

BAHRAIN FINTECH ECOSYSTEM REPORT 2022



Bahrain
FinTech
Bay



A MESSAGE FROM BAHRAIN FINTECH BAY

The Bahraini fintech ecosystem has matured on many fronts. Undoubtedly, new developments from government, corporate, and investment stakeholders have created a more conducive environment for local and international startups to grow and scale from the Kingdom. The number of fintechs established in Bahrain is now in the hundreds, including larger fintechs valued at over \$1bn.

The previous edition of the Bahrain FinTech Ecosystem report represented a snapshot of the local fintech environment in 2018, at the time of Bahrain FinTech Bay's launch, and now serves as a benchmark for comparison. While growth in the sector is clear, embracing innovation and emerging technologies has proved vitally important to society, business, and economic growth. The second edition

of the Bahrain FinTech Ecosystem Report now reviews key emerging fintech trends within Bahrain's local ecosystem. It identifies growth drivers necessary to capitalize on the ecosystem's maturity and catalyze the expansion of the industry.

Bahrain FinTech Bay plays a strategic role in realizing this national ambition and strategy to drive forward corporate innovation and investment, as well as support local and international startups and scaleups by facilitating unique partnerships and business models. Looking ahead, innovation and technology have the potential to disrupt, transform, and create opportunities beyond financial services. The growth of the fintech sector in the Kingdom is a testament to the opportunities these new industries can create.

FOREWORD



Bahrain has witnessed several revolutionary advancements within the country. Corporates embracing innovations and fintechs developing world-class technology have led to notable growth in Bahrain's financial services sector. Emerging technologies such as artificial intelligence and blockchain are changing the face of banking services as we know them today.

With the support of its business-empowering regulations introduced over the years by the Central Bank of Bahrain and Bahrain FinTech Bay's collaborative platform, the Kingdom has developed an ideal environment for fintechs and ecosystem players to operate seamlessly.

We have also seen home-grown fintechs thriving over a short period, reflecting the Kingdom's ongoing efforts to evolve and future-proofing its position as one of the region's leading fintech hubs.

We are pleased to launch the second edition of the Bahrain FinTech Ecosystem Report, which highlights the key advancements in the local fintech ecosystem.

Bahrain FinTech Bay will continue driving innovation and creating growth opportunities to spearhead the region's push towards a digital economy in the years to come.

Khalid Humaidan

**Chairman of the Board
Bahrain FinTech Bay**

FOREWORD



As Bahrain is repositioning itself to be a Financial Technology (FinTech) hub in the region combining conventional and Shariah compliant FinTech solutions, the Central Bank of Bahrain continues its FinTech initiatives as part of its digital transformation strategy to further facilitate a more efficient provision of financial services to customers. The Central Bank of Bahrain seeks to make the Kingdom of Bahrain a key player in FinTech through the availability of innovative financial solutions, highly qualified national talent in finance and banking, and access to supportive policies. Presently, Bahrain is home to 367 financial institutions and a workforce of over 13,700 individuals highlighting the strength of the country's position in this regard.

The Central Bank of Bahrain has recently revised its Regulatory Sandbox Framework to allow FinTechs to test and experiment their ideas and solutions related to the sector in a more efficient and effective environment. The Central Bank of Bahrain has also introduced a virtual innovation platform for key players in the ecosystem through FinHub973, which was launched in October 2020 offering more than 430 API to develop banking and financial solutions.

Ultimately, the Central Bank of Bahrain aims to keep pace with technological developments and to ensure an appropriate ecosystem to adopt modern financial services through FinTech solutions by working on initiatives such as developing the digital dinar, electronic payment system infrastructure, and cross-border payment systems, and to promote a culture of innovation in the financial sector and national economy.

With the Central Bank of Bahrain's continuous efforts to enable industry players and establish a forward-looking strategy, the FinTech ecosystem will continue to develop with the addition of revised regulatory frameworks and enhancing services related to Open Banking, e-KYC, and contactless payments, thereby enabling an innovative and connected environment.

Yasmeen Al Sharaf

**Director of FinTech and Innovation Unit
Central Bank of Bahrain (CBB)**

EXECUTIVE SUMMARY

Technological advances and the momentum of changing customer expectations continue to accelerate. Financial institutions are embracing fintech solutions in order to keep up with the growing customer expectations and the associated development requirements from a technology standpoint. Fintechs today are viewed by the financial sector as partners for growth, enabling them to fulfill customer expectations and increase efficiency while unlocking new revenue models. The expansion of this sector is mainly due to the rise of technological response to traditional financial services limitations.

The report ran two parallel surveys targeting corporates/startups and investors. The purpose of the survey was to provide an inclusive understanding of the key growth drivers of Bahrain's fintech ecosystem from various market players, including startups, corporates, government entities, incubators/ accelerators, investors, and academia.

The number of fintechs in Bahrain has increased by 100% since 2018. While key developments such as the implementation of open banking and growing demand for improved customer experience highlighted the need for innovative fintech solutions in Bahrain, the impact of COVID has slowed down the growth of many startups.

The report highlights four emerging trends that are shaping the way fintech is impacting businesses across different industries; open banking APIs, artificial intelligence, customer-centric models, and fintech as infrastructure providers.

Key Growth Drivers

To help track the development of the local fintech industry and understand its changing dynamics, this report will highlight four key growth areas: **Government Support and Regulations, Innovation, Talent and Funding.**

Government Support and Regulations

The main regulatory developments that have had the most impact are the introduction of the regulatory sandbox, the development of the open banking framework, and the introduction of the personal data protection laws.

Regulations that are expected to be introduced in the near future are primarily within the alternative finance space with a focus on open and decentralized finance. The report also identifies key barriers to entry and opportunities for fintechs.

Innovation

The report research suggests retail banking, corporate banking, and telecommunications appear to be the sectors experiencing higher fintech disruption and adoption in Bahrain. In contrast, real estate, wealth management, and insurance sectors are experiencing the lowest adoption of fintech. Similarly, technologies in Bahrain are developing rapidly, with big data analytics, artificial intelligence, and regulatory technology at the forefront of innovation.

Talent

Academic institutions need to build the entrepreneurial mindset in Bahrain's youth alongside technical expertise. The quality and expertise of talent in the financial services and technology sectors is an important variable for solution scaling. The report highlights key in-demand skills, qualifications, and functions for the fintech sector and the impact of co-working with artificial intelligence.

Funding

Investors have moved their focus towards the fintech sector as they realize it is beyond technologies used for digital payments and online banking. The report research shows that VC funding, banks and asset managers, and angel investors are Bahrain's most common sources of funding.

Path Forward

The overall objective of all stakeholders involved is to accelerate the expansion of the local fintech industry by creating accessible, transparent, and digitized solutions. Building on the analysis, the report identifies four key factors that could contribute to the success of the Bahraini fintech ecosystem given the right strategy and direction:

- 1** Improving the regulatory environment by introducing new fintech regulations, adopting unique and diverse fintech solutions from global markets, deepening cross-border collaboration, and maintaining a fintech registry.
- 2** Encouraging technological readiness and innovation through modern technological infrastructure, platform banking with microservices, and building open API frameworks.
- 3** Developing talent by creating more Bahraini-led fintechs through curated programs and educational courses and building a strong technological and entrepreneurial talent pool by engaging universities.
- 4** Establishing a competitive funding ecosystem to enable fintechs and attract international players.



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Section 1

BAHRAIN FINTECH ECOSYSTEM



BAHRAIN FINTECH ECOSYSTEM

Ecosystem Overview

Over the past years, emerging technologies have given rise to cost-efficient ways of creating personalized, convenient, and data-intuitive solutions. As technological advances and the momentum of changing customer expectations continues to accelerate, financial institutions are embracing the approach of financial technology (fintech) firms in order to keep up with the development requirements.

Fintech refers to technology-enabled companies that leverage advanced technology to provide improved financial services, including combining innovative business models and technology and automating existing services. The expansion of this sector is largely due to the rise of technological response to traditional banking method limitations.

As Bahrain transitions to a digital and cashless economy, the government launches their Economic Recovery Plan with the objective of furthering economic growth, creating 20,000 quality jobs, and attracting direct investments across sectors worth \$2.5 billion by 2023.

20,000
quality jobs

\$2.5b
direct
investments
by 2023

Specifically, key points highlighted in the plan for developing financial services and fintech in Bahrain are:



Issue a digital Dinar through a digital payment platform that is available 24/7



Enhance the infrastructure and network of the BENEFIT Company



Develop the GCCNET payment network to link and support all points of sale services



Upgrade the Electronic Funds Transfer infrastructure to include more services by the BENEFIT Company



Integrate retail banks within The Arabian Gulf System for Financial Automated Quick Payment Transfer (AFAQ)



Develop an instant payment platform, available 24/7



Integrating retail banks within "Buna", a multi-currency cross-border payment platform within the Arab Region



Adopting Sup-Tech to excel supervisory practices



Enhancing the offerings of FINHUB973 platform to include a Virtual Market Place



Automating workflows and information exchange between CBB and licensed financial institutions

Bahrain Fintech Landscape

As the global landscape of finance changes, Bahrain's financial sector is moving in an upward trajectory for fintech adoption. The number of fintechs in Bahrain increased by 100% since 2018. While key developments such as the implementation of open banking and growing demand for improved customer experience highlighted the need for innovative fintech solutions in Bahrain, the impact of COVID slowed down the growth of many startups for a short period. Bahrain is home to over 120 fintech startups and as the ecosystem develops and unfolds, the report will highlight some key verticals and the state of adoption within each sector market:

PAYMENTS, TRANSFERS, AND REMITTANCES



BIG DATA ANALYTICS AND INTELLIGENCE



ISLAMIC FINANCIAL SERVICES PLATFORM



TECHNOLOGY



ROBO-ADVISORY



WEALTH MANAGEMENT



DIGITAL BANKS AND BANKING PLATFORMS



SECURITIES TOKENIZATION



CYBERSECURITY AND REGTECH



BANKING SOLUTIONS



OPEN BANKING



TRADE FINANCE



INSURTECH



ALTERNATIVE LENDING AND CROWDFUNDING



SOFTWARE DEVELOPMENT



LOYALTY



BLOCKCHAIN AND CRYPTO ASSETS



(Note: Status as of 20th February 2022)

Payment & Lending

Post-COVID impact led to the need for contactless payments and other innovative forms of carrying out monetary transactions. In a report launched by BENEFIT, Bahrain has seen a 292% increase in volume of electronic funds transfer systems (EFTS) through the BenefitPay app within the span of one year in 2021. This shows the increased volume of

digital transactions to 50,609,425, especially as a result of the pandemic. Moreover, there is a clear trend of payment companies focusing on the buy now, pay later (BNPL) service as within the span of five months, the CBB regulatory sandbox had four companies providing the service of “buy now, pay later” (BNPL).

CASE STUDY: TALY

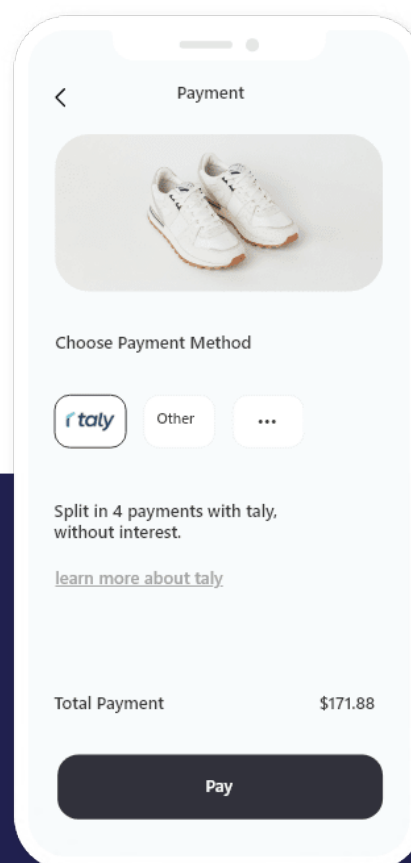


Buy now, pay later (BNPL) is a fintech product that offers customers a flexible range of installments options to choose from while shopping. It was first introduced by Klarna, a Swedish financial firm, in the year 2005, which subsequently revolutionized how installments are now settled. Moreover, the BNPL has recently become active within the GCC since 2020 in countries like the Kingdom of Saudi Arabia and the United Arab Emirates.

Taly is the first Shari’a compliant BNPL service in the Kingdom of Bahrain that is completely free for customers and thus will not imply excess amount of costs. Taly’s products will therefore allow customers to shop and pay the full required sum within 30 days. Otherwise, they are also offered with an additional option which is splitting their payments into four which include 25% upfront payment and the 75% to be settled in the following 90 days after purchase.

Taly BNPL products will benefit merchants in terms of stimulation of sales, expanding customer base, enhancing cash flow by getting paid upfront, eliminating risk of credit default and frauds and reducing marketing costs.

Moreover, the Kingdom of Bahrain has a strong foundation for the fintech industry which is supported by the Central Bank of Bahrain. There is a fintech nurturing environment within the country where regulations are in place to fully test the service and launch strongly. It still remains an untapped market for the BNPL service and the prospects of success are high.



Blockchain and Tokenization

Bahrain's adoption of blockchain technology has been relatively low compared to other jurisdictions such as UAE, where there are several government-led initiatives for blockchain adoption. Some of these include establishing the Global Blockchain Council and launching the Emirates Blockchain Strategy 2021. In Bahrain, blockchain-related services such as smart contracts and Ethereum are gradually growing in the public sector through some government initiatives.

Despite the relatively low adoption of blockchain, there have been several new crypto-asset

companies within the sandbox - 36% of the sandbox graduates are crypto-asset related. Several new companies, such as Fasset, are entering the market and are currently in the sandbox stage undergoing testing. Rain is a primary example that acquired its license early in February 2019, after spending over 12 months in the sandbox.

As the blockchain space develops locally within specific areas, Bahrain is now seeing interest in tokenization; it is an asset that allows information to be stored, transferred, and verified securely.

CASE STUDY: FASSET



The term 'tokenization' means taking any asset (as illiquid as it may be) and virtually encapsulating its value and existence to be represented by a digital token that can be traded like stocks of companies. These tokens can go on to represent fractional ownership of the underlying asset that is 'tokenized' - thus allowing for a new means of financing.

Bahrain has been one of the most progressive jurisdictions in the world with regards to this 4th industrial revolution technology. The Central Bank of Bahrain established a dedicated FinTech & Innovation Unit to ensure that best services are provided to individual and corporate customers in the financial services sector by encouraging an agile regulatory framework that fosters fintech and innovation. Fasset is honoured to have taken part in the regulatory sandbox cohort of 2020, with the authorisation for tokenization services. To give the example of how tokenization can be beneficial to a range of stakeholders, let us look at this in the context of infrastructure assets.

Firstly, infrastructure assets lack means of financing. These assets are important to finance in the fight against climate change and in attaining the SDGs. On the other hand, digital assets, in their current guise, are extremely volatile because they are usually not backed by real world assets - this can lead to unsuspecting retail investors to lose significant amounts of money. Owners of these sustainable infrastructure assets will be able to sell portions of their assets through a dedicated exchange, thereby unlocking lost liquidity. The International Institute for Sustainable Development estimates that the illiquidity discount of an infrastructure fund is 40–60% - by directly tokenizing infrastructure we can unlock this lost value for asset owners.

Consumers, retail customers and institutional investors can also benefit from this emerging technology. By tokenizing hard assets we give retail and institutional clients the opportunity to invest in a healthy, secure and stable asset class. Governments can also benefit from additional capital being flown into essential infrastructure assets, which are usually in the form of Public Private Partnerships and thus have significant government backing - an increase in the financing of infrastructure will also lead to job creation, and in fulfilling the SDGs.

Overall, tokenization can bring many benefits to a variety of stakeholders. Bahrain has already made steps towards issuing progressive legislation and regulation around this novel technology and we are excited for what the future holds.

Open Banking

Open banking is a game-changer that has created a shift in data ownership between financial institutions and customers. Customers are now in control of their data and who it is shared with. Allowing third-party entities to access their data enables innovation through the development of new business models and opportunities that revolve around the customer's experience. The introduction of the open banking regulatory module led several banks to set up open banking infrastructures.

While most of these banks are focused on internal open banking solutions, they are yet to make third-party collaborations. In conversation with local banks, the open banking system requires more

sophistication in its processes and data reporting. Some banks face discrepancies in data reporting, such as salary transfers being labeled differently. This leads to further difficulty in building personal finance management (PFM) type solutions on top of the open banking platform. It is anticipated that open banking services will primarily include PFM, data aggregation, and payment and lending services. An example of this is the adoption of PFM solutions introduced by Beyon Money, an initiative run by Batelco. Currently, 21% of the sandbox graduates are Account Information Service Provider (AISP) and Payment Initiative Service Provider (PISP) entities.

CASE STUDY: TARABUT GATEWAY



Despite Bahrain having one of the highest smartphone and internet penetration rates across the region, many banking applications do not quite deliver on the level of customer experience that is expected and required by the digitally savvy young population. On the other hand, banks are looking at ways to innovate and enhance their digital propositions to cater to the changes in those demands. As for the growing number of fintechs across Bahrain, they are looking to access banking APIs to help them in delivering their products & services to their customers. This is where Open Banking steps in and helps in addressing these gaps.

Through regulated and consensual sharing of financial data between financial institutes and approved third party providers, Open Banking can provide a more personalized experience similar to the customized recommendation experience Netflix or Amazon provides based on a user's preferences and habits. For banks, they can leverage Open Banking to help create new revenue streams and channels through building better suited products, retaining customers, attracting new ones and other monetization opportunities such as offering premium APIs to approved third party providers.

