IMPORTANT NOTICE: PLEASE READ

All rights reserved. The entire contents of the Bahrain FinTech Ecosystem Report are the copyright of Bahrain FinTech Bay. No part of this publication may be copied, transmitted by any electronic means, or stored in any data storage medium or published in any document, report or publication without prior approval of Bahrain FinTech Bay.

The information presented in the Bahrain FinTech Ecosystem Report is for informational purposes only and does not constitute and should not be construed as a solicitation or other offer, or recommendation to acquire or dispose of any investment or to engage in any other transaction, or as advice of any nature whatsoever.

While reasonable efforts have been used to obtain information from sources that are believed to be accurate, Bahrain Fintech Bay does not make any representation or warranty that the information or opinions contained in the Bahrain Fintech Ecosystem Report are accurate, reliable, and up-to-date.

Although every reasonable effort has been made to ensure the accuracy of this publication, Bahrain Fintech Bay does not accept any responsibility for any omissions within the Bahrain FinTech Ecosystem Report or other loss alleged to have arisen in any way with the reader’s use of this publication.

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 can only be realized with the enormous support from the project team and external supporters. Several partners have invested significant resources into the project.

Numerous advisors, founders, investors, and industry experts have given us access to their knowledge, networks, and time because they support our vision and wanted to move the FinTech ecosystem forward.

We would also like to highlight the support of the survey participants and 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!

IN-HOUSE CONTRIBUTORS:

Aahan, Ali
Abdulla, Ali
Al Ahmed, Faisal
Al Fadhel, Muneera
Al Maskati, Maissan
Azar, Toni
Boghossian, Georges
Boukhriss, Amine
Dannish, Khalid
Dhaif, Ali
Goh, Jolyn
Jindel, Sushrut
Lamb, Thomas
Mohamed, Ameera
Murad, Rose
Naar, Amina
Nazier, Nawal
Saad, Khalid
Tan, Victor
Visser, Gerben
Foreword

Khalid Al Rumaihi
CEO of the Economic Development Board and Chairman of Executive Board of BFB

Technology-led innovation has fuelled a wave of disruption across the global economy and, here in Bahrain, FinTech has been a significant driving force behind this transformation.

Charting Bahrain’s emergence as a FinTech hub, the following report explores the drivers behind the sector’s growth to date. Critically, it also maps the path forward and the key initiatives that will underpin sustained progress in the future.

Bahrain’s commitment to regulatory improvements is one of its major strengths as a FinTech hub. With a dedicated FinTech unit, the Central Bank of Bahrain is shaping a pro-innovation regulatory framework, including the region’s only onshore Regulatory Sandbox, established last year, which provides a test bed for FinTech startups.

In today’s complex, fast-changing business environment, entrepreneurs are increasingly recognised as a major force behind innovation.

Bahrain’s newly announced $100 million VC Fund of Funds will open up new funding avenues, further strengthening an ecosystem which already benefits from multiple accelerators and tailored startup support by entities like Tamkeen and the Bahrain Development Bank.

Given these points, this report goes beyond what has been achieved so far to explore how we move forward and continue to energise the FinTech community to ensure Bahrain keeps pace with this fast-paced sector.

Empowering our ambitious young population is vital. Future-proofing skillsets through formal education, high-value career opportunities and continuous learning will pave the way forward locally and globally. Our young population is quick to grasp these opportunities.

With Amazon Web Services predicting that 10,000 data solution architects will be needed across the region in the next five years, around 2,500 young Bahrainis have already signed up for AWS Educate training programmes.

In Bahrain, 87% of professionals are interested in collaborating or have already collaborated with FinTech firms. The launch of Bahrain FinTech Bay, the largest FinTech hub in the MENA region, will facilitate and accelerate such partnerships.

For decades, Bahrain has embraced the changes brought by technology. With our firm commitment across the government and private sector to further increase dynamism, creativity and innovation. We are confident that the Kingdom will continue to strengthen its position as a FinTech leader, regionally and globally.
Foreword

Khalid Saad
CEO of Bahrain FinTech Bay

We are delighted to be sharing with you the first edition of the annual Bahrain FinTech Ecosystem Report 2018.

FinTech has been experiencing rapid growth over the past few years driven by changing customer behaviour, technological development, and increased support from both regulators and governments.

Here in Bahrain, the development of the FinTech ecosystem is a top priority and this builds upon Bahrain’s legacy and position as a leading and established financial services hub. Bahrain, through a collaborative approach between the government and private sector, is positioning itself as a regional hub from which FinTech firms can base themselves and grow. The launch of Bahrain FinTech Bay exemplifies this collaborative approach.

This inaugural Bahrain FinTech Ecosystem Report looks at the key developments in the local FinTech ecosystem and sheds light on topics such as adoption of FinTech, industry collaborations, the role of regulation and human capital.

A survey was conducted with over 800 respondents from 24 countries and representing 25 industries with the aim of providing an insight into the domestic and global community’s perception of Bahrain’s FinTech industry.

Looking ahead, FinTech’s continued adoption and rise will continue to challenge traditional financial institutions and redefine the financial services landscape as we know it.

The report ends with a view on the future and how the Bahrain’s FinTech ecosystem can move forward. Such growth will be driven by regulatory enhancement, talent development, wider adoption of cloud and blockchain, increased investments and interaction between traditional financial institutions and FinTechs.

Bahrain will continue to take the necessary steps to create the ideal and open environment from which FinTechs can thrive. Bahrain FinTech Bay through its various initiatives focusing on raising awareness, talent development and venture acceleration aims to play an effective role in further positioning Bahrain as a FinTech hub.
Bahrain FinTech Bay: Ecosystem Builder

Bahrain FinTech Bay (BFB) is a FinTech ecosystem launched in February 2018 as a private-public partnership between Bahrain’s Economic Development Board (EDB) and Singapore-based FinTech Consortium.

As operator of BFB, FinTech Consortium has partnered with governmental bodies, financial institutions, corporates, consultancy firms, universities, associations, media agencies, venture capital, and FinTech startups to create an ecosystem where collaboration and community support can spur innovation.

BFB provides FinTech focused companies a co-working space supported by initiatives such as corporate incubation, venture acceleration, and education/training to support insightful, scalable, and impactful FinTech initiatives.

BFB’s objectives are centered on three primary goals: to anchor, advocate, and accelerate.

