth in the sector.

Conclusion

The Saudi fintech landscape is undeniably at an inflection point, marking a transformative shift in the financial tapestry of the region. As traced through the evolution of the sector, from its nascent stages to the burgeoning hub it is today, it's evident that Saudi Arabia is poised to be a pivotal player in global fintech innovation. The sectoral analysis offered a granular perspective, spotlighting leading fintech firms that have become synonymous with financial innovation in the Kingdom. Our comprehensive survey of fintech entrepreneurs illuminated the intricacies of their journey, underscoring both the promise and the prevailing challenges in the ecosystem. While concerns around talent acquisition, regulatory frameworks, and market access are prominent, they are not insurmountable. With the tailored suite of solutions and recommendations proposed, the roadmap for addressing these challenges is clearer and more actionable. As Saudi Arabia continues to invest in and prioritize its fintech sector, especially under the ambitious Vision 2030 framework, the future beckons with limitless potential. For investors, entrepreneurs, and stakeholders alike, the Saudi fintech narrative offers not just opportunities but the chance to shape the future of finance in the MENA region and beyond.

References

- Abumughli, A. A., & Aysan, A. F. (2021). The ascent of digital banks in the Gulf region: Prospects and challenges. *Journal of Digital Banking*, 6(3), 277–286.
- Akmal, S., Talha, M., Faisal, S. M., Ahmad, M., & Khan, A. K. (2023). Perceptions about FinTech: New evidences from the Middle East. *Cogent Economics & Finance*, 11(1), 2217583. <https://doi.org/10.1080/23322039.2023.2217583>
- Almuhammadi, A. (2020). An Overview of Mobile Payments, Fintech, and Digital Wallet in Saudi Arabia. 2020 7th International Conference on Computing for Sustainable Global Development (INDIACom), 271–278. <https://doi.org/10.23919/INDIACom49435.2020.9083726>
- Alshater, M. M., Saba, I., Supriani, I., & Rabbani, M. R. (2022). Fintech in islamic finance literature: A review. *Heliyon*, 8(9), e10385. <https://doi.org/10.1016/j.heliyon.2022.e10385>
- Bajunaied, K., Hussin, N., & Kamarudin, S. (2023). Behavioral intention to adopt FinTech services: An extension of unified theory of acceptance and use of technology. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(1), 100010. <https://doi.org/10.1016/j.joitmc.2023.100010>
- Baliker, C., Baza, M., Alourani, A., Alshehri, A., Alshahrani, H., & Choo, K.-K. R. (2023). On the Applications of Blockchain in FinTech: Advancements and Opportunities. *IEEE Transactions on Engineering Management*, 1–18. <https://doi.org/10.1109/TEM.2022.3231057>
- Banerjee, A. (2020). FinTech Revolution in the Gulf Countries and MENA Region. In D. Klonowski (Ed.), *Entrepreneurial Finance in Emerging Markets: Exploring Tools, Techniques, and Innovative Technologies* (pp. 335–344). Springer International Publishing. https://doi.org/10.1007/978-3-030-46220-8_21
- Belouafi, A. (2021). Fintech in the MENA Region: Current State and Prospects. In M. M. Billah (Ed.), *Islamic FinTech: Insights and Solutions* (pp. 335–366). Springer International Publishing. https://doi.org/10.1007/978-3-030-45827-0_19