As for fintechs, Open Banking creates a 'plug-and-play' digital infrastructure that allows financial institutions, fintechs and a wider array of companies to connect and access the financial ecosystem using universal connectivity. This is far easier for fintechs who, rather than having to sync with multiple bank specifications, can connect to all banks using a standard format. This benefits the growing fintech hub in Bahrain greatly, making it easier for them to scale and thrive.

Bahrain was the first country in the MENA region to introduce the regulatory sandbox, and Tarabut Gateway was the first to graduate from it in 2018. In December of the same year, the Central Bank of Bahrain issued the draft rules for Open Banking and followed that with the Bahrain Open Banking Framework in October 2020. A second version was also launched recently in November 11, 2021 outlines new business use-cases for every phase of the implementation plan.

At Tarabut Gateway, we aim to enable a new world of financial services through a regulated Open Banking platform that connects a regional network of banks and fintechs via a universal application programming interface (API).

InsurTech

The adoption of insurance technology has been nascent compared to other financial sectors. This is mainly because the Bahraini insurance sector has not yet seen an uptake in seamlessly customer-focused services as seen in more developed markets. While the insurance sector has some basic digital services such as renewing policies online and applying for motor, health, or home insurances via a web application, there is still a major gap in the market for technology-enabled insurance services.

In comparison, Europe is presently facing an insurtech boom. Within the first half of 2021, European insurtechs have seen capital investment of over \$1.9 billion across 52 deals. This change was mainly derived as a result of the pandemic as more and more customers demanded digital insurance services including taking out policies and underwriting policies.



EMBEDDED INSURANCE IN BAHRAIN

Insurance products, like most financial services, are derivatives of real-world needs and therefore in a sense “embedded” into the consumption of goods and services addressing these needs. For example, the purchase of a car triggers the need to insure that car – in Bahrain, the 1st year of insurance coverage for new cars is often embedded into the registration service offered by the car dealership. With an estimated annual premium of USD 700bn worldwide in P&C alone, embedded insurance is a sizeable opportunity. In the Middle East, the market is still in its early stages with only a few niche products being offered in Bahrain and other countries.

In general, technology has increasingly unbundled insurance into its core building blocks over the past few years. API connectivity also enables non-insurance players to increasingly bundle insurance products into their own offerings in a seamless manner. This integration will become even closer as all players in this ecosystem become more used to operating in this way and begin focusing on specific building blocks. This offers substantial potential to redefine the value propositions to the end customer.

Some insurance companies in Bahrain have recognized this potential and offer insurance products such as smart device cover or personal cybersecurity cover bundled with smartphone purchases. Telco operators, for example, are natural partners for insurers to launch embedded insurance products across different retail lines of business: They have a broad customer base, direct access to the customers, a lot of data on their customers, and the ability to make business sense of this data. One application of this is offering home content insurance on the back of internet broadband. Along these lines, other potential partners for embedded insurance include utilities, banks, and retailers across all sectors – each of them potentially looking to embed some insurance functionality into their own value propositions. Consider for example embedding life insurance into the purchase contract for a mortgage-financed home.

The domestic insurance market in Bahrain is small with many insurers. Therefore, many local companies need to find partners to be able to offer embedded insurance. Often, this will provide an opportunity for insurtechs to help these insurance companies make an offering. Most embedded insurance applications in the Bahraini market today are focused on retail products, such as home content insurance embedded into internet broadband, personal cybersecurity with a smartphone, or life insurance being bundled with a mortgage for a house. To move into embedded insurance, insurers will need capabilities for low-cost product & process design using APIs and white-label customer journeys as well as the ability to provide strong support for distribution partners on the regulatory setup.

This offers insurance companies substantially wider distribution reach than they have today through the dominant direct and broker channels in the Bahraini markets. It also provides an opportunity to create a differentiated offering (by virtue of association) in a fairly commoditized market. However, insurance companies also need to consider that they will lose control of the customer front-end, which is managed

by their partners and will be dependent on their data to execute functions such as underwriting. One way to address this is for insurance companies to proactively orchestrate the ecosystems they embed into – which requires focus, the right capabilities as well as mindset.



Nikolaus Sühr,
CEO & Co-Founder of
KASKO



Andreas Buelow,
Partner at Arthur D. Little

Personal Financial Management (PFM)

The PFM market in Bahrain is not as concentrated as expected to be as there are not many banks that are working on the development of PFM solutions. Given that this is a basic digital service globally available for consumers in order to have a better overview of their transactions, there is a lot of opportunity for this solution to be adopted in the future.

Most banks have not been able to build a business case that will justify the cost of development or the cost of acquiring the service. However, we expect a significant pickup in adoption by the banking sector once leading banks start offering the services.

STRANDS' PERSONAL FINANCIAL MANAGEMENT: THE HEART OF DIGITAL BANKING



In just under a decade, fintech has undergone an astonishing trajectory. Global investment in fintech rose from \$4 billion in 2013 to \$165 billion in 2019. Despite the worldwide pandemic-induced economic slowdown in 2020, fintech investment continued to perform strongly, at \$105 billion.

After a decade of sustained investment and important changes to international financial regulation, fintech has become the global driving force behind the financial industry's rapid digital transformation, bringing true innovation to the industry and enabling traditional financial institutions to digitally transform.

Founded in 2004, Strands has been part of this financial revolution from the beginning. Specializing in data analytics, artificial intelligence, and machine learning, [Strands has partnered with banks around the world](#) to bring pioneering personal financial management (PFM) products to the mass market.

What exactly is Strands' PFM?

Strands PFM is a digital financial management platform that the company's financial institution partners can provide to their individual and retail clients. It enables retail banking customers to gain greater control and foresight over their finances. Ultimately, it provides the kind of solid foundation needed for superior financial well-being by empowering them to keep their expenses under control with accounts payable viewing and analysis tools.

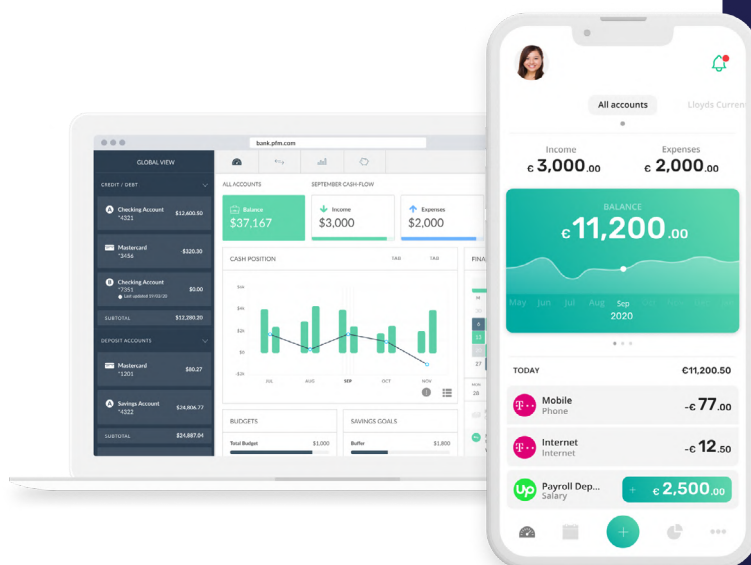
It uses advanced technology in data analytics and artificial intelligence to provide banks with an unprecedented level of customer insight. With Strands PFM, banks can learn much more easily about how customers invest their money, which positions them to provide a hyper-personalized service, including highly contextualized cross-selling and up-selling capabilities to customers thus increasing its satisfaction and engagement.

In a nutshell, [Strands PFM](#) means smarter and easier money management for end customers. And for banks, it creates a markedly superior customer experience, huge potential for significant business growth within retail banking, and lower distribution costs by migrating retail customers to digital. More broadly, Strands PFM acts as a crucial AI and data-driven technology within the broader societal migration to new and innovative financial services and helps spread financial education, and financial inclusion for previously unbanked people.

Success story: Powering Bank of Georgia's Customer Experience Performance

Strands partnered with Bank of Georgia to deliver PFM to its customer base. The entire integration period took less than six months. By migrating its customer base to digital banking in the form of PFM, Bank of Georgia was able to generate markedly improved customer experience performance. This includes a customer satisfaction score of 86%, comfortably above the market average. Daily engagement shot up to 39% and the bank reported improved review scores averaging 4.7 out of five on the Google Play and Android App stores.

[Learn more about Bank of Georgia's success story and find out what Strands can do for your financial institution](#)



Impact of COVID-19 on Fintech Adoption

As COVID-19 spread across the globe, it led to major changes in consumer behavior. Prior to the pandemic, consumers in Bahrain already had access to basic digital financial services such as accessing their accounts, making transfers, paying merchants, etc. However, consumers were not able to engage in more sophisticated products such as loans and investments through their mobile devices. Only a few applications, such as Jazeel, were able to provide loan services through the app. These processes still required branch visits, physical employee interaction, and long delay periods. Due to the pandemic, these processes were expected to adapt and evolve into more sophisticated digital offerings as consumers started expecting more from their banking providers.

Not only did the pandemic impact consumer dealings, but also internal processes with employees. Overtime, banks had to relax their longstanding outdated security protocols in order to become more agile and adaptive to the pandemic citations. As employees started working from home, banks permitted the use of VPN, gave access to banking details outside of the premises, and open sharing of documents.

The pandemic pushed banks with a long-term digital transformation strategy and roadmap to respond in time by quickly implementing new digital processes. Organizations started adopting fintech solutions and developing technological advancements in order to keep up with the changing customer needs.

Not only did the consumption of digital services increase as the survey suggests, but it has also led to changing customer expectations and a major shift in overall customer behavior. With the new banking habits, the digital way is now the “new normal” for banking customers.

WHICH OF THE FOLLOWING FACTORS IMPACTED YOUR ORGANIZATION MOST AS A RESULT OF COVID-19?

72%

Increase in remote working and/or collaboration

35%

Increasing use of advanced technologies in operations

32%

Changing customer needs/expectations

29%

Increasing customer demand for online purchasing/services

20%

Increasing use of advanced technologies in business decision making

3%

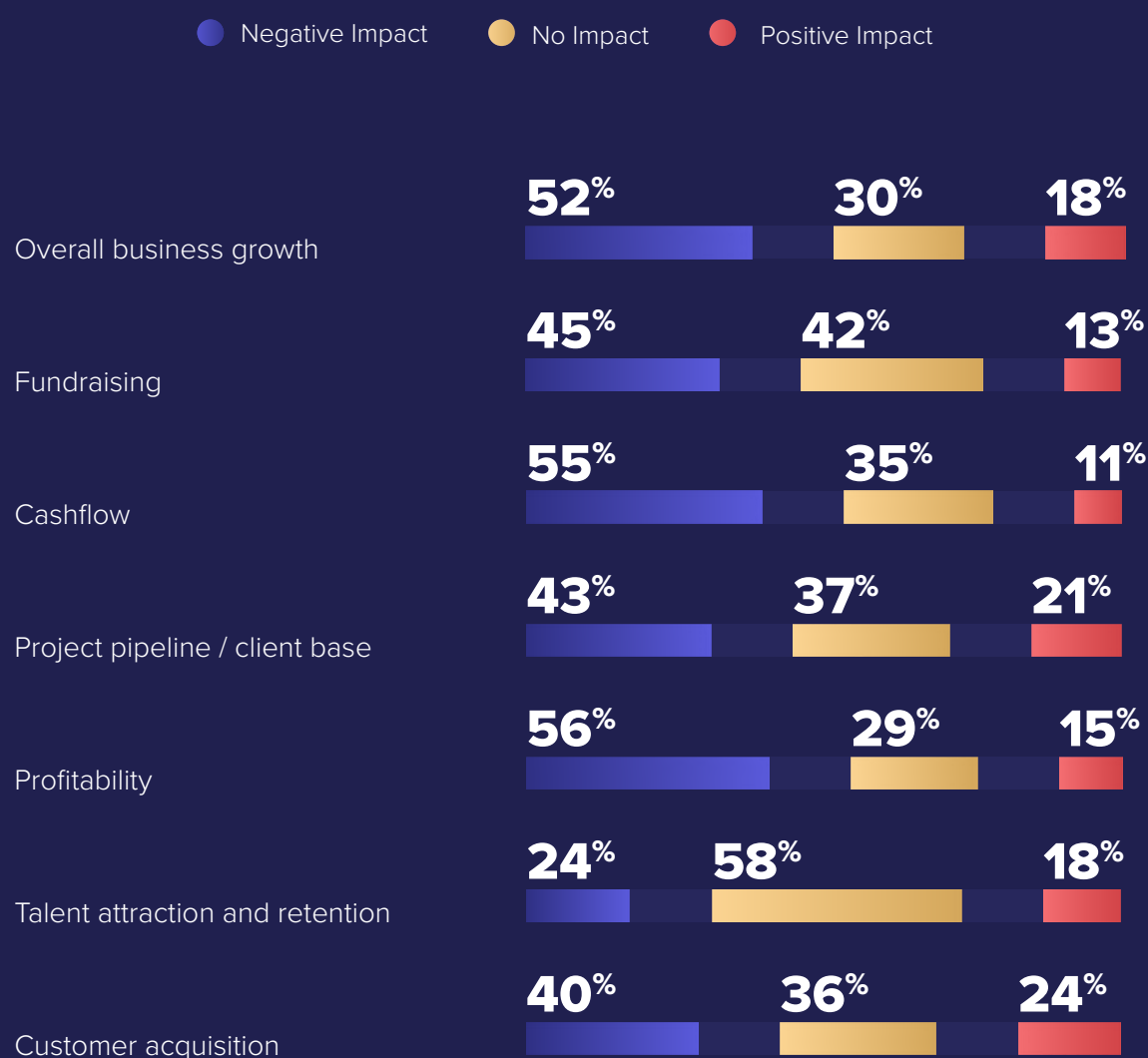
Other

With the perspective of startups, at the start of the pandemic particularly between the months of March to July, business around the world was on hold. Ongoing projects, upcoming pipelines, and general operations were disrupted as the pandemic took over. Moreover, investors stopped injecting money in startups due to rising uncertainty levels, especially investments in foreign regions. This was reflected in our survey where respondents believed that COVID-19 had a negative impact on their business. Primarily, 56% found profitability to be their primary issue due to lack of business, growth,

and projects. Alternatively, respondents found no impact on their ability to attract and retain talent.

Startups that maintained cash reserves were able to survive the slow period of the pandemic. As the world adapted to the effects of the pandemic, corporates slowly started moving towards digitalization - thus, leading to demand for tech and fintech startups. More fintechs got the opportunity to collaborate with corporates on different projects as changes in consumer behavior and expectations demanded it.

HOW HAS COVID-19 IMPACTED YOUR BUSINESS IN THE FOLLOWING AREAS?



Digital capabilities that were once considered innovative and new such as mobile banking apps are now conventionally unexceptional due to the pandemic. Previously, good customer experience was about going through the brand experience that the bank delivers, based on its core values.

The focus then shifted to online services for customers to have closer access to the banks and their services. As customers are turning towards more digital channels, they are now moving beyond basic financial services and demanding services such as loyalty programs, loan options, PFM, etc.



WHAT IS NEXT FOR BAHRAIN IN FINTECH ADOPTION?

Over the past few years, the Middle East payments market has expanded to include fintechs, tech companies, and telecommunication firms alongside incumbent banks. This shift has been enabled by regulatory changes such as those introduced in Bahrain in 2018, in Saudi Arabia in late 2019 and the UAE in 2021.

Bahrain has taken the lead in establishing itself as the region's leading fintech hub. The Kingdom's well-structured regulatory framework and open and competitive environment pushes companies like Arab Financial Services (AFS) to think outside the box and invest in and test platforms that power the digital transaction transformation.

Fintech continues to have a huge opportunity to drive financial inclusion and positively impact consumers' day to day lives while boosting businesses of all sizes. Bahrain's fintech ecosystem will see greater developments with new and exciting products being adopted.

Payments Solutions for the MSME Segment

AFS Go!

The global **Micro, Small and Medium Enterprise (MSME) landscape** is shifting. Cashless and convenience are now at the forefront and redefining the standards for how, where and the speed with which payments are made. Key areas of growth must include the digitisation of payments which will serve to help MSMEs extract value for their business, simplify business operations, reach more customers, increase sales, and reduce costs.

AFS Go! is a digital solution bundle that supports the growth of MSME businesses across Bahrain, at a competitive price. This platform addresses MSME needs across digital payroll (banking unbanked workers), eShop (attract sales through a dedicated web presence), and In-Store Payments acceptance for online, 'card present' (CP) and 'card not present' (CNP) environments including AFS Pay, an app that allows Android phones to act as smart POS terminals. Our vision with AFS Go! is one of a digitally equipped MSME segment with dedicated financial products and services. It gives businesses access to their online customer base, supports acceptance of mobile money and digital payments, and banks unbanked employees. Our end-to-end solution cost-effectively digitizes payments and supports every aspect of the MSME value chain, including the last mile logistics fulfillment.



Payment Solutions for the Unbanked and Underbanked

AI Rateb

Another area is the **unbanked and underbanked** segments. Digital banking platforms are stepping in and filling the gap as they provide millions of unbanked people globally with access to financial services. The essential components of digital banking that foster financial inclusion for the unbanked are digital banking platforms, smartphone banking apps, and POS payments services. Together, they enable customers to make and receive payments, view, and manage their finances, and make seamless payments to merchants.

AFS's digital payroll solution AI Rateb banks unbanked workers across the Kingdom of Bahrain, giving employers the tools to pay salaries digitally and offer an efficient, digital remittance capability. This solution handles salary distribution digitally, instantly, and securely, banking unbanked workers with a digital payroll solution that gives them access to tailored banking services, at an affordable rate. For businesses of all sizes, it simplifies salary management and automates internal processes, providing clear audit trails.