**Anchor:** Provide a dedicated workspace to connect partners and enable impactful collaborations. The co-working space becomes an anchor point for members to connect, cross-pollinate ideas, and explore partnerships across corporates and startups.

**Accelerate:** Support partners with tailored resources through targeted research, publications, events, and access to relevant talent.

**Advocate:** BFB acts as a neutral platform and representative for its members to identify industry pain points and bring innovative solutions to the forefront.

The breadth of expertise provided by members and experienced mentors provides a deep domain expertise and ability to engage with and educate regulatory and public stakeholders, as well as promote FinTech innovation in the region.
Executive Summary

Over the past year, Bahrain’s FinTech ecosystem has witnessed several key developments, most notably the launch of the Regulatory Sandbox and the creation of a dedicated FinTech and Innovation Unit within the Central Bank of Bahrain.

The first edition of the 2018 Bahrain FinTech Ecosystem report aims to shed more light and act as a reference point on the FinTech ecosystem in Bahrain. The report, which will be issued annually, covers global FinTech trends and investments, regional FinTech landscape, the Bahrain FinTech landscape, and the path forward. The report also features profiles of BFB partners.

Data sources for the report include publicly accessible information and the BFB annual survey, which looks into the FinTech industry in Bahrain from a domestic and global perception. More than 800 respondents from Bahrain and abroad participated in the survey, which targeted both professionals and students. Key subjects included collaboration with FinTech firms, the role of stakeholders in the FinTech ecosystem, the disruptive nature of the FinTech industry, and Bahrain’s role as a FinTech hub in the MENA region.

Demystifying FinTech

FinTech is the integration of financial services with innovative technology solutions. The FinTech industry appeals to a wide range of customers due to its competitive products and services that are user-friendly, transparent, efficient, and automated. FinTech solutions directly connect consumers to financial services. As a result, the rise of FinTech disrupts multiple industries. This section explores seven verticals: artificial intelligence; big data analytics; crowdfunding; cryptocurrencies; InsurTech; RegTech; payments, transfers, and remittances.

The FinTech Landscape

Globally, FinTech has secured its staying power during 2017 with 1,824 FinTech investment deals attracting $14.2 billion of venture capital investment. Within the MENA region, the FinTech ecosystem is growing with the number of startups expected to reach 250 by 2020.

FinTech in Bahrain

Bahrain’s established financial services industry, its role as a leading Islamic finance hub, and the national drive for financial inclusion are supporting the growth of FinTech. Presently, Bahrain hosts around 400 domestic, regional, and international financial institutions. There is keenness within the financial sector to explore collaboration with FinTechs and adopt new innovative solutions. This is coupled with the national initiative to drive financial inclusion through digital means. Key factors supporting the FinTech ecosystem include Bahrain’s human capital, a highly progressive and liberalized ICT infrastructure, an increased push to drive entrepreneurship, and increased demand for funding.

Survey

BFB’s annual survey provided insight on the domestic and global community’s perception of the FinTech industry in Bahrain. Specifically, the report looks at
six driving themes:
1. Domestic support for collaboration between financial institutions and FinTech firms.
2. High concentration of tech-savvy individuals in Bahrain.
3. High interest from Bahrain’s young population to participate in FinTech.
4. Need for increased FinTech talent in Bahrain.
5. Domestic confidence in the regulator to promote innovation.
6. Bahrain’s overall reputation as the leading FinTech hub in the MENA region.

Looking Ahead

Looking beyond 2018, the report reviews seven primary areas that will further drive the development of Bahrain’s FinTech ecosystem over the upcoming years:
1. The cloud will play a major role in the transformation toward a digital and innovation-driven economy.
2. The continued development of regulations, which remains a top priority for FinTech firms in the region.
3. Increased partnerships between FinTech firms and traditional financial institutions that are undergoing digital transformations.
4. Blockchain will increasingly be an area of focus for government and private sector institutions.
5. Increased push to raise awareness about FinTech in the region.
6. A more comprehensive funding ecosystem in Bahrain and the region to help FinTech firms scale up.
7. The need to equip the Bahraini market with educational resources and practical skills to bridge the gap between technical and entrepreneurial skills.
Table of Contents

Demystifying FinTech
Deciphering the key features of the disruption to the global economy 01

The FinTech Landscape
Rundown of active players and accomplishments both globally and in the MENA region 02

Bahrain FinTech
Bahrain’s leading position as a business friendly economy and fertile ground for innovation 03

Survey
The Bahrain FinTech Bay Survey provides insight into the local and broader perception of FinTech in the country 04

Looking Ahead
Looking beyond 2018, Bahrain’s key national initiatives and opportunities are outlined from cloud computing to eKYC 05

Partners
A list of leading institutions that are partners with Bahrain FinTech Bay 06

About Bahrain FinTech Bay
Information on Bahrain FinTech Bay, our programs, and events 07
Financial Technology or “FinTech” in its simplest form is the integration of financial services with innovative technology. FinTech involves the development and application of technology that can enable companies to manage software and business models more effectively. Recently, FinTech refers to the startups that are disrupting the financial services industry and bypassing financial institutions.

FinTech is entering its third wave in 2018 and showing early signs of permanent adoption. Since emerging from the 2008 financial crisis FinTech has become a rising power on the global financial stage. The FinTech sector secured a 346% increase in the value of venture capital-backed FinTech deals from 2013 to 2017.1 Presently, there are close to 30 FinTech unicorns.

The industry’s customer base is both broad and deep rooted due to its competitive products and services that are user-friendly, transparent, efficient, and automated. These advantages allow FinTech solutions to impact not only financial institutions but other sectors such as telecommunications, manufacturing, government, and beyond. The disruption to the status quo has resulted in both the private and public sectors rethinking the delivery and infrastructure of their services with an emphasis on customer experience.
1.1 FINTECH DISRUPTION

Banking

Until recently, FinTech startups were perceived to be a threat to banking, with the potential to steadily weaken customer loyalty by providing a more personalized, transparent, and engaging experience.

The banking industry has responded with solutions of their own to protect their market position.

However, as bigger players enter the market, banking has begun embracing FinTech in an effort to modernize and remain relevant. Payments and lending are key FinTech verticals in banking, with a majority of payments and alternative lending solutions ranked in the global list of top FinTech unicorns valued at a minimum of $1 billion.