- Dewasiri, N. J., Karunarathne, K. S. S. N., Menon, S., Jayarathne, P. G. S. A., & Rathnasiri, M. S. H. (2023). Fusion of Artificial Intelligence and Blockchain in the Banking Industry: Current Application, Adoption, and Future Challenges. In A. Saini & V. Garg (Eds.), *Transformation for Sustainable Business and Management Practices: Exploring the Spectrum of Industry 5.0* (pp. 293–307). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-80262-277-520231021>
- Fintech Saudi – *فنتك السعودية*. Retrieved July 22, 2023, from <https://fintechsaudi.com/>
- Frad, H., & Jedidi, A. (2023). Fintech up-coming in Saudi Arabia: Study, analysis, and recommendations. *International Journal of Business Information Systems*, 42(1), 72–84. <https://doi.org/10.1504/IJBIS.2023.128302>
- Hassan, M. K., Rahiman, H. U., Rabbani, M. R., & Alhomaidi, A. (2022). The Future of Finance and Fintech: Visualizing the Opportunities for Fintech in the MENA Region. In M. K. Hassan, M. R. Rabbani, & M. Rashid (Eds.), *FinTech in Islamic Financial Institutions: Scope, Challenges, and Implications in Islamic Finance* (pp. 89–111). Springer International Publishing. https://doi.org/10.1007/978-3-031-14941-2_5
- Hudithi, F., & Siddiqui, K. (2021). Designing the guidelines for FinTech curriculum. *Entrepreneurship and Sustainability Issues*, 9, 633–643. [https://doi.org/10.9770/jesi.2021.9.1\(39\)](https://doi.org/10.9770/jesi.2021.9.1(39))
- Khalaf, B. A., Awad, A. B., Ahmed, O., & Gharios, R. T. (2023). The Role of FinTech in Determining the Performance of Banks: The Case of Middle East & North Africa (MENA) Region. *International Journal of Membrane Science and Technology*, 10(3), Article 3. <https://doi.org/10.15379/ijmst.v10i3.1748>
- Lee, I., & Shin, Y. J. (2018). Fintech: Ecosystem, business models, investment decisions, and challenges. *Business Horizons*, 61(1), 35–46. <https://doi.org/10.1016/j.bushor.2017.09.003>
- Lukonga, M. I. (2018). Fintech, Inclusive Growth and Cyber Risks: Focus on the MENAP and CCA Regions. *International Monetary Fund*.
- Magdy Rezk, W., & Halim, M. A. A. (2022). Financial technology (Fintech) in the Arab countries challenges and opportunities. *L'Egypte Contemporaine*, 113(547), 437–466. <https://doi.org/10.21608/espe.2022.155565.1020>
- Makki, A. A., & Alqahtani, A. Y. (2022). Modeling the Enablers to FinTech Innovation in Saudi Arabia: A Hybrid Approach Using ISM and ANP. *Systems*, 10(5), Article 5. <https://doi.org/10.3390/systems10050181>
- Mohamad Shafi, R., & Tan, Y.-L. (2023). Evolution in Islamic capital market: A bibliometric analysis. *Journal of Islamic Accounting and Business Research*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/JIABR-04-2022-0106>
- Nadeem, R. M., & Shaheen, R. (2021). THE IMPACT OF USING ROBO-ADVISORS ON FINANCIAL INSTITUTIONS PERFORMANCE. *PalArch's Journal of Archaeology of Egypt / Egyptology*, 18(13), Article 13.
- Razzaque, A., & Hamdan, A. (2020). Role of Financial Technology FinTech: A Survey. In A.-E. Hassani, A. T. Azar, T. Gaber, D. Oliva, & F. M. Tolba (Eds.), *Proceedings of the International Conference on Artificial Intelligence and Computer Vision (AICV2020)* (pp. 112–117). Springer International Publishing. https://doi.org/10.1007/978-3-030-44289-7_11
- Shirazi, N. S., Aysan, A. F., & Nanaeva, Z. (2023). Open Banking for Financial Inclusion: Challenges and Opportunities in Muslim-Majority Countries. In Z. H. Jumat, S. Hafiz Khateeb, & S. Nazim Ali (Eds.), *Islamic Finance, FinTech, and the Road to Sustainability: Reframing the Approach in the Post-Pandemic Era* (pp. 259–282). Springer International Publishing. https://doi.org/10.1007/978-3-031-13302-2_12
- Suryono, R. R., Budi, I., & Purwandari, B. (2020). Challenges and Trends of Financial Technology (Fintech): A Systematic Literature Review. *Information*, 11(12), Article 12. <https://doi.org/10.3390/info11120590>

التقنية المالية في المملكة العربية السعودية: عصر جديد من الابتكار المالي

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المستخلص. شهدت صناعة التقنية المالية في المملكة العربية السعودية في السنوات الأخيرة تطوراً كبيراً، مما يبشر بعصر جديد من الابتكار المالي. تقدم هذه الورقة استكشافاً متعمقاً لرحلة ومسار ونمو قطاع التقنية المالية السعودي. يلقي تحليل قطاعي شامل الضوء على مجالات التقنية المالية المهيمنة، ويسلط الضوء على شركات التقنية المالية الرائدة التي تمهد الطريق في المملكة. ولمزيد من الخوض في الجوانب التجريبية للصناعة، تم اعتماد نهج البحث الكمي، والنقاط التجارب الحية والتحديات التي يواجهها رواد الأعمال في مجال التقنية المالية في المملكة العربية السعودية. تم إجراء البحث على عينة متضمنة ٤٠٠ رائد أعمال من مناطق مختلفة في المملكة العربية السعودية، وتم تحقيق معدل استجابة بنسبة ٩٢٪، مع ٣٦٨ استجابة كاملة. وتجدر الإشارة إلى أنه من بين التحديات التي تم تحديدها، تم تمييز "المواهب والتوظيف" على أنها مصدر قلق محوري للأغلبية، تليها القضايا المتعلقة بـ "التنظيم" و"الوصول إلى العملاء". ومن المثير للاهتمام، أن جانب "تطوير التقنية / المنتجات" لم يكن مثيلاً للقلق كما سبق ذكره. وكتصور لمستقبل هذه الصناعة، تم تقديم مجموعة من الحلول والتوصيات.

الكلمات المفتاحية: التقنية المالية، المملكة العربية السعودية، الابتكار المالي، رواد الأعمال في مجال التكنولوجيا المالية، التحديات ونقاط الضعف، الفرص، التوصيات الاستراتيجية.