Payment Solutions for the Consumer

Buy Now Pay Later (BNPL)

Buy Now Pay Later solutions boost retail, giving consumer access to high value products on their own terms (avoiding interest, debt and fees). They also give businesses the opportunity to attract new customers (boosting existing customer loyalty and retention), push through higher average order values and higher checkout conversion rates.

AFS has partnered with one of the region's leading BNPL service providers to deliver a Buy Now Pay Later Solution to the Bahrain market. BNPL helps businesses enhance sales while giving their customer more control over their spending through a simple, transparent, and financially responsible alternative to traditional payments for purchase items of higher value. Through interest-free instalment plans with no hidden fees, retailers foster loyalty, increase spends, and improve the overall customer experience.



Digital disruption is occurring at all levels in the banking industry, from new competition to new technology, and increased customer expectations.

Bring Global addresses Digital Transformation projects throughout the world, based in three main pillars: data analytics, integration and customer experience. We help improve the customer experience, accelerating the delivery of digital products and services, remaining competitive in the marketplace, reducing costs and increasing revenue, adding our contribution to redefine how banking services will be offered in the coming years.

bring'

Role of Existing Stakeholders

Bahrain's fintech ecosystem comprises of startups, corporates, government entities and the regulator, incubators/accelerators, investors, and academia.



Startups

The startup ecosystem in Bahrain is supported by several entities, both public and private. At present, Bahrain has over 120 fintechs within various verticals – payments and crypto being the most concentrated. Fintechs aim to identify a problem, verify the validity of the problem, and thus innovate a solution to serve unmet financial needs of targeted segments. The main drivers for startups to operate in Bahrain are identified as follows:

- Acquire a license by a progressive regulator and be accredited for their solution
- Acquire their first paying customer/client in the region for B2B providers
- Test and deploy their solution in the local market for B2C providers



Government Entities & Regulators

Balancing the role of regulator and promoter of fintech solutions, the Central Bank of Bahrain (CBB) has introduced several new regulatory reforms and policies. These include crowdfunding, crypto-assets, digital financial advice, open banking, and the e-KYC framework.

- Drive innovation within the economy to promote entrepreneurship through local talent
- Digital transformation for wider adoption of technology across all industries
- Economic growth through technology advancement and innovation leading to job creation and overall development



Corporates

Corporates in Bahrain including financial services, telecommunication companies, and technology firms are taking proactive steps in leading innovation within their organizations. Financial institutions are increasingly looking to interact more with their customers through digital platforms and provide them with more services in order to remain competitive and relevant in the market.

While the retail and corporate banking sector are being more active in the fintech space, the insurance sector is still lagging behind in their digital transformation journey. Moreover, the telecommunication sector has long since added financial services as part of their product/service portfolio. This shift is mainly due to the vast consumer database telecoms own, their experience within both sectors, and their ability to provide a better customer experience.



Incubators & Accelerators

With over 19 entities in Bahrain, there is a strong need for incubators and accelerators as entrepreneurs often find it challenging to navigate the landscape. These incubators and accelerators aim to support startups throughout their development by facilitating connections, establishing operations, and navigating the regulatory landscape. Overtime, the focus of incubators and accelerators has shifted to technology-led startups, including fintechs.

- Promote and create awareness on fintech solutions
- Facilitate between major stakeholders to deliver innovative solutions
- Identify market gaps for business opportunities
- Curate programs to develop local skillset and drive for innovation



Investors

The Bahraini government has largely supported fintech startups in the market. There are nearly eight investing entities present in Bahrain actively investing in fintechs. A recent survey by BFB interviewing local and regional investors found that despite investors having 100% focus on the fintech sector, only 25% of the respondents have an active fintech-only fund. However, one reason for fintech being an investor's key focus was that fintech is considered the fastest growing sector in funding activities locally, regionally, and globally. It has the potential for success and scalability within the MENA region.

- In 2020, Bahrain had 20 investments (Bahrain's share was 4% of 496 regional deals = 20 deals).
- 200% increase in Bahrain start-up funding since 2019
- 45% increase in funding versus H1-2020

In comparison to other MENA regions, survey respondents believe that Bahrain is an attractive location for investment. This is mainly due to the attractive fintech-friendly regulatory framework and advanced banking system as compared to the MENA region.



Academia

Educational institutions are key enablers of innovation within the ecosystem. Through curated programs and specialized curriculum, academia can drive interest for students to pursue a career in fintech with the right skills and knowledge. Universities in Bahrain have started delivering fintech and technology-focused seminars and workshops. Despite the availability of several courses, programs, and startup hackathons, the academic institutions are yet to make permanent changes to their curriculum at a national level. While universities have been taking active steps towards educating students in fintech, tertiary level schools also need to be a part of this transformation.

- Provide relevant educational courses and programs to develop local skillset
- Provide internship opportunities to fresh graduates within relevant roles
- Curate programs in partnership with other stakeholders

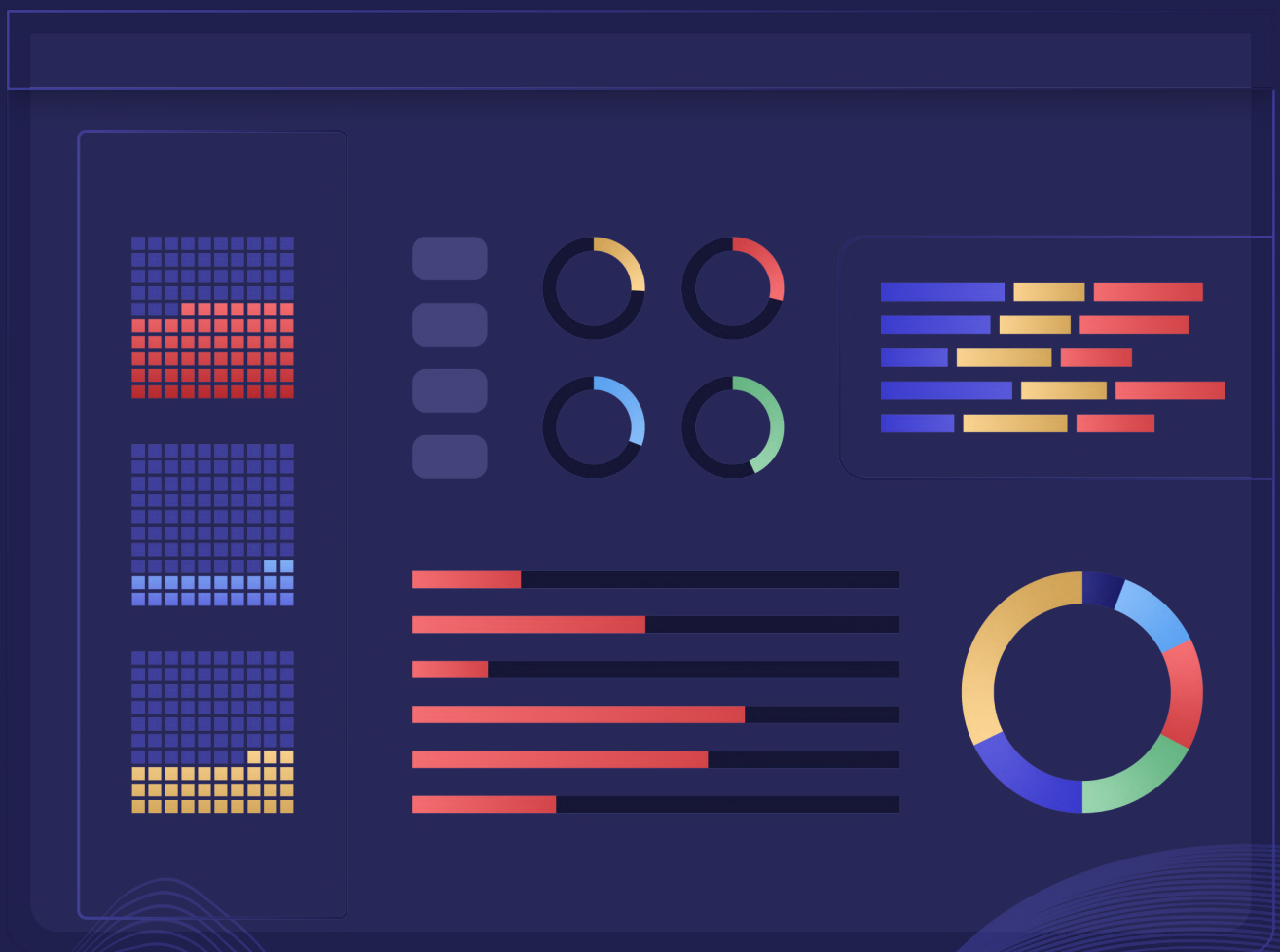


Clear regulatory framework and support from government and semi-government entities have had a positive impact on the Bahraini ecosystem. In 2017, the Bahraini Central Bank introduced its FinTech regulatory sandbox, which focused on Know Your Customer (KYC) and Anti-Money Laundering (AML). The second sandbox cohort addressed Open Banking and Innovative Financial Solutions, as well as Crowdfunding regulations. Most importantly, following the incubation of these companies, the Central Bank facilitated the integration of fintechs with banks across the Kingdom. While the fintech regulatory foundations have been laid out and that process has sent a very strong, welcoming message from Bahrain, we would like to see more regional regulatory synchronisation that would enable not just the fintech start-ups formation, but also support their scaling out across the region.

Finally, we believe that challenges such as access to talent and capital have been solved for the best regional companies but a joint regulatory effort to synchronise regulations in fintech will grow an open, outward-looking Bahraini VC ecosystem.

Section 2

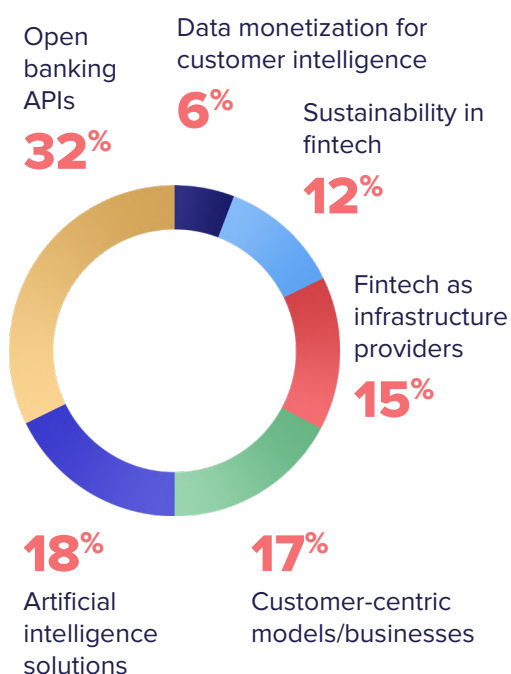
TOP TRENDS IN FINTECH 2022



TOP TRENDS IN FINTECH 2022

The FinTech Ecosystem Report 2022 highlights four emerging trends that are shaping the way fintech is impacting businesses across different industries.

WHICH OF THE FOLLOWING TRENDS HAS THE HIGHEST POTENTIAL TO GROW IN BAHRAIN?



Trend 1: Open Banking APIs

Open banking promises banks a new way of collaborating with third party entities and customers. It allows customers to be at the center of the transaction process where they have complete control over their personal and financial data. It is on their permission that the data will be shared with third parties to enable access to a more personalized and user-centric experience; thus, driving innovation and a competitive landscape where increased accessibility and cost efficiency is key. This trend is visible in other developed countries as well, particularly in Europe where the harmonized regulatory framework has made it easier for open banking adoption across different countries.

Primary banking services expected to be impacted by open banking APIs are PFM, data aggregation, payment and lending services, and investment products. While these banking services are expected to innovate and evolve for open banking, it is anticipated that non-banking services will also equally be impacted and included within the scope of open banking. Non-banking services primarily include lifestyle and business applications. Lifestyle apps include ride-sharing, loyalty programs, and online shopping. Business applications include budgeting, accounting, tax management, etc.

The CBB introduced open banking regulations in December 2018, one of the earliest in the region. They have since worked with the industry to design and develop the framework of standards and rules. There are currently 15 participating banks compliant with the open banking framework; and two AISPs and PISPs

RETAIL BANKS (ISLAMIC AND CONVENTIONAL)



AISPs AND PISPs



(Note: Status as of 20th February 2022)

The Bahrain Open Banking Framework (BOBF) identifies key use cases that define the customer experience guidelines and technical API specifications to provide a baseline implementation standard.

As open banking emerges as a trend across several economies, in Bahrain, the level of impact will depend greatly on customer data sharing permissions, new financial service providers, and speed or appetite for change.

By studying global best practices and business opportunities relevant to the Bahraini market, the CBB highlights three thematic use cases:

1

Payment Initiation Services (PIS)



Initiating payments for customers through their ASPSP accounts, including domestic, future dated, international, and bulk/batch payments.

Example - Automatically transfer funds between a user's accounts in order to ensure they stay within credit limits or avoid an overdraft.

2

Account Information Services (AIS)



Sharing of account information of customers by ASPSPs and AISP, including sharing transaction history and product details.

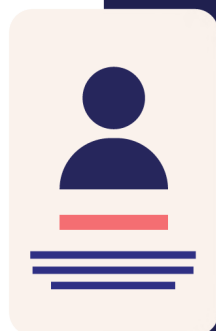
Example - A budget planner app that allows users to create a custom monthly budget by reading information available from the user's bank account.

3

Essential Services



Consent and notification applicable to both AIS and PIS, including subscribe to real time and (or) aggregated polling event notifications.



CASE STUDY: NATIONAL BANK OF BAHRAIN



With the future of fintech on the rise, Open Banking APIs are key drivers of organisational growth within the Kingdom. They are a tool that enables financial institutions to share financial data through a third-party application. Classified into three categories, APIs can provide account information, payment initiation and essential services that enable end users to grant or revoke access to accounts.

Stakeholders are an essential element in driving open banking forward into a digital age. With its array of benefits, open banking helps the industry shape the financial system as it provides high-quality information to fintechs. Additionally, open banking accelerates marketing for the bank's products and increases their competitive edge in the market.

APIs have become a vital component for open banking. There are a number of existing cases where Open Banking exists to advise customers on better financial behaviour, based on their aggregated transactions. Valuable services, such as PFM, helps end users understand spending behaviour, fine-tuning and budgeting.

Through an Open Banking process, customers can consent to NBB's exposure of details to third party vendors. The bank is currently sharing the released information with third parties and providing the kind of information utilised in a smart way by AISP building, equipping fintech and Open Banking regulated companies with the necessary data.

The payment initiation category of APIs allows end users to initiate financial transactions through PISP application. To enrich the customer experience further, we are enabling the user to use the open banking related features through our nbb digital banking platform. In order to complement each customer's lifestyle, NBB is constantly introducing solutions that act as a one stop shop for all customers' needs, complementing the experience alongside third party service providers. As such, providers are closely observed, graduating the central banks' sandbox to explore business propositions and partnership arrangements for the benefit of the customer, utilising NBB's current open banking infrastructure.

Open banking APIs created a rich environment for fintech to conceptualise ideas that have helped shift the financial experience and services of the sector to another level. NBB is currently working very closely with other fintechs to build a solid ecosystem for financial services in Bahrain, exposing a set of APIs that can be classified in the above-mentioned categories. The bank is also the first in the region to launch Open Banking solutions in partnership with Tarabut Gateway, an aggregation service that enables customers to connect their accounts to any bank across the Kingdom and create a consolidated view of their finances.

Trend 2: Artificial Intelligence Solutions

Artificial Intelligence (AI) is a universal trend across multiple regions as a strategy to further foster and empower capabilities. A wide range of existing and emerging devices are becoming smarter by learning from trial-and-error sessions, predicting realistic outcomes, and recognizing patterns, among other approaches. Adding intelligence to existing products/services has given rise to several business opportunities across industries.

Applications of AI are many and diverse, and it is now a core competence required by financial institutions as part of their digital transformation strategy. In Bahrain, AI implementations are done in silos for individual functions or processes such as chatbots, e-KYC, etc.

Despite the CBB releasing regulations on digital financial advice that have an element of artificial intelligence, they are yet to roll out a complete guideline on the use of artificial intelligence for different applications. As per survey results, regulations on AI are highlighted as one of the top three priorities of regulatory development to be introduced next.

There is a clear gap between the adoption of artificial intelligence solutions and the market perception of artificial intelligence as an up-and-coming trend in Bahrain. However, over the next couple of years, it is anticipated that the strategy will shift from standalone applications to full-blown integrations into the company's operational and customer service interface.



EUROPEAN COMMISSION'S PROPOSED AI REGULATIONS



In April 2021, the European Commission released the first draft of Proposed AI Regulations. The two main areas of focus are excellence in AI and trustworthy AI. The EU approach to establishing an AI framework is to safeguard the functioning of trade markets, the public sector, and consumer rights in order to maintain a fully functioning internal market for artificial intelligence systems.

The Proposed AI Regulations would primarily apply to financial institutions, payment service providers, and fintechs development, procurement, use, and operations of AI systems. Along with the introduction of regulations, the European Commission is also working on developing an AI strategy to hand in hand with the AI approach. The purpose is streamline research, policy building, and innovation for artificial intelligence.

Trend 3: Customer-Centric Models

Consumers of financial services have developed an appetite for better and more advanced digital services when it comes to their money management. Consumers now prefer a more lifestyle-embedded way of dealing with their banks, i.e., services that are more tailored and focused on their preferences, requirements, and goals. Thus, evolving customer expectations have led to the rise of customer-centric models that focus on innovation catering to customer needs.

Financial institutions across the spectrum are reshaping the customer experience journey by creating a well-designed customer-centric product through valuable data to better understand customers behavior, make relevant recommendations, and offer the right services at the right time. In Bahrain, it is observed that banks have commonly taken the first step in digital transformation mainly within the customer interface, front-end operations. Examples include digital

onboarding for account opening and payment initiation via mobile applications. Now that it is easier to open bank accounts due to e-KYC and digital onboarding procedures, it has also become easier for customers to switch their bank accounts. While customers may not change their main account for salary deposits, they still open secondary bank accounts for daily expenses or savings.