Within banking, FinTech has a direct impact on the following:

- **Payments:** The popularity and development of payment solutions is evident as global revenue for mobile payments is anticipated to exceed $1 trillion by 2019.\(^3\) The unification of finance and technology has made it easier for restricted consumers to complete transactions. The introduction of e-wallets and other seamless payment methods also ensure transparency, minimizes risks, human errors, and processing fees.

- **Lending:** Loans can now be extended to a wider client base who previously had no access to loans through traditional banking. Many small and medium-sized enterprises (SMEs) deemed high risk and required to meet higher interest payments now have access to loans through FinTech lending providers. Globally, peer-to-peer (P2P) lending gained ground in the aftermath of the 2008 financial crisis as banks cut back on lending.

Led by the United Kingdom’s Funding Circle and US-based Lending Club, this solution is anticipated to collect $1 trillion globally by 2025, an increase from $64 billion in 2015.\(^4\)
there has been a reduction in the need for banks to establish several physical branches. Banks operating within the European Union experienced the closure of 9,100 banking branches in 2016 due to high online banking adoption levels.⁵

**KYC and Security:** There is an increasing demand for Know Your Customer (KYC) solutions to support the prevention of money laundering and fraud. Presently, KYC operations need to adopt new technology to cut costs, reduce labor time, and efficiently adapt to regulatory changes.

The cost of non-compliance is apparent as the Governor of the Bank of England Mark Carney highlighted that the cost of global banks' misconduct reached more than $320 billion.⁶ Therefore, financial institutions are starting to adapt FinTech verticals, such as AI, to support KYC guidelines.

**Biometrics** is also playing an increasingly active role within the financial services industry. Approximately 80% of survey respondents from the FindBiometrics Year in Review survey viewed biometrics as a mainstream technology.⁷ The need for customers' biometric data is increasing with the rise of digitized financial services.

Biometrics are increasingly necessary to execute online transactions to verify customers. Several banks have invested heavily in biometric authentication solutions for security measures and client onboarding.

1.1 FinTech Disruption

InsurTech has the potential to be implemented across every stage of the insurance value chain. The technology underpinning the insurance sector is undergoing a substantial shift to catch up to developments in banking and asset management.

InsurTech is increasingly attracting investment across distribution, underwriting, servicing, and claims management.

New innovations emerging in the industry include on demand and P2P insurance, digital distribution platforms, and more effective claim management through the Internet of Things (IoT), Blockchain, and artificial intelligence (AI).

**Physical Presence:** With the availability of digital channels across the globe,
The number of InsurTech global deals between 2016 and 2017 increased by 39% and the funding reached $2.3 billion representing a 32% year on year increase. 

Within insurance, FinTech has a direct impact on both individuals and SMEs who will benefit from innovation due to:

**Collaboration:** Recent technology developments promise the formation of new solutions for the insurance industry that can assist in operations including P2P insurance, which consists of a network of individuals linking their premiums. However, the demand for the product is new as the likelihood of customers purchasing P2P insurance in 2017 was at an average of 25%.

**Customer engagement:** The adoption of AI will reduce response time for customer service and improve customer satisfaction. Software can be further developed to deal with customer claims and improve customer retention. AI can aid with customer queries by delegating information to relevant departments and directing instructions. This reduces wage expenses as well as improves customer satisfaction. During 2017, the global insurance industry was estimated to invest an average of $124 million in AI platforms, which is higher from a cross-industry average of $70 million.

**Management of claims:** Time management is crucial for the processing of claims. FinTech solutions can increase the efficiency of processing claims and improve customer retention. In a 2016 survey, 60% of surveyed insurance companies believed that improved retention of customers is a primary opportunity that relates to the rise of FinTech.
Asset And Wealth Management

WealthTech can help create effective frameworks and strategies for the sector by creating new cost models and customer experiences.

Pressure on management fees of actively traded funds and the rise in popularity of passive and cost effective strategies has enabled FinTechs to fill a market void. These strategies in highly liquid, low risk exchange traded funds, coupled with the demand for digital solutions for a younger generation of investors has lead to a significant amount of investment from both venture capital and private equity firms.

Private investments on FinTech firms have accumulated $11.4 billion since 2010 in the asset management space.\(^\text{12}\)

Additionally, this combination has resulted in the emergence of robo-

advisors, offering automated online portfolios in which investors can customize the scope of their investment as well as appetite for risk. Assets under management in the robo-advisor segment totalled to $618 million in 2018 and are expected to grow by 45.7% to $2,787 million by 2022.\(^\text{13}\)

**Automated decision-making:** Providers such as Wealthfront and Betterment allow private and institutional investors to invest their money in pre-existing portfolios, which are automatically managed by individually configured algorithms. The advantage of such automation is that passive investors may not want or cannot afford ongoing personal monitoring of their portfolio development.

These automated investment services also allow for attractive returns with low starting capital and without specific investment know-how, which is in contrast to traditional investments offered by traditional banks.

**Market research:** Access to big data analytics is highly significant for asset and wealth management firms as it can support investment decisions. FinTech solutions focused on big data analytics can provide asset and wealth management firms thorough analysis on data from unconventional sources including social media platforms for client sentiment analysis.\(^\text{14}\)
1.2 FinTech Verticals

Artificial Intelligence

AI is the automated process of decision-making and involves installed algorithms instructing machines to adopt human competences. Specifically, AI platforms create algorithms that perform business operations including classifying, directing, and predicting data.

AI secured a record investment of $22.9 billion in the first half of 2017. Top adopters of AI that contributed to its growth include telecommunications, automotive, and the financial services industry. AI is anticipated to be a huge disrupter in the economy. Estimates are that AI could contribute up to $15.7 trillion to the economy worldwide in 2030, of which $320 billion will originate from the Middle East.

The development of non-oil sectors through investment in AI technologies could elevate the region’s position in the upcoming decade. Spending on AI systems in the Middle East and Africa region is estimated to grow from $37.5 million in 2017 to over $114 million by 2021.

Furthermore, AI in Saudi Arabia and the United Arab Emirates (UAE) is anticipated to contribute 12.5% and 13.6% respectively to GDP by 2030. Other Gulf Cooperation Council (GCC) countries including Bahrain and Kuwait’s AI sectors are all expected to contribute 8.2% towards their GDP by 2030.
Presently, 2.7 zettabytes worth of data exists on the Internet and is expected to drastically increase to 100 zettabytes by 2020. The need to analyze this large volume of data led to the development of big data analytics. Anonymized and disordered data are stored from an assortment of sources including web browsers, social media platforms, cloud computing, electronic transactions, and credit card data.

There are four main types of analytics required for big data analysis and are generally implemented in stages:

- **Descriptive Analytics**: Summarizes and describes existing data to explain outcomes.
- **Diagnostic Analytics**: Evaluates past performances and explains the causes of outcomes.
- **Predictive Analytics**: Focuses on forecasting scenarios.
- **Prescriptive Analytics**: Evaluates alternative outcomes\(^ {18}\).

Big data analytics and intelligence can provide insight on customers’ interests and sentiment. The submitted data can assist firms in tailoring their product offering and targeting to efficiently promote brand awareness and yield higher return on investment.

**Insurance**: Data analytics can assist in providing more detailed underwriting decisions and premium calculations through the assessment of applicants’ risk profiles.

**Banking**: Banking providers can also adopt big data analytics solutions to improve credit assessment analytics. Big data solutions can further prevent fraudulent transactions through pattern detection and recognition to identify suspicious activities as well as employ predictive analytics to review the risk of loan portfolios.\(^ {19}\)

Real-time data can also be extracted from the use of digital banking platforms to analyze customer interactions and ultimately improve customer engagement with existing products.

The Middle East and Africa region accumulated approximately $2 billion in revenue from big data analytics during 2016. The region is expected to see year-on-year growth of 11% in 2017 reaching up to $2.2 billion and $3.2 billion in 2020 representing a 20% CAGR.\(^ {20}\)
Crowdfunding

Crowdfunding is an alternative online fundraising and lending solution that individuals can use in a collective effort to gather a capital sum. The funds raised can be used for loans, acquiring a property, and also financing a project. Crowdfunding can be broken down into four primary categories:

- **Donation-based**
  - Contributors will not receive financial returns or rewards for any funds donated, commonly used for charities and fundraisers

- **Rewards-based**
  - Contributors will usually not receive any form of financial return, but instead will receive a reward in exchange for their contribution

- **Equity-based**
  - Contributors become equity holders. As owners, they will receive financial returns

- **Lending-based**
  - Firms are able to raise funds via loans in return for interest payments

The average funding per campaign was $1,065 in 2018 and is anticipated to increase by roughly 40% to $1,499 by 2022. The World Bank expects global investment in crowdfunding to reach $93 billion by 2025.

Crowdfunding has gained substantial traction over the last decade. Total transaction value in 2018 stood at $9.4 billion and is estimated to grow to $26 billion by 2022. The number of campaigns being funded annually has seen a steady increase and is expected to reach 17,287 by 2022.

**Transaction Value**

<table>
<thead>
<tr>
<th>Year</th>
<th>Transaction Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>$9.4 billion</td>
</tr>
<tr>
<td>2022</td>
<td>$26 billion</td>
</tr>
</tbody>
</table>

Crowdfunding has witnessed increased uptake in the Middle East by entrepreneurs seeking alternative sources of funding. Crowdfunding activity in Africa and the Middle East reached $173 million during 2018 and is estimated to reach $296.8 million by 2022.

**Average funding per campaign**

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>$1,065</td>
</tr>
<tr>
<td>2022</td>
<td>$1,499</td>
</tr>
</tbody>
</table>

Since 2014, there has been a surge in Islamic crowdfunding platforms, with around 10 platforms spread across the region. Shari’ah-compliant crowdfunding platforms are also seen as a benefit to Islamic investors that are looking to diversify their investment portfolios while adhering to Islamic principles.

1.2 FinTech Verticals
Cryptocurrencies

Cryptocurrencies, also known as a form of digital currencies, use cryptography to secure and validate transactions making it almost impossible to alter or delete data. Similar to traditional currencies, cryptocurrencies can be used for transactions online between parties with no intermediaries.

The first appearance of cryptocurrencies was through the introduction of Bitcoin in 2009. Thousands of cryptocurrencies have been created following the introduction of Bitcoin. The current market capitalization of cryptocurrencies is valued at around $350 billion with a rise of over 1,500% during 2017. Bitcoin remains the largest cryptocurrency by market capitalisation with 17 million coins currently in circulation.

However, despite its advantages, the adoption of cryptocurrencies remains problematic, specifically, the recognition of cryptocurrencies as a currency.

During 2018, Federal Judge Jack Weinstein backed the US Commodity Futures Trading Commission’s definition of cryptocurrencies as commodities, enabling cryptocurrencies to be traded on the futures market. China, on the other hand, has taken a firmer stance and banned cryptocurrency exchanges and initial coin offerings.

Given the short-term volatility of cryptocurrencies, major players are looking toward indexes to diversify, manage downside risk, and to long-term outperform individual currencies. Coinbase, the leading US marketplace for cryptocurrencies, announced in March 2018 it was releasing a weighted index fund to give accredited US investors access to crypto-assets.25

In December 2017, the Central Bank of the UAE and Saudi Arabian Monetary Authority (SAMA) confirmed that they are working on a joint project to develop a blockchain-based system and will also issue a cryptocurrency to ease cross-border transactions between the countries.

The digital currency to be created will be based on blockchain technology designed primarily as a tool to facilitate cross-border transactions between the two countries, which currently stands at $15.2 billion annually.26

Furthermore, in February 2018, Saudi Arabia's Central Bank also secured a deal with US-based Ripple to adopt blockchain solutions for cross-border payments.

1.2 FinTech Verticals

Cryptocurrencies differ from traditional currencies that allow debit or credit cards to possess a user's personal information and track their activities.

Instead, cryptocurrencies provide users with complete anonymity unless the user chooses to voluntarily add information.

Cryptocurrencies, through their confirmation mechanism, resolved the issue of double spending that hindered online digital payments in the past.
1.2 FinTech Verticals

Payments, Transfers, And Remittances

Digital payments, transfers, and remittances are the diversion of transactions from cash and payment cards to digital channels, which includes mobile wallets.

The move towards open banking, which involves data being accessible to third parties, increases collaboration opportunities between financial institutions and FinTech firms to produce payment solutions.

Consumer data can be protected through the inclusion of unique identifiers of biometric information such as fingerprints, facial recognition, and iris scanning to strengthen information security.