As mentioned previously, while basic services are available, advanced add-on services such as PFM are not yet available. The main reason behind the slow adoption is the high costs of implementing such solutions against the return on investment. Given the small size of Bahrain and small consumer base, it becomes difficult to justify the cost against the value customers receive. Therefore, while banks in Bahrain have customer centricity as their core value, they are yet to develop further advanced features and products.

CONSUMERS SHAPING NEXT GENERATION DIGITAL BANKING



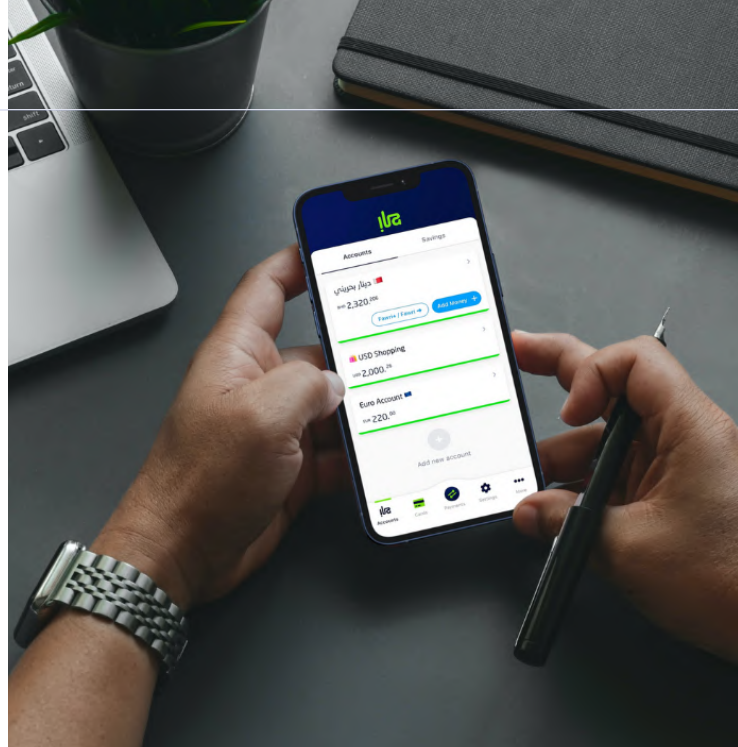
In the digital age, consumers dictate the digital banking agenda. As digital-first, app-based experiences become increasingly ubiquitous across most, if not all, industries including food, health, transportation, music and retail, modern day consumers have become accustomed to effortless, seamless and instantly accessible services and solutions. Yet, despite this rapid global transformation, traditional banks have been held back by sunk costs, expensive legacy systems and large physical operations. From the outset, Bank ABC saw digital disruption as a catalyst for positive change. As customer centricity and innovation have always been at the heart of its strategy, it embarked on a digitization journey early on to design banking around the consumer's world.

In November 2019, Bank ABC launched ila Bank, the region's first fully cloud based digital, mobile-only bank. With a promise to deliver "Banking that reflects you", ila offers consumers an unparalleled personalized banking experience that reflects their everyday needs, addresses their financial pain points and fulfills their short-and-long-term financial aspirations. Merging cutting edge technologies, including AI and Data Analytics, with a deep human understanding, ila delivers tailored banking solutions while continuously co-creating new features alongside its consumers. Its innovative offering includes an unmatched digital onboarding service requiring only one ID and a selfie; unique saving solutions such as "Hassala" and "Jamiyah" that encourage savings and financial stability. ila Bank has also launched two unique Credit Cards, ila Blue designed to cater to today's discerning customers and enrich their lifestyle experiences with a world of exclusive benefits, rewards and offers, and ila Switch, that allows customers to transfer their balances from other banks to ila in a seamless way and at competitive rates "Transfer by mobile number" feature enabling seamless payments; a donations feature promoting prosperity among many other market-first solutions.

Although ila was faced with an unprecedented global health crisis within two months of its launch, it continued to thrive and capitalize on greater demand for touchless banking solutions, leveraging its agile digital infrastructure to rapidly respond to changing consumer needs and accelerate financial inclusion.

Since its inception, ila released 24 app upgrades, including user interface and functionality enhancements as well as unique banking products and solutions, and maintained outstanding app ratings of 4.4/5 in Apple Store and 4.5 in Google Play. It was also named “Best Consumer Digital Bank” and “Best Mobile Banking App” in Bahrain as part of Global Finance’s 2021 World’s Best Consumer Digital Banks Awards in the Middle East.

The digital mobile-only bank continues to demonstrate exceptional growth. In 2021, it witnessed a **163% growth in ila customer base and an increase in debit card spending by 10 fold**. It has also cemented Bank ABC’s footing as a leading digital banking player in MENA and is set to expand across the Bank’s core regional markets, starting with Jordan in 2022.



Trend 4: Fintech as Infrastructure Providers

Incumbent financial institutions are looking to partner with fintechs that have advanced technology capabilities to help upgrade or replace a bank’s existing IT system infrastructure. Initially what started out as fintech-bank partnerships or collaborations over a single solution or service, banks are now leaning more towards fintechs that act as enablers of innovation and support the banking infrastructure as a whole.

Fintechs across different areas are building the customer experience infrastructure from scratch. This gives them the agility to develop customer-centric products and gain more exposure overtime; whereas financial institutions are found developing short-term ad-hoc solutions to deliver on specific

customer needs. This is mainly due to core technological infrastructures of financial institutions that are built over old programming systems leading to many inefficiencies. Some of these inefficiencies include making it difficult to build on legacy systems to add new features. This is one of the primary reasons that banks remain incumbent as fintechs develop more agile and modular solutions that are easy to plug into the system. This is identified as a common issue between banks in Bahrain where digital solutions are introduced at a slow and fragmented pace. Banks in Bahrain need to move from what is sometimes referred to as the “patchwork solutions” strategy towards a gradual migration of a complete modernized technological infrastructure across the spectrum.

CASE STUDY: BACKBASE



Backbase is a fast growing fintech software provider that empowers financial institutions to accelerate their digital transformation and effectively compete in a digital-first world.

Backbase Engagement Banking Platform is a state-of-the-art digital banking software solution that unifies data and functionality from traditional core systems and new fintech players into a seamless digital customer experience. Backbase offers financial institutions the speed and flexibility to create and manage seamless customer experiences across any device, and deliver measurable business results. They believe that superior digital experiences are essential to stay relevant, and their software enables financials to rapidly grow digital business.

Backbase-as-a-Service was created so banks could increase innovation and decrease IT overhead. With it, banks have access to the entire suite of the Backbase catalogue, automatic updates, early access to new features and 24/7 management. Ultimately, with Backbase-as-a-Service, it’s the bank’s customers who win. With cloud technology, banks can deliver the latest and greatest digital innovations faster than ever.

Section 3

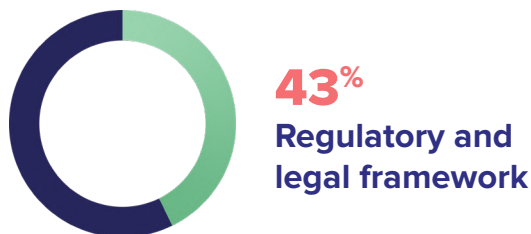
KEY GROWTH DRIVERS OF THE FINTECH ECOSYSTEM



KEY GROWTH DRIVERS

The report outlines four key growth drivers that provide startups, corporates, governments, incubators/accelerators, investors and academia with an understanding of areas that are impacting the fintech ecosystem.

By building across the regulatory framework, sustained demand for innovation, talent potential, and funding, the report provides a holistic overview of how Bahrain's fintech ecosystem currently functions and will continue to in the future.



Note: Survey - Growth Drivers of Bahrain's Fintech Ecosystem

Government and Regulatory Support

The Central Bank of Bahrain strongly supports the ambition of a digital economy in Bahrain by creating a viable fintech ecosystem through comprehensive and supportive regulatory frameworks. The CBB has been instrumental in shaping the fintech sector and acting as the catalyst for successful fintechs regulated under their jurisdiction. Over time, regulators have acknowledged that innovation is one of the main drivers of economic growth and has the potential to meet industry challenges within the financial sector.

The report identifies two key areas of focus:



Regulatory framework development



Barriers to entry and ease of doing business

Regulatory Framework Development

Current Initiatives and Impact

Since the FinTech and Innovation Unit launch in October 2017 by the Central Bank of Bahrain, several fintech developments have occurred. The unit is dedicated to supporting the development of digitized financial services and providing best practices for services that individuals and corporate customers can access in the financial services industry. To date, the CBB has introduced eight fintech-focused regulations:

REGULATIONS TIMELINE



The CBB, in September 2021, issued a new license category of investment firms for fund managers. The new license caters to the business models of specialist fund managers who operate, manage, or market collecting investment undertakings (CIUs) for investors with a net worth of \$1 million and above. Examples include private equity funds, hedge funds, structured funds, real estate funds, venture capital funds, and other alternative investment funds.

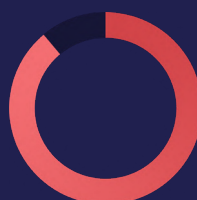
The CBB recently, in February 2022, introduced amendments made to the CBB Rulebook Volume 5 for type 3 of Financing Companies in order to enable new innovative business models for financing customers with small loan values by using digital technology products, also referred to as BNPL companies.

The following amendments were made to the CBB Rulebook:

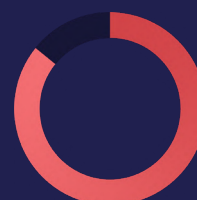
- 1** Reducing the constraints on the ownership percentage of Controllers
- 2** A suitable management structure to match technology-based business models
- 3** BNPL firms are not required to have a minimum capital of BD5 million, as is the case for conventional financing companies. The capital requirements will be based on the nature, scale, and size of operations.

The survey highlighted the following regulatory developments that should be a priority to introduce next:

WHICH OF THE FOLLOWING REGULATORY DEVELOPMENTS SHOULD BE A PRIORITY TO INTRODUCE NEXT?



89%
Digital banking license



86%
Further development of consumer data protection



82%
Use of artificial intelligence



70%
Use of distributed ledger technology (blockchain)



69%
Alternative finance



61%
Digital currencies



58%
Tokenization of assets (blockchain)

The CBB highlighted that their focus is expanding on existing regulations similar to their implementation of the BOBF and studying the sandbox companies to identify gaps and opportunities. This analyzes which verticals are gaining traction and which are a success/failure when testing solutions. On the outlook, the CBB is

researching more about alternate digital finance platforms, particularly open finance and alternative finance.

For current regulatory developments, the survey highlights which had the most impact on the fintech ecosystem since its introduction.

WHICH OF THE FOLLOWING REGULATORY DEVELOPMENTS HAS RESULTED IN MORE IMPACT WITHIN THE FINTECH SECTOR IN BAHRAIN?

65%

Regulatory sandbox

57%

Open banking regulations

40%

Personal Data Protection Law

29%

Crypto-asset exchange regulations

28%

Crowdfunding regulations

21%

Data Jurisdiction Law

21%

Digital financial advice regulations (robo-advisory)

10%

Insurance aggregators regulations

Regulatory Sandbox

The renowned regulatory “sandbox” introduced by CBB creates a robust virtual environment for fintech startups to test and market their innovative financial products and services. It is one of the first major steps toward the development of the fintech industry in Bahrain.

Bahrain’s sandbox provides an opportunity to both attract global fintechs to expand into the region and elevate Bahrain’s position as a fintech hub on a regional and global scale.

As of September 2021, there are **25 fintech companies** in the Regulatory Sandbox

SANDBOX COMPOSITION

Aggregator of Financial Products Information



Artificial Intelligence Platform



Auto Insurance Data Analytics



Buy Now, Pay Later



Crowdfunding Platform Operator



Crypto Services (ATM, Tokenization)



Customer Notification Solution



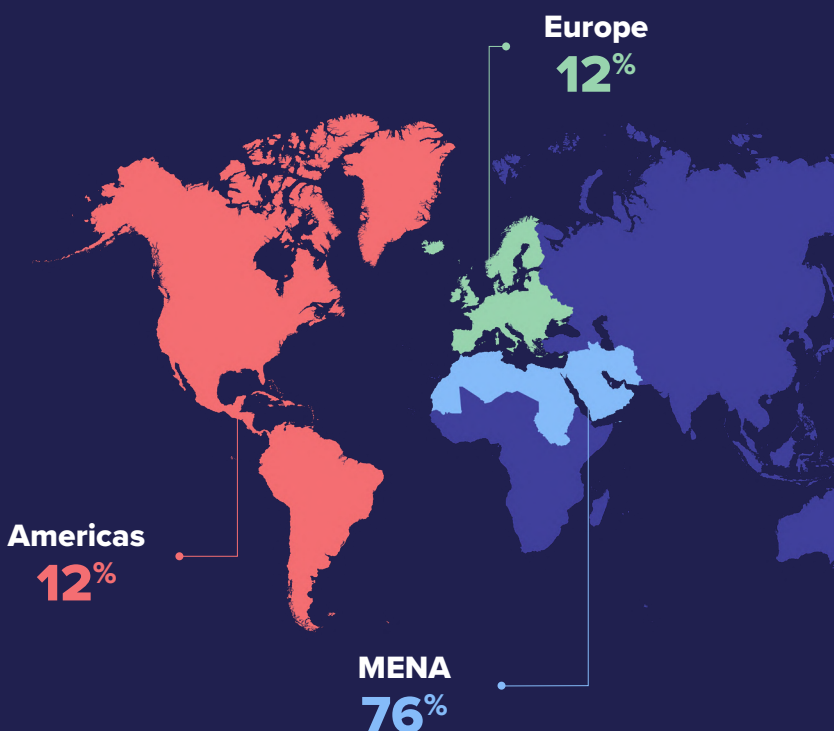
Digital Contract Payment Network



Financing Platform



Investment Platform



Loan Aggregator (AISP)



Online Money Remittance



Payment Service Provider



Rewards and Payments



Robo-advisory



Smart Interactive Receipts



In Conversation with the CBB

In conversation with the CBB, it was stated that the sandbox had a significant impact on the development of regulatory frameworks. Several of the regulatory developments directly resulted from working with and studying the sandbox participants that introduced and tested their solution within the sandbox environment.

An example of this is Tarabut Gateway, the first graduate of the sandbox. As a result of the success of the open banking solutions being tested in the sandbox, as well as the global trends observed towards open banking and the value it delivers to customers and banks alike, the CBB was able to comprehensively create open banking regulations and design the Bahrain Open Banking Framework (BOBF). Similarly, for the crypto-asset and digital financial advice regulations, the presence of such companies in the sandbox helped shape the current regulatory guidelines.

Overall, the sandbox companies play a vital role in providing regulators such as the CBB with insights on innovative solutions and business models to ensure it meets the needs and risk appetite of the market and regulator.



Open Banking Framework

The Bahrain Open Banking Framework was introduced in October 2020, whereas the open banking regulations were introduced in 2018. This positioned the Kingdom as an attractive destination for fintech in the MENA region. The framework was introduced to facilitate a more seamless implementation of open banking services for both banks and third-party providers. It was also a means to pave the way for a technology-friendly and innovation-driven ecosystem within the financial services sector. The only licensed open-banking platform in the MENA region, Tarabut Gateway graduated from the regulatory sandbox and now provides access to a global network of banks and financial institutions.



Personal Data Protection Law (PDPL)

The “Bahrain Personal Data Protection Law,” which supports legitimate and fair use of data privacy and protection, was highlighted as one of the initiatives to have the most impact. Given that consumer data privacy was highlighted as one of the major concerns for respondents of the survey, the introduction of PDPL had a major impact on easing consumer concerns.



Crypto-Asset Exchange Regulations

There are over 12% of crypto-asset companies in the sandbox at present. Several modifications have been made to the crypto-asset module after being finalized in February 2019. The module highlighted the four categories of crypto-asset licenses with a different minimum capital requirement for each. Each category has a different set of services that a crypto-asset operator can provide.



Barriers to Entry and Ease of Doing Business

Bahrain has always been highlighted as a vibrant startup ecosystem with ample support from existing stakeholders. The ease of doing business, low barriers to entry, and overall supportive environment has always made it easy for startups to set up operations locally. As per the Global Startup Ecosystem Report 2020, Bahrain was globally ranked amongst the top five fastest-growing startup ecosystems with less than 1000 startups. It was found that Bahrain generated \$164 million in ecosystem value over the past two and a half years. The survey identified key barriers to entry and opportunities for startups.

Key Barriers to Entry

FUNDING

58%

Fintechs require a larger amount of capital than other tech startups, thus making investors hesitant to invest large amounts of capital. Moreover, considering the risk and reward factor, fintech solutions that offer substantial growth opportunities to justify the risk of investment are typically the ones with many regulatory issues. The payoff is higher with riskier fintechs, but since the regulators are unwilling to license such risky business models easily, the investors lack interest in the market.

REGULATORY ISSUES

43%

Sandbox participants often find a gap between when they graduate and when the regulations are released for their service. Moreover, early-stage fintechs face major operational challenges due to rigid and intense compliance requirements. There is no difference between the regulations of a small-scale fintech and a large bank. Therefore, it becomes difficult for fintechs to grow sustainably due to high compliance costs. Lastly, there is a lack of regulatory harmony between GCC countries. Each jurisdiction has its objectives leading to fintechs taking longer to establish or acquire a license. Subsequently, there is no expectation of passporting opportunities within the GCC due to the fragmented regulatory environment.