Key FinTech solutions include P2P mobile wallets, foreign exchange transactions, real-time payment, and digital currencies. Examples of existing global players include Revolut and TransferWise.

MENA Online Payment Volume

$69 billion (2020)\(^{28}\)

Contributing to the rise of digital payments is the increased use of smartphones, which stood at almost 4 billion users in 2017.\(^{27}\)

Although cash remains to be the preferred payment method in the MENA region, digital payments are on the rise, notably in the number of payment platforms and gateways.

The MENA region has become the fastest growing market for online payment transactions and is set to reach $69 billion in volume by 2020.\(^{28}\)

Industry experts predicted that the rapid acceleration in digital payments was estimated to increase the region’s GDP by approximately $100 billion during 2017.\(^{29}\)

Presently, 84% of MENA FinTech startups operate in the payments, transfers, and remittances vertical.\(^{30}\)
Insurtech

Insurtech solutions create an opportunity to renovate the present system for insurance firms.

Existing innovative solutions leverage insurance firms’ data collection to offer better customer experiences by tailoring insurance policies and producing accurate risk predictions.

An existing InsurTech solution is the use of AI to pitch suitable insurance policies for a client’s risk coverage. Other devices that can be used include in-car monitoring devices, wearable activity trackers, customer-facing applications, and Software as a Service (SaaS) platforms that manage insurance policies and payments.

As of 2017, there were more than 1,000 startups in the global InsurTech industry. In total, InsurTech funding has increased by more than 200% in the past three years. Furthermore, EY’s 2017 FinTech Adoption Index highlighted that there has been an increase in global interest toward InsurTech solutions as the adoption rate among surveyed consumers reached 24% in 2017, an increase from 8% in 2015.

Since last year, InsurTech has been gaining tremendous momentum as InsurTech platforms are coming into fruition and are being adopted by the public. Furthermore, global investment deals on InsurTech solutions are anticipated to have reached a total of $2.3 billion during the last quarter of 2017.

InsurTech is slowly embedding its presence in the MENA region. The insurance market in the GCC region is projected to increase from $26 billion in 2016 to $44 billion in 2021.
RegTech

RegTech at its core consists of the usage of technology to help businesses comply with regulations efficiently and cost effectively.

The main focus of RegTech has been on risk, compliance monitoring, and regulatory reporting.

Some of the examples of RegTech applications being used are monitoring big data compliance, detecting insider trading, trading limit abuse, detecting discretionary sales, legislation gap analysis, management information, transaction reporting, activity monitoring, and risk data monitoring.

In regards to fraud detection, machine learning and data analytics can verify identities and predict susceptibility to fraud.

Following the EU’s General Data Protection Regulation (GDPR) that came into effect on 25 May 2018, RegTech will play a larger role with the push for data protection.

Upcoming RegTech solutions will be able to ease the adoption of new regulations for a variety of industries.

Risk management tools supporting the financial services industry include the following:

1.2 FinTech Verticals

- **Portfolio Risk Management**
- **KYC**
- **Monitoring**
- **Anti-Money Laundering**

It is suggested that the global RegTech market could reach $6.5 billion by 2020 and global demand for regulatory, compliance and governance software is estimated to reach $8.7 billion by 2020.

It is also expected that the global adoption of RegTech solutions in the short term will reap substantial benefits as it will deliver operational efficiencies and substantial cost savings. Some of the benefits include:

- **Reduced Cost of Compliance**
- **Sustainable and Scalable Solutions**
- **Advanced Data Analytics**
- **Risk and Control Convergence**

In the long term, RegTech aims to establish a solid foundation in fostering innovation while enhancing overall operations, which allows for seamless
compliance reporting. The benefits include:

Positive Customer Experience

Increased Market Stability

Improved Governance

Enhanced Regulatory Reporting

The financial services industry in the MENA region has been quite slow in adopting RegTech solutions. However, this should change as market awareness for such platforms increases in the region.

Blockchain

Blockchain is an online digital distributed ledger that allows parties to exchange information without any intermediaries. It is a decentralized network that involves the exchange of information in secured blocks through cryptography.

An unknown developer with the pseudonym of Satoshi Nakamoto created Bitcoin in 2009, using blockchain as the underlying technology.

As a distributed ledger, a historical database of all transactions are accessible within the whole network to ensure the circulation of a universal copy.

Transactions passed through the system are then validated without the need for a centralized authority.

Blockchain is consensuses based, meaning that it is only executable if all parties in the network approve the transaction collectively as their respective ledgers reconcile.

The data is also cryptographically sealed to prevent alterations thus ensuring greater security against fraud.

The transactions are subsequently stored in a block that is represented through a unique identifier called a hash.

Each block is chronologically connected to the other by a sealed chain and time stamped to ensure that it is secure and easily verifiable.

Currently, blockchain technology is widely used in cryptocurrency exchanges but the platform can be adopted in alternative functions that can also revolutionize key industries.

For example, transfers are traditionally executed through financial institutions. However, with the use of a blockchain it is possible to send money without the need for banks via P2P payments. Similarly, blockchain eliminates the complexity of processing customers’ documents, therefore providing a transparent, risk-free solution for businesses.

Smart contracts are an alternative application of blockchain. Developed through Ethereum, a blockchain-based distributed computing platform, Smart contracts oversee online digital agreements between two parties with the exchange of assets executed automatically upon securing a collective agreement. Subsequently, blockchain is used to store the details of the transaction.
1.2 FinTech Verticals

Blockchain Procedure

The requested transaction is broadcasted to a P2P network consisting of computers, known as nodes.

The network of nodes validates the transaction and the user’s status using known algorithms.

A verified transaction can involve cryptocurrencies, contracts, records, or other information.

Once verified, the transaction is combined with other transactions to create a new block or data for the ledger.

The new block is then added to the existing blockchain in a way that is permanent and unalterable.

Transaction complete.

CRYPTOCURRENCIES

- No intrinsic value
- No physical form
- Network is completely decentralized
Uses of Blockchain in Banking

Security Settlement
Stakeholders gain direct access to the depository eliminating the need for intermediaries.

Post Trade Operations
Procedures including trade capture, trade enrichment, and settlement are automated on a shared ledger decreasing post-trade operation time.

Trade Repository
Financial transactions and the history of asset control are recorded. Hence eliminating the need for a separate trade repository for recordkeeping.

Derivative Trading
Blockchain’s decentralized network connects potential buyers and sellers with real-time updates on offers. Smart contracts can also automate derivative contracts on a shared ledger, which decreases operation costs.

Syndicated Loan
Borrowers and arrangers can broadcast offers to an extensive list of investors participating in the automated platform.

Cross-Currency Payment
Market players are connected automatically, which eliminates the need for intermediaries.

1.2 FinTech Verticals

Know Your Customer
Customers’ credit history information can be easily shared between companies in a public but secure ledger.
The FinTech Landscape

2.1 Global | Page 25
2.2 MENA Region | Page 27
During 2017, there were 1,824 FinTech investment deals secured globally, attracting $14.2 billion of venture capital investment. The United States dominated FinTech investment with a combined $7 billion of the total $14.2 billion or 49% of the global total. Corporate participation in FinTech-specific venture capital deals has been significant in the United States. China, on the other hand, saw a sharp decrease and attracted only $1.6 billion of venture capital investment compared to $8.2 billion in 2016, a decrease of 81%.
2.1 Global FinTech

Global FinTech VC Investment – Deal Value 2017

Top 10 countries by capital invested ($):

<table>
<thead>
<tr>
<th>Country</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>7,053</td>
<td>5,793</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1,783</td>
<td>704</td>
</tr>
<tr>
<td>China</td>
<td>1,606</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>648</td>
<td>562</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>548</td>
<td>178</td>
</tr>
<tr>
<td>Sweden</td>
<td>478</td>
<td>60</td>
</tr>
<tr>
<td>Canada</td>
<td>444</td>
<td>243</td>
</tr>
<tr>
<td>Germany</td>
<td>331</td>
<td>417</td>
</tr>
<tr>
<td>France</td>
<td>203</td>
<td>84</td>
</tr>
<tr>
<td>Singapore</td>
<td>130</td>
<td>85</td>
</tr>
</tbody>
</table>

Top 10 countries by deal volume:

<table>
<thead>
<tr>
<th>Country</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>765</td>
<td>784</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>224</td>
<td>232</td>
</tr>
<tr>
<td>India</td>
<td>120</td>
<td>121</td>
</tr>
<tr>
<td>Germany</td>
<td>66</td>
<td>66</td>
</tr>
<tr>
<td>Canada</td>
<td>63</td>
<td>66</td>
</tr>
<tr>
<td>France</td>
<td>47</td>
<td>49</td>
</tr>
<tr>
<td>China</td>
<td>39</td>
<td>73</td>
</tr>
<tr>
<td>Singapore</td>
<td>37</td>
<td>53</td>
</tr>
<tr>
<td>Switzerland</td>
<td>37</td>
<td>23</td>
</tr>
<tr>
<td>Australia</td>
<td>31</td>
<td>43</td>
</tr>
</tbody>
</table>
2.2 MENA REGION

MENA startups raised $410 million in funding during 2017 (excluding Souq.com and Careem) up 65% from 2016, which saw $249 million on 176 deals. The industries that saw the most deals were e-commerce and FinTech, each with 11.9% of the total deals made in 2017, followed by the technology industry with 11.5%.^43

Industries with the most deals in 2017 (changes from 2016)^43

In regards to FinTech-focused startups, it is estimated that more than $35 million was secured in funding during 2017 and $100 million within the last decade.\(^{42}\) Furthermore, there is an apparent growth in the region’s FinTech ecosystem as the number of startups is predicted to increase from 105 in 2016 to 250 in 2020.

Three key growth drivers can be credited for the apparent growth of FinTech in the region:

1. **E-commerce:** The e-commerce market in the MENA region is anticipated to reach $20 billion by 2020 suggesting a 4x growth from 2015.

2. **Financial inclusion:** Approximately 86% of the population in the MENA region are estimated to not have access to traditional banking services. As a result, there is a high potential in the region for customer acquisition through the deployment of FinTech solutions to accommodate the unbanked.

3. **SME support:** There is an apparent market for FinTech solutions that promote lending in the region as 63% of existing SMEs in the region are anticipated to lack access to funding. Specifically, during 2017, the financing gap for SMEs is estimated to reach a value of $26 billion.\(^{44}\)

Top FinTech companies to secure funding in the MENA region included:

- $20 million
- $10 million
- $7 million

© 2018 Bahrain FinTech Bay
Map of the FinTech Ecosystem in the MENA Region (2018)
3.1 Economic Overview

Oil and gas energy as a contributing factor to GDP has been steadily falling over the past two decades, more than halving from 44% in 2000 to 18% in 2017. Presently, the financial sector is the highest contributor to real GDP from non-oil sectors.

Bahrain's Real GDP Composition (2000-17)

Taxes, custom duties, utility costs, and cost of human capital are significantly lower than its neighbors. Bahrain has no restricted free zones and 100% foreign investor ownership is permitted.

Bahrain Fact Sheet (2017)

3.9% Real GDP Growth

1.4% Inflation rate

$33 billion GDP
3.2 FINANCIAL SERVICES INDUSTRY

The financial services industry has recorded healthy growth over the last decade becoming the largest non-oil contributor to Bahrain's GDP. Bahrain is home to the highest number of licensed financial institutions in the region with a mix of around 400 domestic, regional, and international institutions. Total banking assets reached $188.7 billion as of 2017. The retail banking sector specifically showcased a constant growth during the past decade from $49.3 billion during 2007 to $83.5 billion by the end of 2016.

The annual growth of the financial services industry has been notable over the last decade and very pronounced over the 2015-16 period, growing from 1.7% to 7.4%. The financial services industry caters to a variety of market requirements including 29 retail, 73 wholesale, and 23 Islamic banks.

The financial services industry benefits from advantages such as competitive operating costs, open market economy and a skilled workforce of 14,000 employed in the industry growing at 3% per annum. Over 60% of employees are Bahraini highlighting a domestic financial services industry with substantial local talent.

The key growth drivers that contributed to the expanding financial services industry are identified below:

Established Financial Landscape

The future prospects for the financial services industry are highly promising with Bahrain's position as a financial hub for over 40 years.