TALENT RECRUITMENT

41%

In Bahrain, there is a lack of technical specialization. Companies often turn to foreigners in order to recruit specialized talent. As new fintech solutions are introduced in the market and there is a healthy appetite for innovation within the financial sector, companies are now looking for blockchain coders, data analysts, software engineers, and experts in fields such as artificial intelligence, etc.

Key Opportunities

TECHNOLOGICAL INNOVATION

78%

Innovation is encouraged and supported in Bahrain with a supportive government with a vision of a digital economy and progressive regulators that introduce fintech regulations. Especially with the establishment of Bahrain FinTech Bay, there is a dedicated hub in Bahrain that caters to the needs of fintechs. Its mandate is to further develop Bahrain's fintech ecosystem, nurture and support corporate innovation, accelerate startups, and provide a neutral platform that fosters collaboration between investors, entrepreneurs, government bodies, and financial institutions.

CUSTOMER ACQUISITION

70%

Survey respondents highlighted customer acquisition as a key opportunity in Bahrain. With technological innovation and progressive e-KYC procedures, it is easier to acquire customers with digital onboarding capabilities. However, it is also just as easy to lose customers as they can easily switch between competitors. With technology, banks have lost a robust loyal customer base and consumers are now looking for value-added services that are embedded within their lifestyle.

GAINING VISIBILITY AND AWARENESS

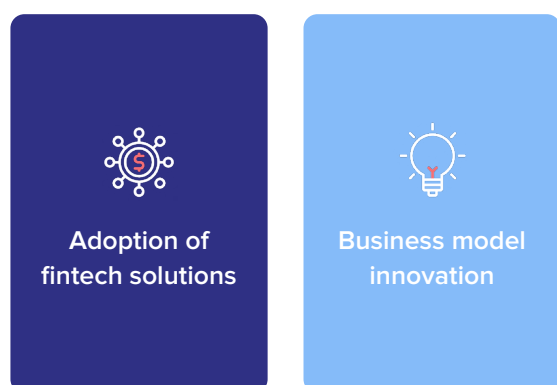
66%

Given the small size of the market, it is easier to introduce your product/service in the market and reach your customers. It is easier for fintechs to gain traction in the market if given the right opportunity. However, it can also cause large fintechs to not be attracted to Bahrain due to its small size.

Innovation

Innovation is defined as the development and application of ideas or technologies that overall improve existing goods and services or make the production of that good or service efficient. Innovation is identified as one of the key growth drivers of the fintech ecosystem as innovators across the spectrum are utilizing different technological tools to develop seamless and innovative financial services for all market segments.

The report focuses on two key areas of focus for innovation:

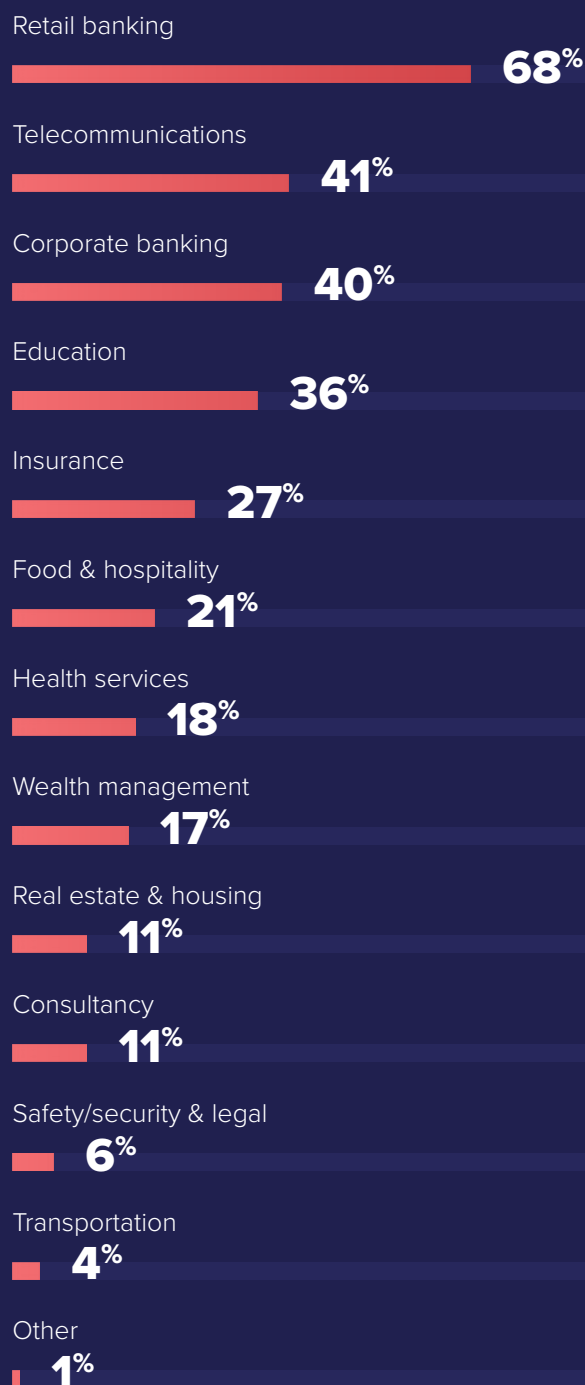


Adoption of Fintech Solutions

Fintech Adoption Across Different Sectors

Sectoral analysis of the market reveals that retail banking is experiencing higher fintech adoption than other sectors, as perceived by the survey respondents. The expansion of the retail banking sector is largely due to the rise of technological response to traditional banking method limitations and changing customer expectations. This is followed by telecommunication and corporate banking.

WHICH OF THE FOLLOWING SECTORS ARE EXPERIENCING HIGHER FINTECH DISRUPTION AND/OR ADOPTION?



Banks are increasingly looking to interact more with their customers through digital platforms and provide them with more services in order to remain competitive and relevant in the market. As customers are looking for a better experience, banks are looking to integrate more services into their lifestyle or risk losing their customers. With the quick digital onboarding and e-KYC processes, customers can easily switch to another bank if they are not satisfied with their current bank. Thus, there is a clear shift from traditional banking methods to lifestyle banking, where add-on services are being prioritized.

Telecommunication companies have long since added financial services to their product/service portfolio. These were through basic payment wallets and loyalty programs. As more and more telecoms are moving into the financial space at a larger scale with a range of products, the gap between the telecommunication sector and financial services sector is decreasing. This trend is expected to continue as telecoms establish new entities to specifically remain within the

same industry but operate as a financial services entity. This is mainly because telecoms that are regulated by the Telecommunication Regulatory Authority (TRA) cannot be regulated by the CBB. Therefore, by establishing new entities, telecoms are looking to acquire full banking licenses by the CBB. This shift is mainly due to the vast consumer database telecoms own, their experience within both sectors, and their ability to provide a better customer experience. In Bahrain, one of the leading telecommunication firms, Batelco, has established a separate entity in order to enter the fintech space. Batelco was the first and only GCC to acquire an open banking license from the CBB. The services within the license include providing both consumers and SMEs with services such as digital wallet creation, cards issuance services, bank accounts aggregation, and bank account payments initiation on behalf of clients and third parties. By entering the financial services space as a telecommunication firm, Batelco expands its offerings to include innovative digital services and communication solutions.

CASE STUDY: BEYON MONEY



On the 1st of December 2021, Batelco launched its Fintech brand Beyon Money. This was a highly anticipated event after Batelco's announcement earlier in the year its plan to venture into the world of fintech. Batelco Financial Services received the necessary licenses by the Central Bank of Bahrain, making it the first telco subsidiary in the GCC to achieve this milestone.

The Beyon Money Super App includes Visa Prepaid Cards, Stored Value Wallet, Open Banking Connectivity, categorization of expenses and financial Insights and fully digital Remittances. It is the first fully digital Financial Super App to deliver direct Open Banking access to consumers in Bahrain, connecting all the banks across the Kingdom in one App. Users will have the ability to view all transactions with their banks and with their cards, as well as transact and transfer funds between accounts and into their digital wallet with ease.

With its unique customer-centric offering, Beyon Money is expected to be a key catalyst in the market with a vital role of supporting the advancement of payment innovation and digital ecosystems.

Beyon Money is the only Super App in Bahrain that will develop a marketplace for its users to access a wide range of financial products and services, such as mortgages, alternative savings and investment solutions offered by several providers.

With its scalable model, Beyon Money will have no geographic boundaries, as it will be connecting regional and international financial service institutions, being the first fintech in the MENA region to offer such a wide scale of services to its customers.



As per survey results, 27% of respondents believe that insurance companies are adopting fintechs. However, as per market analysis, insurance companies have not invested in major insurtech innovations mainly due to the fragmented market structure with only 21 locally incorporated insurance companies and a small share of customers.

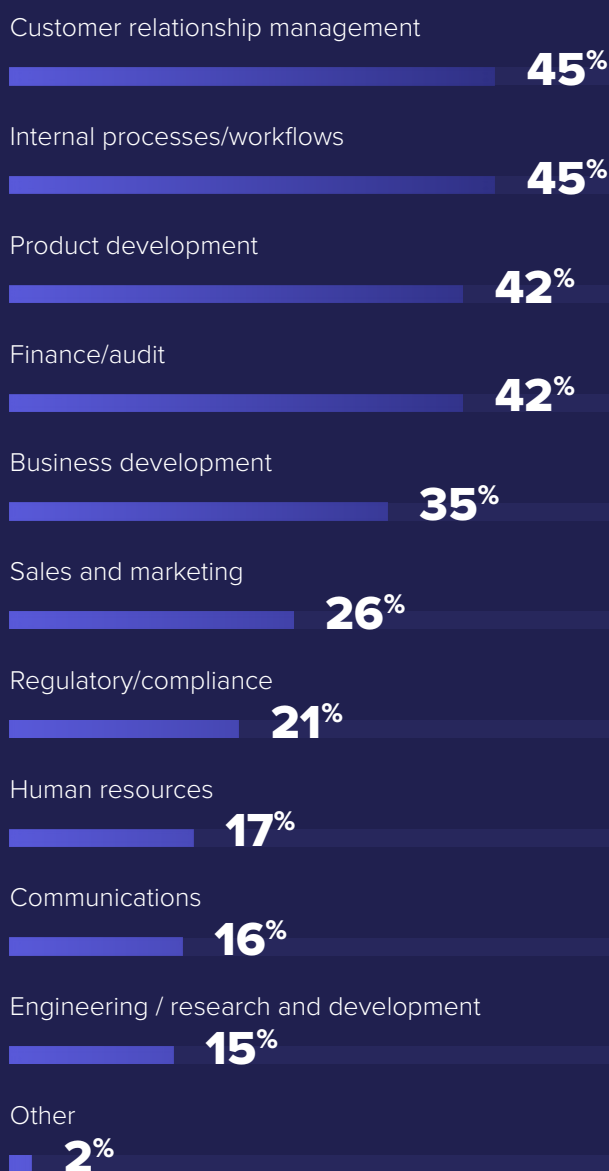
Despite a general drive for consolidation as more and more insurance companies are merging, there is still slow adoption in the market. An example of this is Solidarity Bahrain and t'azur, two Sharia-compliant insurance (takaful) providers merging. It is anticipated that with these mergers, insurance companies will be able to spend more capital on digital infrastructure capabilities and lower the barrier to entry to adopt more insurtech solutions. Moreover, it is expected that introducing innovative insurance solutions such as insurance-as-a-service for areas outside of auto, health, and home insurance could be another avenue to boost the insurance sector.

In a recent development, it was announced that the BENEFIT Company (leading electronic financial transactions service in Bahrain) would be integrating e-KYC into the insurance sector in collaboration with Bahrain Insurance Association (BIA). The e-KYC solution is a national initiative that was previously available for the banking sector and now extended to the insurance sector. The e-KYC service will allow insurers to initiate paperless KYC for digital customer onboarding journeys. This is a step towards the digitalization of the insurance sector.

Digital Transformation within Business Areas

As the survey identified sectors experiencing the highest level of fintech adoption, the survey also deep dives into the different business areas that have the most potential for digital transformation alongside which technologies are a higher priority for corporates.

WHICH OF THE FOLLOWING AREAS WITHIN A BUSINESS DO YOU BELIEVE HAVE THE MOST POTENTIAL FOR DIGITAL TRANSFORMATION?





Customer Relationship Management

CRM is the front-end of dealing with customers. There are multiple touchpoints when dealing with customers, which mainly defines the customer experience journey. The touchpoints could be through a banking app, website, branch, employee interactions, and so forth.

To develop better customer relationships, banks make use of data analytics. The financial services industry was among the first industries to include data analytics within strategic planning to track consumer behaviour and identify market trends. Banks have access to vast data as consumers utilize their products and services daily. Such predictive analytics allow banks to have a faster-paced decision-making process in order to respond to customers promptly. It also allows for long-term strategic planning involving which products and services to introduce, improve, or discontinue.



Internal Processes and Workflows

Internal processes and workflows include improving the overall workflow efficiency by eliminating manual and tedious tasks and processes in the back-office. Banks have previously relied on legacy systems to carry out their processes which typically take a great amount of time to process one transaction at a time. By improving the workflow, banks can save time and cost through a seamless process.

With new technology such as APIs, banks no longer have to do a complete overhaul and investment into a new infrastructure system; they can simply integrate with an API to automate processes.



Product Development

Product development is a key area that is being disrupted with emerging technologies. An example of this is artificial intelligence, where several use cases have surfaced regarding artificial intelligence within the banking field over the past years. The purpose of AI is to improve our ability to recognize patterns and trends, anticipate future events and possibilities, make informed decisions, and communicate with other people effectively. Several areas, departments, and functionalities have been disrupted with the right use of augmented intelligence and autonomous processes. This can range from PFM, investment portfolio management, reporting and analytics, credit scoring, and so much more.

Business Model Innovation

Over the past years, corporates have been developing fintechs or adopting innovative technologies within different business areas through various corporate practices. According to the recent market survey, the most common practice of adopting fintech solutions is procuring from vendors/partners, followed by building internally. Procuring from vendors allows companies to

leverage advanced technology built externally to provide automated and improved financial services by combining innovative business models and technology. Companies that opt to build internally will have creative ownership of design, layout, and structure but will also have to go through major investment decisions and a lengthy process.



CASE STUDY: TAP PAYMENTS

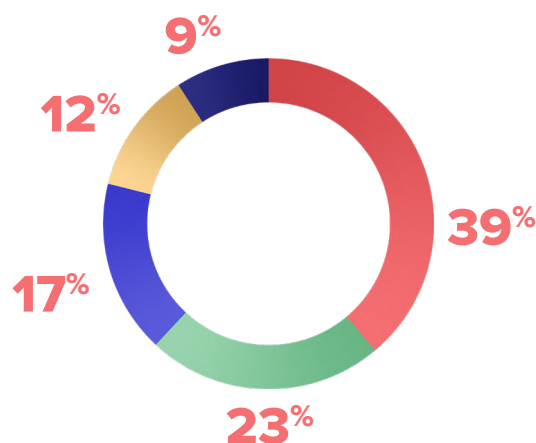
The relationship between fintechs and the banks is expected to solidify as their services complement each other. They work as partners. Fintechs solve what banks are not able to, due to their agility and tech developed solutions. Whereas the banks are providers of liquidity and offer a wide range of services that fintechs rely on to develop their offering, increase efficiencies, and lower costs.

In the past 20 months, digitization has accelerated globally and picked up pace really quickly regionally. There has been a huge shift in consumer behavior. Across MENA, the client base was very cash-oriented and now there is a shift to online payments via different payment methods including buying on credit. Use of online debit cards and credit cards or buy-now-save-later (BNPL) options have become more common. Also, consumers choosing to have their details saved for auto renewals or online subscriptions is a new behavior.

The relationship between banks and fintechs is expected to evolve and solidify. Consumers are expecting more from their financial service providers. Fintechs are able to pick up the gap in the market and create solutions at a faster pace than the banks. This does not mean that the banks are out of the picture. Instead, this solidifies the bank's position as their regulatory framework complements that of the fintechs so the banks are well established to offer a range of services that fintechs can't.

According to a recent report by Wamda (Emerging Venture Markets FinTech Venture Investment Report Q3 2021), fintech startups in MENA closed 15% more deals and raised 150% more funds by October 2021 than full-year 2020. Digital wallets, micro-lending, digital transfer, and peer-to-peer banking are driving digital innovation. These solutions are supporting financial inclusion and creating sustainable economic alternatives. The industrial structure of finance is evolving with greater access to higher quality, more convenient, and less expensive products and services.

When corporations are procuring from vendors, the relationship is built over the selected business model. There are several types of business models, some of which are listed below in order of most popular business models in Bahrain. According to fintech respondents of the survey, it was found that SaaS and revenue sharing was the preferred business models.



Software-as-a-Service (SaaS)

Corporate sets up an annual subscription-based agreement with the vendor.



Vendor Business Model

Corporate sets up licensing-based agreements with vendors.



Investment

Corporate invests into the fintech company through acquisition, joint venture, or others.



Revenue Sharing Model

Corporate and vendor agree to share revenue for a certain period of time.



Pay-Per-Usage (PPU)

Corporate will only pay if the solution/platform is utilized.



Banks are slow to understand that their old business models are no more. To them digital transformation is taking customers online, a copy-paste of their bricks and mortar offering. With this mindset they will only see a step by step carving out of their business to startups, disrupters, and incumbents. We have always suggested that banks need a “digital-twin” that is outside the current banking governance model that can be agile to experiment and succeed/fail.

Talent

The quality and level of expertise of talent in the financial services and technology sector is an important variable for solution scaling. For a successful fintech ecosystem, talent is highlighted as another key growth driver. Academic institutions need to build the entrepreneurial mindshare in Bahrain's youth alongside technical expertise.

The report will focus on two key areas:



In-demand skills,
qualifications and
functions

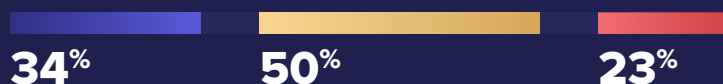


Co-working
with artificial
intelligence

HIRING PLANS FOR FINTECH/DIGITAL TRANSFORMATION

● Retail Banks ● Corporate Banks ● Fintechs

Yes (full-time)



Yes (full-time + internships)



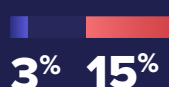
Yes (internships only)



No



Not yet



The survey found that 35% of respondents did not hire additional team members in the last 12 months for fintech or digital transformation teams. This could be mainly attributed to the pandemic as the downturn caused by the lack of business could have led to lower recruitment numbers.

The survey results show that internships were not a popular recruitment option for banks and fintechs as they focused more on full-time employment. Fintechs also expressed that they have not yet recruited employees but plan to hire full-time employees in the next 12 months.



29%
hired full-time
only



13%
hired internships
only

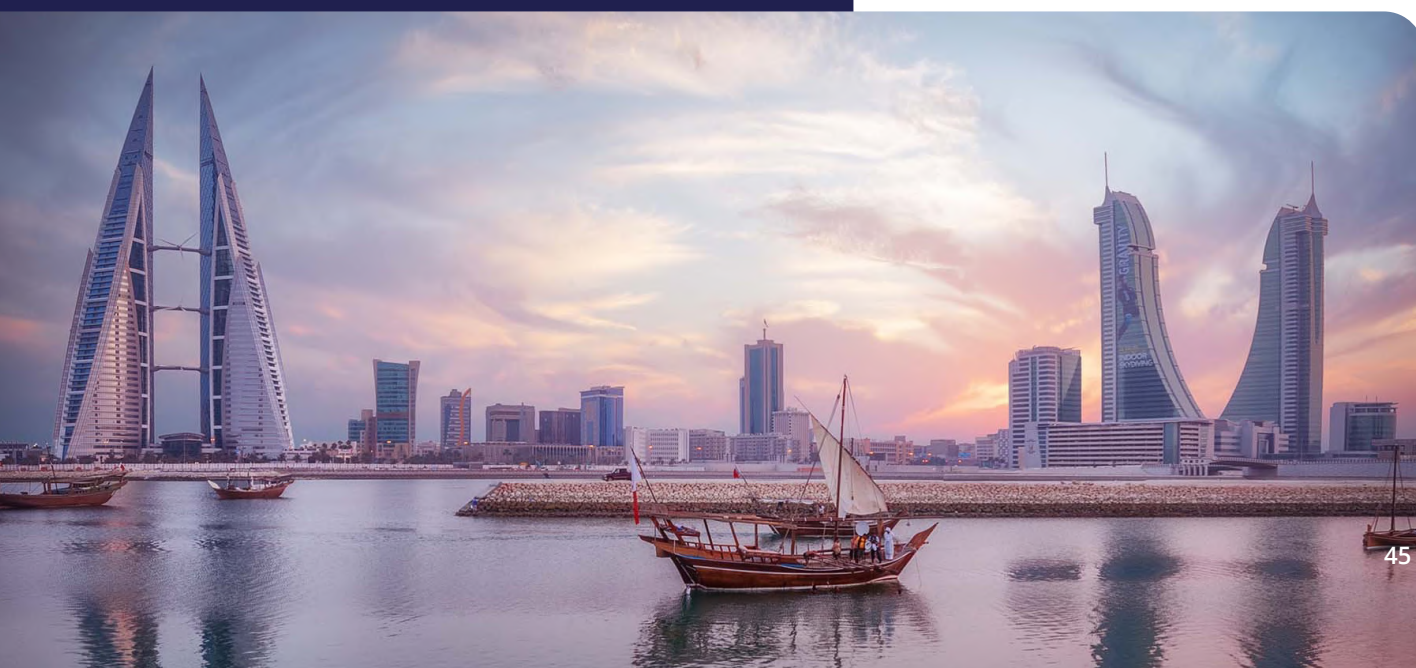
WHAT FACTORS WOULD IMPROVE BAHRAIN'S STANDING AS A TALENT HUB WITHIN THE GCC?



Bahrain as a Talent Hub

As the fintech scene expands in Bahrain, corporates, fintechs, and the government are tapping into digital fintech services talent. Several fintechs that have launched their solution are hiring local talent. An example of this is Beyon Money's team, where 70% of the workforce was Bahraini. Moreover, corporates also are looking to employ full-time employees in fintech and IT roles. As a general view, there is a lack of specialist roles across the GCC. This space is yet to be developed in the region.

While Bahrain is gradually increasing its standing as a talent hub in the MENA region, many gaps exist. As per market sentiment on how Bahrain could elevate its status as a talent hub, offering fintech certificates and programs, awareness campaigns, and introducing technical programs are listed as top priorities. Bahrain has a moderate selection of fintech certificate programs such as Georgetown FinTech Program, Harvard FinTech Course, and Oxford FinTech Programme. Still, the Kingdom has moved beyond the awareness stage of understanding the basic concept of fintech. Therefore, while awareness is important, there still needs to be a better grasp of technologies as a lack of technical skills is identified as the greatest gap within the local talent pool.



In-Demand Skills, Qualifications, and Functions

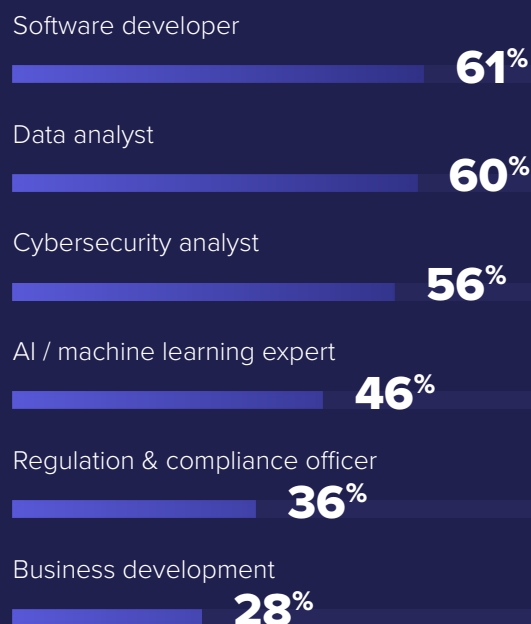
Employers are now looking for skills rather than qualifications.

Employers would like to know if the candidate has the technical skills to build programs while also being creative. There is now a demand for specialization in relevant fields such as artificial intelligence and blockchain coders, data analysts, software engineers, etc. When employers are looking to recruit new talent, their selection process does not involve the availability of a certificate, but their ability to work on a particular software, i.e. what are they capable of producing or innovating.

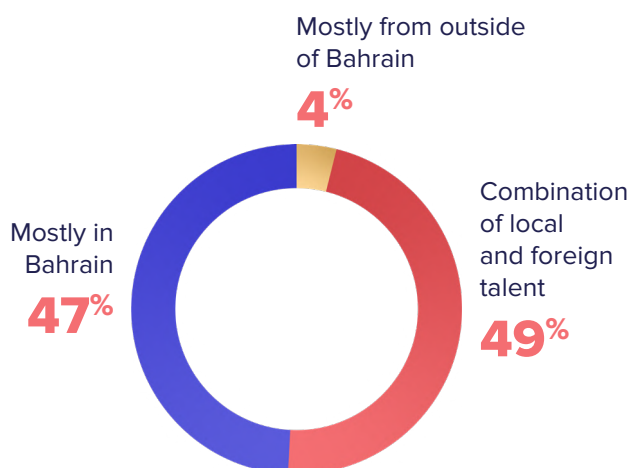
As noted from survey results, companies mainly recruit a combination of local and foreign talent. Therefore, the main issue that stands out in Bahrain's talent pool is a lack of specialist local talent. Companies instead look to hire foreigners who can carry out the technical roles. Due to Bahrainization quotas and demand for foreign specialized skills, this recruitment method proves most effective for companies.

The survey identifies top technical skills in-demand to be software developer, followed by data analyst, and cybersecurity analyst.

WHICH SKILLSET OR TALENT IS THE MOST SOUGHT AFTER IN THE FIELD OF FINTECH AND DIGITAL INNOVATION?



WHERE DO YOU EXPECT TO RECRUIT ADDITIONAL WORKFORCE?



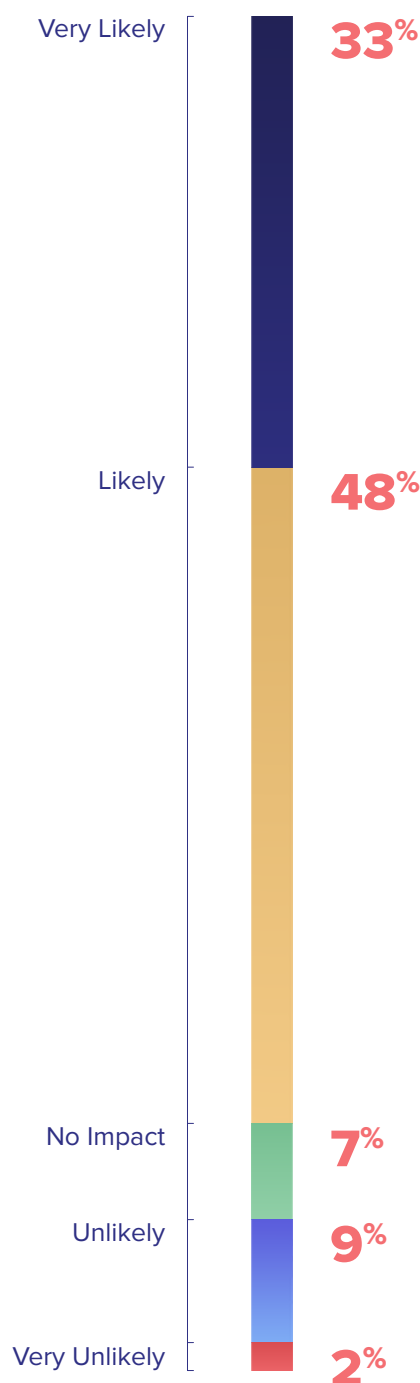
Co-working with Artificial Intelligence

With the wave of digitization, companies are now focusing on upgrading their talent, investment, and infrastructure to be up to par with emerging trends in technologies. Using advanced technology such as AI, companies can secure greater customer satisfaction and operational efficiency. As per the survey, it is identified that 47% of respondents believe that AI will have a major impact on jobs.

Companies today are powered by a digital workforce that includes advanced technologies such as artificial intelligence through machine learning and robotics. They are now shifting from managing employees to managing capabilities with the use of artificial intelligence. This requires a specialized set of skills and knowledge in order to build AI programs and improve them.

However, this does not mean that employees will be made redundant after the use of AI. Rather than spending time on mundane tasks, employees can focus on building and maintaining relationships with their clients and customers, analyze existing data to make better and more informed decisions for competitive advantage, and more importantly demonstrate more innovative ideas to be implemented and worked upon.

HOW LIKELY IS ARTIFICIAL INTELLIGENCE EXPECTED TO IMPACT CURRENT JOBS IN THE BAHRAINI MARKET WITHIN YOUR INDUSTRY?



Funding

Over the past couple of years, investors have moved their focus towards the fintech sector as they realize it is beyond technologies used for digital payments and online banking. Investor interest has spread to other sub-sectors such as wealth management, lending, compliance, etc.

Bahrain's investment activity grew by 167% since 2020 to \$52 million in 2021, according to Magnitt.

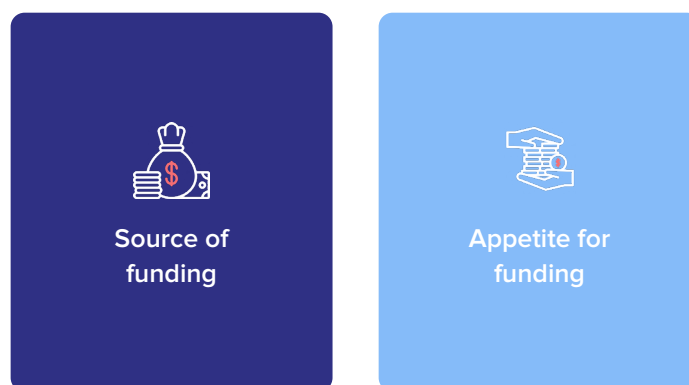
As the pandemic started, investors across the world stopped investments. Especially with the uncertainty of the situation, investors were skeptical about investing locally and regionally. However, as the uncertainty cleared up and there was a clear uptake in the number of fintechs collaborating with corporates, the first half of 2021 saw a sharp increase in fintech investment of \$98 billion compared to \$121.5 billion during all of 2020. Moreover, there was a trend of big fintech players acquiring infant players at their early stages as an investment opportunity.

As an example, Coinbase, one of the largest cryptocurrency platforms in the United States, joined the \$6 million funding round of Rain Financial, the first cryptocurrency exchange with a crypto-asset service provider license from the Central Bank of Bahrain. Rain closed another \$110 million in Series B funding. Tarabut Gateway, the first sandbox graduate of Bahrain as an open banking platform, concluded two funding rounds worth \$25 million within eight months. They were the only fintech company to raise \$13 million in seed investment in the MENA region. Tamara raised \$110 million in a Series A round led by the leading global payment processor Checkout.com. These are a few examples of the fintechs in Bahrain that are acquiring large amounts of funding from regional and international investors.

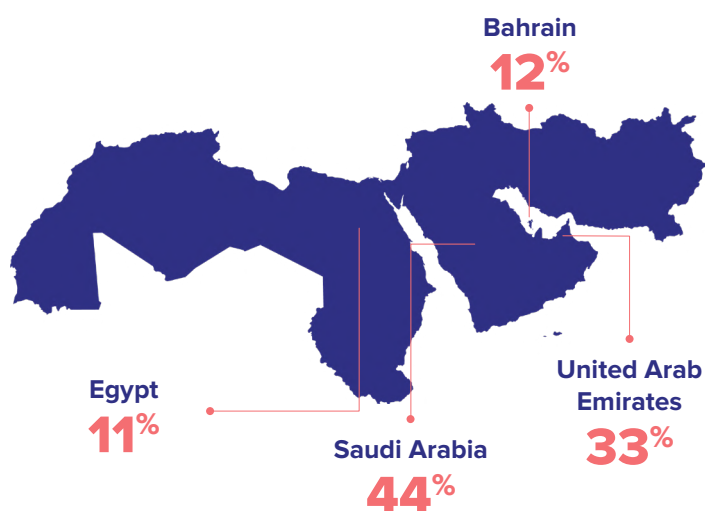
This trend is expected to continue in the future as demand for innovative and agile solutions increases for both B2B and B2C models. While payments remain the dominant vertical for investments in the fintech space, the coming years will see an increase of other verticals as well, specifically WealthTech, RegTech, and banking-as-a-service models.

In order to better understand the funding landscape in Bahrain, the report surveyed key investors within the region who are looking to invest in Bahrain-based fintechs.

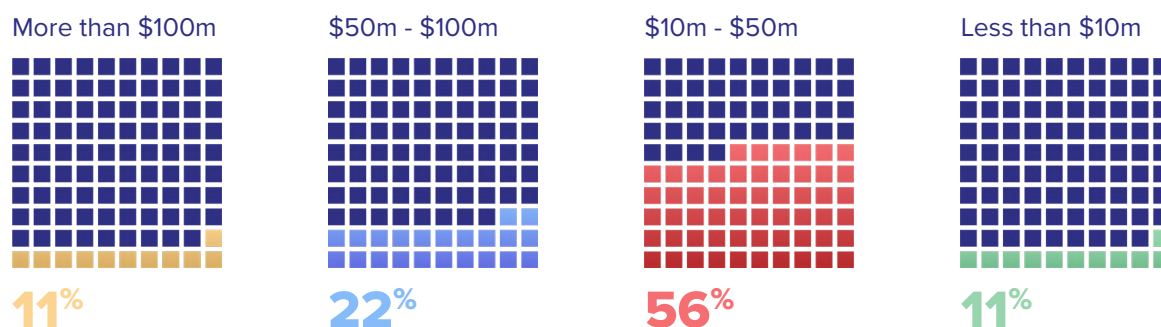
The report focuses on two main aspects of the funding growth driver:



WHERE ARE YOU CURRENTLY LOCATED?



WHAT IS THE SIZE OF YOUR ACTIVE FUNDS?