Bahrain’s Banking Sector (January 2018)

<table>
<thead>
<tr>
<th>Banking Firms</th>
<th>Investment Firms</th>
<th>Insurance Firms</th>
<th>Specialised Licensees</th>
<th>Capital Market Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>125</td>
<td>59</td>
<td>144</td>
<td>53</td>
<td>16</td>
</tr>
</tbody>
</table>

Sector Growth Rates (%) 

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil and gas</td>
<td>3.0</td>
<td>-0.9</td>
<td>-0.1</td>
<td>-0.7</td>
</tr>
<tr>
<td>Finance</td>
<td>3.4</td>
<td>1.7</td>
<td>5.2</td>
<td>5.0</td>
</tr>
<tr>
<td>GDP</td>
<td>4.4</td>
<td>2.9</td>
<td>3.0</td>
<td>3.9</td>
</tr>
</tbody>
</table>
3.2 Financial Services

### Islamic Finance

Bahrain established its position as the leading hub of Islamic finance in the MENA region and the second largest hub globally, pioneering key initiatives to promote the role of Islamic finance. For a fifth consecutive year, Bahrain was ranked as a leading Islamic finance market in the Thomson Reuters-ICD’s Islamic Finance Development Report and Indicator. Furthermore, Bahrain was the first to implement Islamic finance regulations in 2001 by launching sukuks (Islamic bonds) and establishing a general council for Islamic financial institutions. Islamic finance contributes more than 13% of the country’s banking assets in a yearly basis.

The MENA region currently provides Bahrain with an opportunity to expand its role as a leading Islamic finance hub with an estimated demand for at least 150 more Islamic financial institutions in the region by 2020.50

### Regulations

The Central Bank of Bahrain (CBB), has developed a regulatory framework to promote the financial services industry in Bahrain. CBB’s comprehensive regulatory framework ensures compliance with international standards to promote long-term stability in the financial services industry. CBB primarily focuses on conventional and Islamic banks, insurance and investment firms, specialised licensees, capital markets, and collective investment undertakings. CBB was established on 6 September 2006 and is responsible for setting monetary policies to maintain the financial stability of Bahrain.

Prior to the creation of the CBB, the Bahrain Monetary Agency initially acted as the sole regulatory authority since 1973 to regulate and manage the banking industry and later, the insurance and capital markets industries from August 2002.

The regulations in Bahrain are favorable in the region due to the implementation of the region’s first onshore Regulatory Sandbox, renovation of the country’s bankruptcy law, and focus on FinTech with the CBB’s FinTech and Innovation Unit.

### Liquidity

In compliance with existing central bank regulations, the high liquidity levels of banks served as a contingency post the 2008 financial crisis. Presently, Bahrain has a capital adequacy ratio of 18.3% for the banking sector highlighting the country’s financial stability to fulfil financial obligations. The implementation of large capital buffers additionally allow these institutions to reduce the focus on balance sheet consolidation through conservative measures such as cutting costs and alternatively divert attention to driving strategic investment in innovation.

#### Bank Capital to Assets Ratio (%)

<table>
<thead>
<tr>
<th></th>
<th>BASEL III</th>
<th>World</th>
<th>Bahrain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12.5%</td>
<td>10.4%</td>
<td>18.3%</td>
</tr>
</tbody>
</table>

© 2018 Bahrain FinTech Bay
3.3 FINTECH DEVELOPMENTS IN BAHRAIN

Key developments including the launch of the CBB’s dedicated FinTech and Innovation Unit and Regulatory Sandbox highlight the growing market demand and interest in Bahrain for FinTech solutions. Moving into the digital age of financial products and services is imperative as incorporating FinTech into the financial services industry of Bahrain will be a key growth driver.

Digital Banks As The Mainstay

Increasing consumer demand for an improved banking experience has led to the need for FinTech solutions in Bahrain. Modern digital banking is the logical step for the banking industry considering; increasing smartphone usage in Bahrain with roughly 3 million mobile subscribers (18% YoY growth) and redundancy of conventional payment channels. Digital banks and platforms that are active in Bahrain include meem, the first Shari’a-compliant digital bank in the region, and Jazeel that was developed by Waqfe.

Digital Banks and Platforms

An increasing number of financial institutions are looking into FinTech solutions to secure competitiveness and financial strength in the market. This factor presents FinTech firms with great opportunities to collaborate with financial institutions. Collaboration will prove beneficial to financial institutions in the region preparing for the emergence of challenger banks such as in the UK-based Monzo, which raised $93 million in November 2017.

Shari’a Compliant Islamic Finance

Key opportunities in the market include the implementation of FinTech solutions through Shari’a compliant procedures.

Blockchain technology enables Islamic financial institutions to improve transaction transparency. Smart contracts can be effectively implemented for Islamic contracts, which are enforced on Shari’a laws, to easily execute extensive contractual obligations.

Bank ABC announced plans to launch a neobank by 2019 to offer FinTech-focused solutions. The emergence of neobanks in the region will likely enhance competitiveness which could lead to an improvement of customer services. Bahrain Islamic Bank (BisB) also announced on March 2018 plans to invest $10 million to develop its digital infrastructure and a partnership with Paypal to provide their services to BisB customers through their digital channels.

Recent developments in FinTech solutions also highlight the expansion of Islamic financial banks’ client base. Al Baraka Banking Group, for example, has launched through its Turkish subsidiary, the first interest-free digital only bank in Germany. Under the name “insha”, the digital bank will initially serve Turkish Muslims and then to the entire Muslim population of Germany.

Al Baraka Banking Group, Kuwait Finance House, and Bahrain Development Bank also launched the first global Islamic FinTech consortium in an effort to promote the Islamic finance industry. The consortium, ALGO Bahrain, will allow Islamic banks to research, innovate, and operationalize FinTech solutions in a cost efficient manner. ALGO Bahrain aims to launch 15 FinTech banking platforms by 2022.
3.3 FinTech Developments

Bahrain’s wage protection system, a payroll initiative to improve the delivery of salaries, aims to ensure the protection of wages for private sector employees.

The development of electronic mobile wallets allows people to conduct payment transactions far easier.

There are currently more than 100 CBB-licensed merchants for mobile wallet applications in Bahrain such as EasyPay (Ithmaar Bank), MaxWallet (CrediMax), and bWallet (Batelco).

The role of financial inclusion is also evident through the promotion of payment services for employees operating in the country.