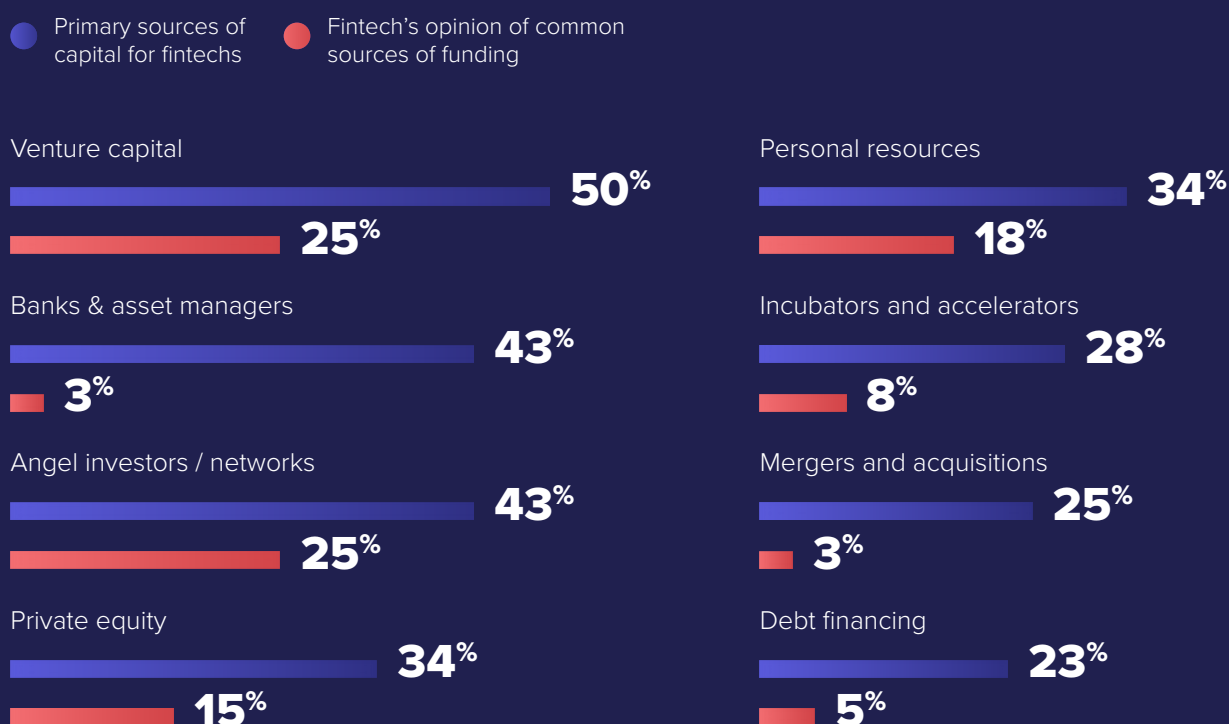


Source of Funding

From the perspective of acquiring funds, the survey results revealed that VC funding, banks and asset managers, and angel investors are the most common sources of funding in Bahrain. As per the opinion of the surveyed fintechs, their perception of most common sources of funding is VC funding, angel investors and personal resources.

Investment portfolio
focused on fintech

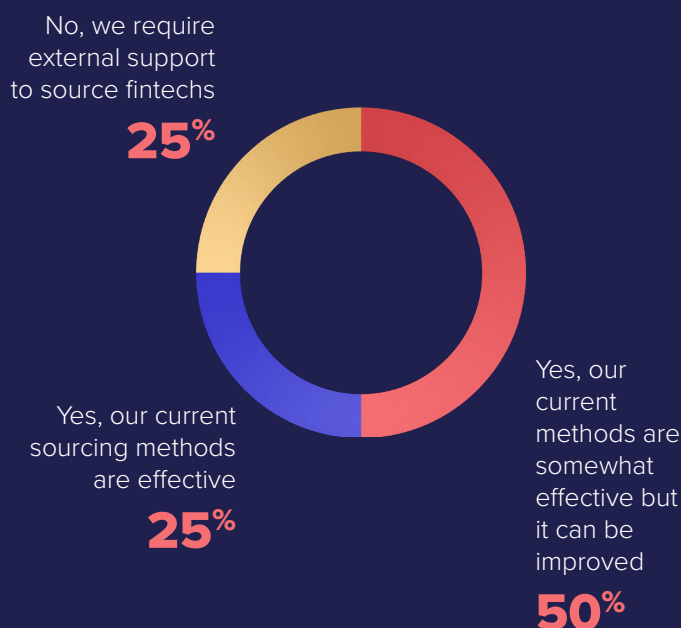
45%
on average



As for the surveyed investors, 63% highlighted that they prefer to source fintechs from their networks based on recommendations rather than pitch/ demo days and internal research databases.

Moreover, the survey highlights that 50% of surveyed investors are satisfied with their current sourcing methods but can be improved; while 25% require external support to source fintechs.

IS IT EASY TO SOURCE INVESTABLE FINTECHS IN BAHRAIN?

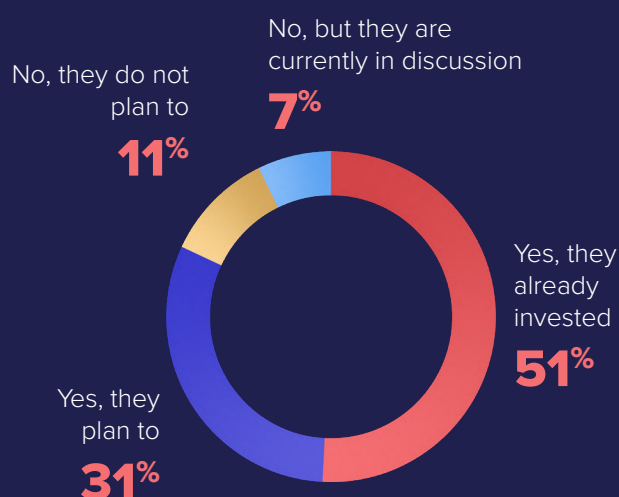


Appetite for Funding

There is a healthy appetite for funding in Bahrain, however, the funding scene could be improved. As per survey results, 51% of respondents say they invested in fintech solutions, of which 64% are retail banks that have already invested and 22% of them plan to.

Therefore, it is clear that the banking sector is moving towards or has already moved towards the digital transformation journey.

HAS YOUR ORGANIZATION SHOWN ANY IMPORTANCE IN INVESTING OR ALLOCATING FUNDS TO ADOPT FINTECH SOLUTIONS?



As for surveyed investors, they all expressed that fintech is a sector they are interested in and focused in. The key reason specified was that fintech is a fast-growing emerging sector in the region that can solve many problems with the use of technology. Specifically, the introduction of open banking has opened doors for several new business opportunities. However, despite the surveyed investors having a clear focus on fintech, only 22% have an active fintech-only fund, including Phoenician Fund and VentureSouq MENA FinTech Fund.



VENTURESOUQ

Moreover, investors also specified the specific areas that they believe have the most potential in the future:

WHICH OF THE FOLLOWING TECHNOLOGIES AND FIELDS HAVE THE MOST POTENTIAL TO GROW?



Cryptocurrency

63%



Compliance/KYC

63%



Alternative lending - P2P
lending, Crowdfunding

63%



InsurTech

63%



Payments, remittance,
and transfers

50%



Big data analytics

50%



Blockchain

50%



Artificial intelligence

13%



Cybersecurity

13%



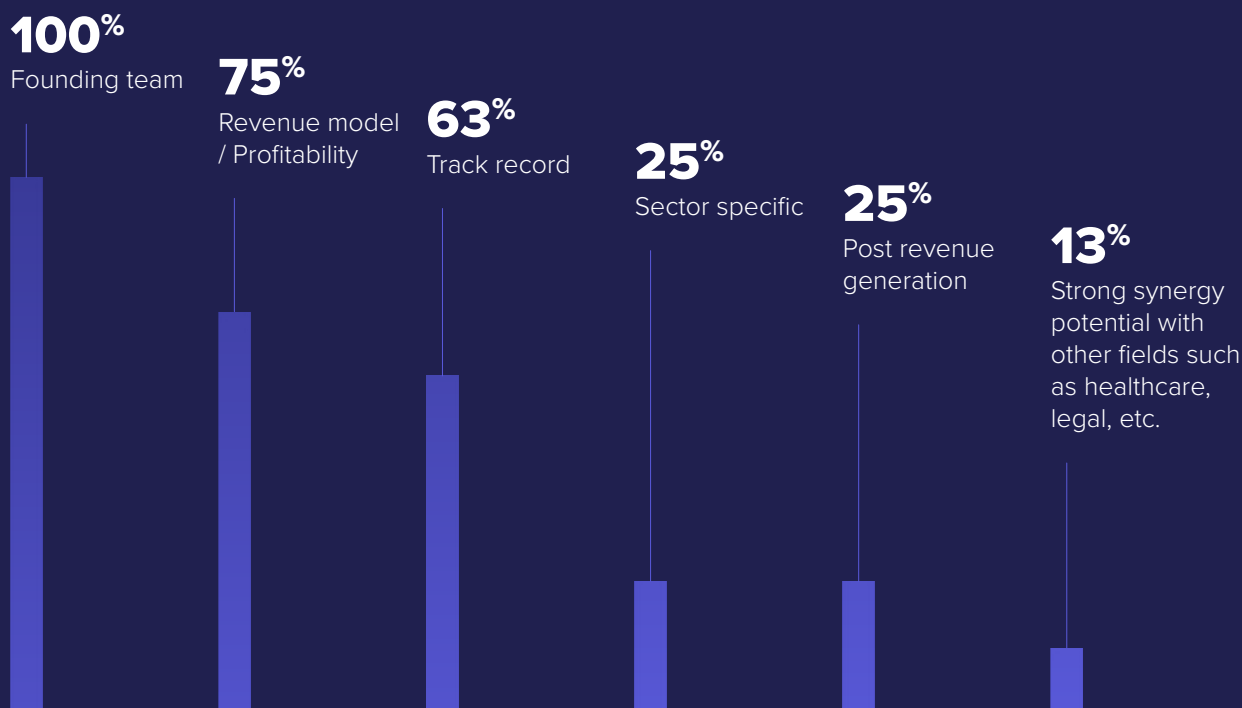
RegTech

13%

Cryptocurrency is one of the most concentrated verticals not only in Bahrain but also in the MENA region. Investors are more attracted to the crypto space given the higher risk rewards factor. Moreover, crowdfunding is a growing space in Bahrain. As Bahrain is highly concentrated with SMEs, there is a lot of potential for crowdfunding platforms to grow as they leverage the number of startups in Bahrain to pool funds.

While investors know which fields to look out for, they also highlight key aspects that they focus on when selecting fintechs. The founding team, revenue model, and track record appear to be the highest-ranking aspects investors focus upon.

WHAT KEY ASPECT OF THE COMPANY DO YOU FOCUS ON WHEN INVESTING IN A FINTECH VENTURE?



Founding Team

Investors want to know if the founding team can execute their milestones and provide a valuable return on investment. Their background, domain expertise, and knowledge will define whether the fintech will succeed. Investors particularly look at how qualified the team is to be working on the problem they have chosen. Investors often avoid investing in single-founder companies because it is statistically proven that startups with two or more founders are more likely to succeed than single-founder startups. Multiple founders ensure that decisions are questioned and clearly justified among leadership. Multiple founders are also known to improve morale by discussing issues together and pulling each other through difficult times.



Revenue Model

Each fintech solution has a different revenue model based on its product/service. These can range from equity-based, revenue-sharing models or subscription-based models. It is important for investors to know which revenue model fits best with their strategy and the fintech they are investing in.



Track Record

The clients or customers that the fintech has acquired since launch can define the overall journey of the company's growth. Acquiring notable institutions or having a large market share is an attractive selling point for investors.



Today, we stand at a pivotal point in history at the cusp of a new era. The increasing changes transpiring across the sectors and industries around the world, the financial sector notwithstanding, have only been further accelerated in the wake of challenges brought on by the ongoing COVID-19 pandemic.

Undeniably, the past two years forced sectors to rethink traditional strategies, giving the financial industry in particular, a jolt of energy and stark wake up call. The pandemic not only acted as a catalyst of change, but for industry players that did not get on board - quickly - to the pre-existing wave of digital transformation were quickly left behind.

In order to meet fast changing consumer demands and maintain market share, industry leaders forged a new path and vision, effectively reworking infrastructures to ensure they had a solid foundation to pivot operations with ease; quickly innovating to launch the requisite products and services to clients. For others who were unable to rise to the occasion, they faced losing their customer base altogether.

This new reality has cemented the fact that launching modern, agile, scalable, secure and resilient financial technology solutions are no longer a competitive edge, but rather the only way forward for our sector.

Beyond this, what has drastically changed and will remain as we look into the future is manner in which customers perceive value from their banks, or any corporation they associate with. Millennials and Gen Z had already transformed the way in which we communicate to and serve our customers, possessing different needs to the previous generation, and demanding a convenient digital experience with a human touch. However, with the shared experience of uncertainty the world experienced, customers are more than ever focused on the value corporates offer, as a new human-centered economy emerges, and a socially beneficial bottom line becoming ever important.

All things considered, financial institutions now need to invest in both financial technology and human capital simultaneously to meet customer needs and wants of the future. Both retail and corporate clients alike will expect hyper tailored services. In order to meet these customer demands, solutions will need to be designed based on the ability to effectively provide insight into customer expectations, and navigate increasing flows of data successfully, all while deliver services effectively.

Ultimately, the method in which these services will be delivered are of paramount importance, managing customer relationships will become a key factor in retaining and enchanting clients, an expertise that cannot be automated.

In the future, success in the sector will be defined by a true balancing act between fintech, and a human touch that ultimately creates a socially-bound and flourishing economy.



Mohammed Al Shehabi,
Head of Innovation



Section 4

PATH FORWARD



PATH FORWARD

The overall objective of all stakeholders involved is to accelerate the expansion of the local fintech industry through the creation of accessible, transparent, and digitized solutions.

*As per survey results, **nearly 63%** agree that growth within the fintech sector will accelerate and more opportunities will be available.*



The future is already taking shape. The pandemic accelerated digitalization in every sector, but even more in the financial services industry—with everyone working from home, banking from home and transacting from home. The way corporations interact with their staff, customers and communities is increasingly important—reinforcing the ‘S’ for social and the ‘G’ for governance of ‘ESG.’

Sustainable finance is becoming a license to operate and the energy transition is a major focus, globally and ever more in the region given the landmark commitments by Bahrain, Saudi Arabia and the UAE on achieving net zero. Implementation of ESG strategies and frameworks are now core to the strategy of regional governments and corporates.

To be the employer of choice, sustainability has to be embedded in your values, and DNA. Employees are ever more discerning—with a focus on purpose. Hiring local talent is increasingly important for retention and productivity. This is yielding particularly positive results in terms of gender diversity with over 30% of the workforce being local women in the banking sector.

Cost and efficiency remain key factors in the financial sector, and we may see further consolidation in the industry—on a regional as well as international level.

Hybrid working options are here to stay, enabling increased productivity and flexibility. At BNP Paribas, we have rolled out “Smart Working” across the globe—embodying this new working model.



BNP PARIBAS



HOW DO YOU SEE THE FINANCIAL SERVICES INDUSTRY CHANGING IN THE FUTURE?

Without any doubt, the COVID-19 crisis has created, in a short time, a huge transformation as the financial services industry witnessed an increase in digital adoption. In contrast, most of those services shifted to digital platforms to meet clients' day-to-day requirements.

Even though the financial sector is active and highly competitive relative to other sectors, financial institutions transformed their processes in a short time frame to provide fast digital solutions in line with the requirements of their customers and beneficiaries of financial services. This rapid shift led to heightened expectations and increased competition; thus, a new consumer's experience has been adopted across the sector. This transformation has effectively increased customer awareness, transparency, and improved customer service.

Bahrain Credit believes that cyber security, ease of use, and value for money will be the core success factors behind all future financial services. Financial institutions will need to work harder, faster, and smarter to meet future users' expectations while increasing the level of consumer confidence as well.

Building on the analysis provided in the previous section, the report identifies four key factors that could be contributing factors to the success of the Bahraini fintech ecosystem given the right strategy and direction:



Regulatory environment

- Introduction of new fintech regulations
- Adopt new and diverse fintech solutions from global markets
- Deepen cross-border collaboration



Technological Readiness and Innovation

- Establish modern technological infrastructure
- Platform Banking with Microservices
- Build open API frameworks (Case-study examples - Data Europa EU, India Stack)



Talent Development

- Create more Bahraini-led fintechs through curated programs and educational courses
- Build strong technological and entrepreneurial talent pool by engaging universities



Funding

- Establish a competitive funding ecosystem to enable fintechs

Regulatory Environment

Introduction of New Fintech Regulations

The supportive regulatory framework of Bahrain contributes to a successful fintech ecosystem through the introduction of relevant and advanced fintech solutions. With the new regulations soon to be introduced (mentioned in the previous section), the CBB will broaden its landscape of regulated fintech solutions, attracting more startups to the Kingdom as it becomes the ideal test-bed for innovative solutions. The process of setting up for these startups then becomes easier within an established regulatory framework.

Adopt New and Diverse Fintech Solutions from Global Markets

Comparing the existing regulatory framework to more mature markets is a healthy exercise to carry out from time to time. It allows regulators to analyze global practices and adopt them locally to develop the fintech sector further if given the right fit. An example of global regulatory developments in the fintech space is launching a new framework for virtual asset trading platforms by the Securities and Futures Commission (SFC), Hong Kong. This framework allows for a centralized online trading platform in Hong Kong that offers at least one security token on its platform for trade.

Deepen Cross-Border Collaboration

As mentioned previously, the regulatory landscape of GCC is very much fragmented. It will be beneficial if the different regulatory jurisdictions build regional bridges allowing for better cross-border collaboration. Structural consultations and exchange of knowledge between association hubs and regulators will assist in the regional growth of the fintech industry and boost the sustainability of financial innovation through the development of a robust regulatory framework. Maximizing international exchange of experiences and stakeholders will not only facilitate knowledge migration business flow but also deepen global fintech ecosystem ties.



Technological Readiness and Innovation

Establish Modern Technological Infrastructure

Fintechs today are no longer viewed as startups in the early stages of growth but are now considered much more sophisticated technological entities with the agile infrastructure and significant global presence. While there are abundant innovative solutions and technological infrastructures, technological development alone will not be sufficient. In order to drive significant change within the market, leading players from the public and private sectors will need to participate actively and collaborate in shaping the ecosystem. The challenge now for financial institutions will be selecting the right fintechs to work with, keeping digital skills relevant, and upgrading their technological infrastructure. A way in which banks can overcome these challenges is by establishing a fintech innovation lab. While most banks have a dedicated digital transformation team, innovation labs will help the digital transformation team cultivate those ideas into reality by exploring new products and strengthening existing products with new features.

Platform Banking with Microservices

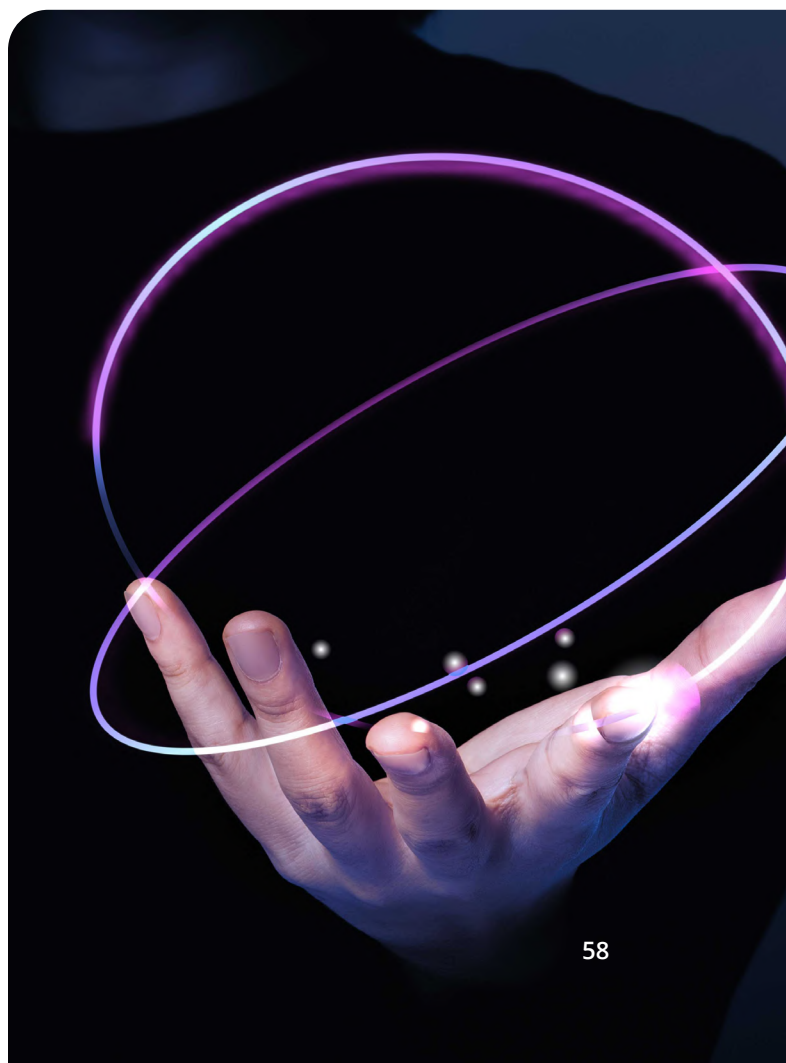
Banks need to build and maintain plentiful partnerships with technology enablers in order to expand their network within the ecosystem. The main obstacle in achieving this is legacy systems. They are not built to support technology-based collaborations as these systems were built with the intention of operating within the business only. However, this is expected to change in the coming years, albeit at a slower pace in Bahrain. These processes need to change internally and microservices architecture can help with this transformation journey.

Microservices are applications built as a suite of services, with each service having its own process workflow and communication channel that is managed independently of other services. This makes applications easier to maintain and further build upon. A microservices infrastructure aims to support fintech partnerships, enable modular and rapid integrations, and foster agility. These independent functionalities can later become

one large application by making API calls to other services. The benefit of microservices is that they will create new revenue streams for banks, enable greater technology, foster and scale partnerships, and increase their range of services.

Build Open API Frameworks

Open API framework is a publicly available application programming interface (API) for software developers. It allows data to be shared freely, allowing the owner to give universal access to users. An API is a software intermediary that makes it possible for application programs to interact and share data. By building an open API framework, these APIs will be available to developers following the application process and evaluation of suggested use cases. This universally available platform will allow developers to plug and play into the system to access services easily. These APIs could range from e-KYC procedures for verification, payment processing, biometrics for identity processing, and other use cases. Such a framework has significant impact across costing, productivity, ease of doing business, transparency, accountability, and innovation.



Talent Development

Create More Bahraini-Led Fintechs Through Curated Programs

While the entrepreneurship mindset in Bahrain is considerably present, there is a lack of ideas within the fintech space. There are very few Bahraini startups that produce relevant and innovative fintech solutions. In order to support the growth of locally-led fintech startups, several entities, including government, academia, incubators, and accelerators, are leading digital transformation and fintech-related programs within high schools, universities, and corporate levels in order to build the drive for entrepreneurship. The programs are in the form of hackathons, accelerators, long-term education programs, etc.

Academic institutions participating from the beginning encourage an innovative mindset of technological advancements by allowing students to test and try their ideas in a safe, encouraging environment.

Build a Strong Technological and Entrepreneurial Talent Pool

Universities and schools will have to work on an advanced curriculum and include specialized areas of new age coding for blockchain and artificial intelligence, cybersecurity, data analytics, etc.

Instead of developing generic IT skills, universities can focus on specialization areas to cultivate these skills and focus on a particular technology to have advanced local talent. For example, learning programming for python and building on AWS or Oracle.

Moreover, universities can engage with fintech companies in order to better understand market requirements, and fintechs can have access to a direct supply of specialized fresh graduates.



Funding

Competitive Funding Landscape

While these entities are working on building the drive for fintech startups, there also needs to be a more comprehensive and competitive funding ecosystem to enable fintech not only in their base operations in Bahrain but to scale to other regions as well. Globally, it was found that funding activity increased in countries where regulatory sandboxes were established. The CBB could connect

sandbox participants with the investor network and facilitate introductions in order to spur the funding ecosystem. Moreover, developing a fintech registry as mentioned previously could provide the investors with legitimate and viable investment options; fintechs that are verified and approved by the government/CBB.



As Fintechs take the lead on innovation and product disruption, we will see a financial service industry dominated by alliance ecosystems offering customers easy, holistic experiences. The FIs that excel at collaboration and innovation will emerge as the clear market leaders, staying nimble and pivot consistently. The widespread use of embedded finance across all industries will mean that every company effectively becomes a fintech, as customers come to expect embedded experiences as a standard. New fintechs unable to get banking licenses will increasingly partner with large institutions via BaaS (banking-as-a-service) and API banking to leverage BaaS infrastructure solutions to offer customers embedded finance.

While open banking and open finance will offer customers increased choice and more value, it will provide a potential challenge for financial services brands, namely how to differentiate effectively in a more democratized playing field. FIs will be forced to focus on brand differentiation, new value creation, and providing strong rates to attract customers. As data, automation, and AI become much more integrated into the value chain, financial services will need to find quick and actionable ways to leverage the influx of information they gather. Those who use this data in the most efficient way will gain an edge in the market.



SUMMARY

Bahrain is gradually developing in the fintech space. This is mainly driven by a supportive regulatory framework and the financial services' sector's drive for innovation. Leveraging the support of academia to introduce fintech-focused curriculum, as well as encouraging funding by facilitating deeper connections will have the most impact in speeding up local fintech adoption. Moving forward, Bahrain can expect the following trends coming up:

Greater number of big international players are looking to invest in local startups that localize the concept of a successful global fintech solution.

The fintech sector will drive a large number of investment exits in the next two years.

Real estate presents a big opportunity for investment and fintech adoption in the future as PropTech is on the rise with solutions such as tokenization.

Shift in traditional job roles towards fintech and innovation at a broader scale. There will be a focus on roles in growing and established scaling startups, particularly within regulatory compliance. Moreover, corporates launching new digital/fintech platforms or subsidiary companies in the area of fintech will be looking for fintech-specific talent.

By encouraging greater market collaboration between all stakeholders involved and exchanging knowledge, business opportunities, and experiences, Bahrain can become the ideal testbed for new fintech companies looking to establish or startup in Bahrain.

TERMINOLOGY

Term	Full Form
AI	Artificial Intelligence
AIS	Account Information Services
AISP	Account Information Services Provider
AML	Anti-Money Laundering
API	Application Program Interface
ASPSP	Account Servicing Payment Service Providers
B2B	Business-to-Business
B2C	Business-to-Customer
BNPL	Buy Now, Pay Later
BOBF	Bahrain Open Banking Framework
CBB	Central Bank of Bahrain
CIU	Collective Investment Undertakings
CRM	Customer Relationship Management
e-KYC	Electronic Know Your Customer
EFTS	Electronic Funds Transfer System
ESG	Environmental and Social Governance
FinTech	Financial Technology
GFIN	Global Financial Innovation Network
InsurTech	Insurance Technology
NFC	Near-Field Communication
P&C	Property & Casualty
P2P	Peer-to-Peer
PDPL	Personal Data Protection Law
PFM	Personal Finance Management
PIS	Payment Initiation Services
PISP	Payment Initiation Service Provider
PoS	Point of Sale
RegTech	Regulatory Technology
SDG	Social Development Goals
SME	Small to Medium Enterprises
VC	Venture Capital
VPN	Virtual Private Network

ABOUT BAHRAIN FINTECH BAY

Bahrain FinTech Bay is one of the leading fintech hubs in the MENA region. We incubate impactful and scalable fintech initiatives through innovation labs, acceleration programs, curated activities, and educational opportunities.

Our collaborative platform is dedicated to furthering the development, interaction, and acceleration of the fintech ecosystem. To bring the full spectrum of market participants together, we partner with governmental bodies, financial institutions, corporates, consultancy firms, universities, associations, venture capital, and fintech startups.



Incubation and Acceleration



Talent and Education



Corporate Innovation and Advisory



Investment and Fundraising



Research and Thought Leadership



Conferences and Events



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Acknowledgement

We would like to express our deep gratitude to all those who helped to make this project possible. A project like the Bahrain FinTech Ecosystem Report 2022 can only be realized with the enormous support from the project's team and external supporters.

We would like to thank all our founding partners, supporting partners, fintech partners, VC partners, and all other partners who have invested significant resources into the project, especially the Bahrain Economic Development Board (EDB), the Central Bank of Bahrain (CBB), and the University of Bahrain (UoB). Numerous advisors, founders, investors, and industry experts have given us access to their knowledge, networks, and time because they support our vision and want to move the fintech ecosystem forward.

We would also like to highlight the support of the interviewees who trusted us by sharing their views and expert knowledge with us. By providing us with solid quantitative and qualitative data and insights, they created the basis and the heart of our research. Thank you for your support!

Methodology

The intention behind the Bahrain FinTech Ecosystem Report 2022 is to raise awareness on the current state of the fintech ecosystem in Bahrain, and highlight the necessary steps that need to be adopted to promote further growth. Moving forward, the intention behind the report is to provide a long-term reference for key stakeholders in the region including individuals, government entities, financial institutions, and fintechs to further understand the most suitable approach toward promoting Bahrain's fintech ecosystem as the hub for innovative solutions.

The information provided in the report is derived from public data, including but not limited to government databases, white paper publications, and online reports. Surveys and case studies were implemented to adopt an empirical approach toward investigating the current landscape of fintech in Bahrain. The report also collected testimonials from C-suite partners on their thoughts and strategies regarding the fintech ecosystem, with a particular focus on the key growth drivers and outlook of the ecosystem.

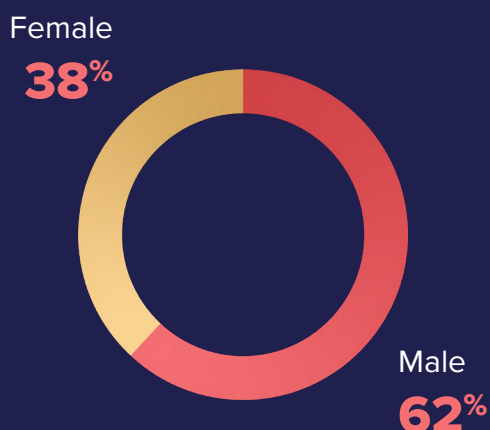
Two surveys targeting corporates/startups and investors were implemented to address the limited availability of primary data locally on the subject. The purpose of the survey was to provide an inclusive understanding of the key growth drivers

of Bahrain's fintech ecosystem from various market players including startups, corporates, government entities, incubators/accelerators, investors, and academia. The outcome of the survey was used to support the recommendations provided in the "Path Forward" section, which recommends the steps that Bahrain needs to implement to strengthen its fintech ecosystem further.

The primary survey was carried out from July to September 2021 and collected the responses of individuals based locally with the intention of taking a representative sample of the relevant stakeholders of Bahrain. The survey analyzed a sample of the population with the responses of 230 individuals in Bahrain mainly from retail banking, corporate banking, fintechs, and government. Limitations of the report include sample size, specifically the diversity of the stakeholders participating in the survey.

The investor survey was carried out from July to September 2021 and collected the responses of investors based in Bahrain and regionally with the intention of taking a representative sample of investors. The investor survey analyzed the opinion of nine investors to better understand market perception and sentiment regarding funding for fintechs in Bahrain.

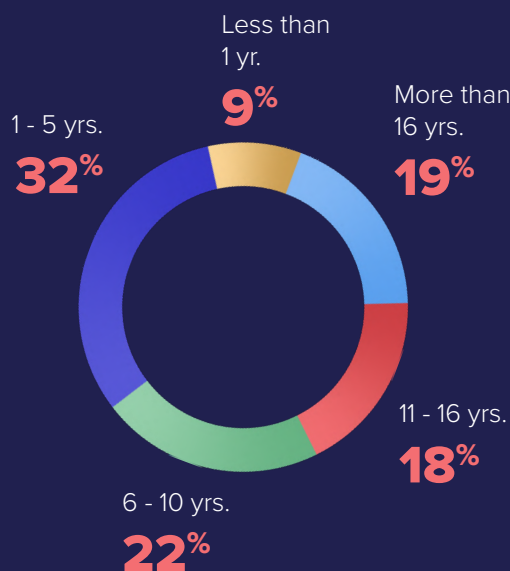
WHAT IS YOUR GENDER?



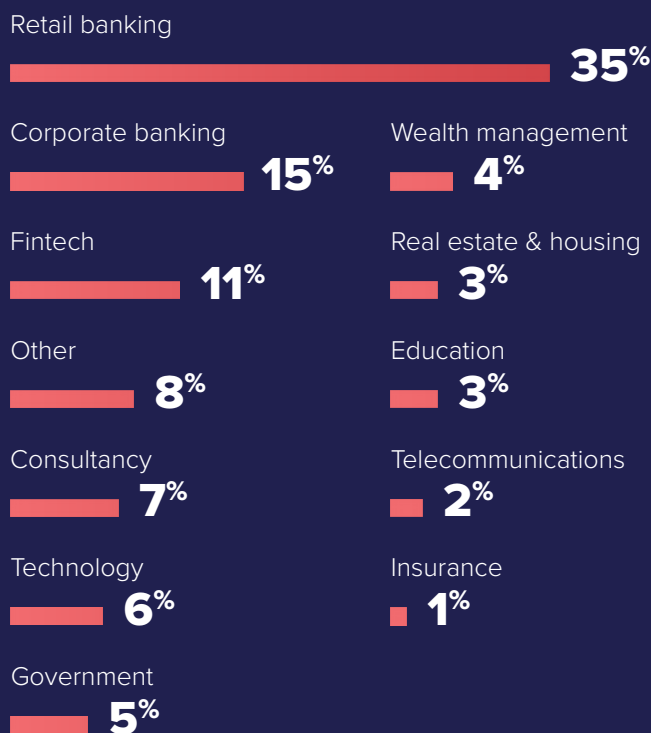
WHAT IS YOUR CURRENT JOB LEVEL?



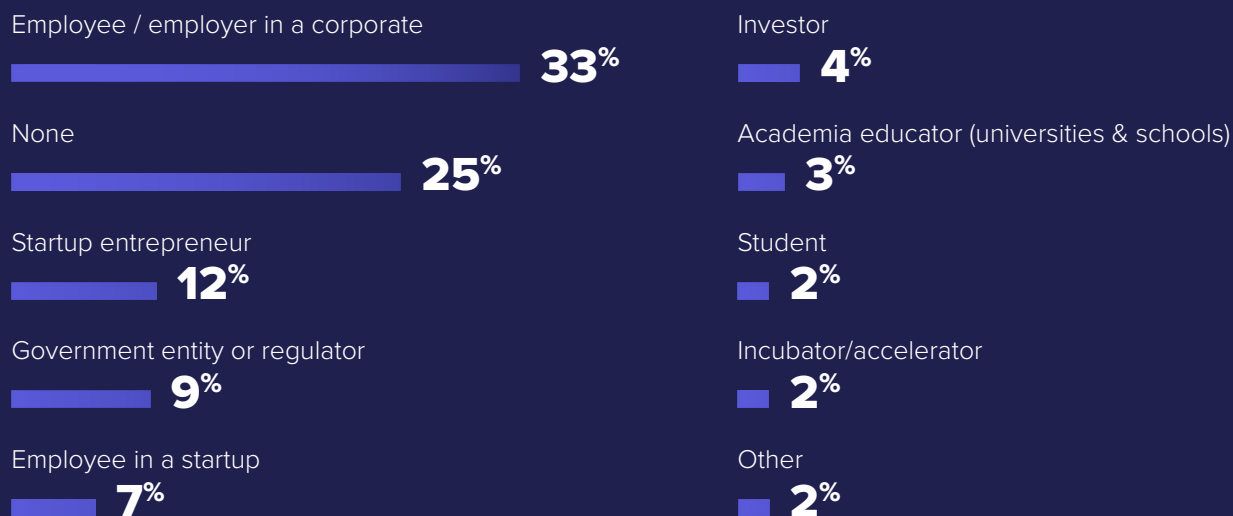
HOW MANY YEARS OF EXPERIENCE DO YOU HAVE IN YOUR CURRENT FIELD OF WORK?



WHICH INDUSTRY DO YOU CURRENTLY WORK IN?



WHAT ROLE, IF ANY, DO YOU PLAY IN THE FINTECH INDUSTRY?



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