Additionally, AFS and Al Salam Bank also highlighted collaborative efforts between financial institutions and digital solutions providers in Bahrain to promote financial inclusion. During October 2017, the two entities signed a partnership to launch a digital payroll.

As a result, Bahrain’s prominent role in promoting financial inclusion in the country will benefit companies based in their jurisdiction as a starting point and gateway to other regional markets to tap onto the regional need for further financial inclusion.

Financial Inclusion

Financial inclusion is the availability of financial services to satisfy the needs of individuals and businesses. Individuals referred to as “unbanked” or “underbanked” do not have or possess minimal access to professional financial services including a bank account.

As per the World Bank, there are currently 2 billion unbanked people. Reasons behind the unbanked population include distrust of banks, limited resources, lack of literacy, unemployment, and high bank fees.54

Since 2010, at least 55 countries have pushed forward to increase financial inclusion via FinTech solutions. Accessing the unbanked is becoming easier with the development of digital IDs, digitized transactions, mobile financial platforms, and big data. Emerging economies witness greater decentralization and an increasing growth in their financial services industry as mobile banking advances and increases financial inclusion. From the 2 billion unbanked people, FinTech solutions are anticipated to have aided 700 million since 2011.54

Although Bahrain plays an active role in promoting financial inclusion, the MENA region as a whole is considered one of the least financially inclusive regions. With the growth of FinTech in Bahrain, providing financial services to the unbanked has become easier.

Financial Inclusion in Bahrain (December 2017)55

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>with Debit Cards</td>
<td>99.4%</td>
</tr>
<tr>
<td>with Credit Cards</td>
<td>19.7%</td>
</tr>
<tr>
<td>with Current Accounts</td>
<td>17.5%</td>
</tr>
<tr>
<td>with Savings Accounts</td>
<td>63.2%</td>
</tr>
<tr>
<td>with e-Banking</td>
<td>43.7%</td>
</tr>
</tbody>
</table>
3.4 CURRENT TIMELINE

June 2017
Introduction of the CBB’s Regulatory Sandbox

July 2017
Bahrain issues crowdfunding regulations for conventional and Shari’a compliant markets

August 2017
PayTabs raises $20 million for global expansion plans

September 2017
AWS announces plans to launch operations in Bahrain early 2019

October 2017
Launch of the CBB’s FinTech and Innovation Unit

December 2017
Three Bahraini banks launches the first Islamic FinTech consortium Algo

January 2018
Launch of Batelco and Arab Financial Services’ new mobile wallet bWallet

February 2018
Launch of Bahrain FinTech Bay

March 2018
Launch of Sadad and Viva’s new mobile wallet VIVA Cash

April 2018
Announcement of national e-KYC utility tool for financial services
Launch of “meem”, the first Shari’a-compliant digital bank in the region

May 2018
Kuwait Finance House launches it digital account platform Jazeel
Launch of the national P2P payments service BenefitPay
3.5 Bahrain FinTech Ecosystem
3.6 REGULATIONS

Bahrain’s Regulatory Body

The CBB’s list of responsibilities include implementing monetary and foreign exchange rate policies, issuing the country’s currency (Bahraini Dinar), managing the government’s reserves and debt issuance.

Additionally, the CBB oversees the country’s payments and settlement system and governs Bahrain’s financial services industry.

The wide scope of the CBB’s responsibilities provides an approach that thoroughly governs Bahrain’s financial services industry covering both the conventional and Islamic Finance industries.

Presently, the CBB has issued a total of seven CBB Rulebook volumes. The purpose of the Rulebook is to fully detail the licensing requirements and to cover ongoing obligations. Each volume focuses on a specific licensee or industry sector and include conventional banks, Islamic banks, insurance licensees, investment firm licensees, specialized licensees, capital markets, and collective investment undertaking.

As part of the CBB’s initiative to nurture Bahrain’s FinTech ecosystem and transform the country into a smart, digitally savvy financial hub, a dedicated FinTech and Innovation Unit was launched. The FinTech and Innovation Unit aims to create a supportive regulatory environment to encourage further investments in FinTech and increased innovation within the financial services industry. Developments include a dedicated license category for conventional and Shari’a-compliant crowdfunding and the first onshore Regulatory Sandbox in the region.

The Role of the Central Bank of Bahrain

<table>
<thead>
<tr>
<th>Encouraging</th>
<th>Encouraging the growth of Bahrain as a global financial hub</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervising</td>
<td>Supervising and regulating the country’s financial services industry</td>
</tr>
<tr>
<td>Managing</td>
<td>Managing Bahrain’s foreign currency cash and gold reserves</td>
</tr>
</tbody>
</table>
Regulatory and Legal Reforms

Currently, Bahrain is working on developing a data protection law to ensure protection and privacy of data. This is through a transparent governing framework for the digital and technology industry. On April 2018, the Finance and Economic Affairs Committee of Bahrain’s Shura Council also approved a new bankruptcy law that aims to promote transparency.

Additionally, as of January 2006, Bahrain signed an FTA (Free Trade Agreement) with the United States. A major part of the FTA are the IP protection laws which make it easier for foreign firms to establish their presence within Bahrain.

In regards to national policies, Bahrain is the first in the region to have developed the Cloud First policy to accelerate the adoption of cloud computing.

Regulatory Sandbox

In order to create a strong foundation for the FinTech industry, the CBB announced the introduction of the country’s first

The Regulatory Sandbox in June 2017.

The Regulatory Sandbox is a framework that provides local and international firms, whether traditional or FinTechs, with a light-touch regulatory environment to test and incubate new FinTech and innovative solutions.

The introduction of the Regulatory Sandbox will encourage firms to further embrace technology, enhance customer experience, and accelerate the introduction of FinTech in the domestic and regional financial services industry.

Once approved, applicants are given a defined period of up to nine months to experiment with their FinTech solutions.

Thus far, nine firms have been authorized to participate in the Regulatory Sandbox covering areas including cryptocurrency exchanges, financial inclusion, wealth management, alternative lending, big data analytics, and robo-advisory.

The firms are both domestic and global firms based in the UAE, United States, Malaysia, and India.

Aims of the Regulatory Sandbox

- Enhance customer experience
- Encourage financial inclusion
- Embrace new technology
- Promote competition
- Encourage growth of FinTech industry
Crowdfunding Regulation

In terms of crowdfunding, the CBB issued regulations regarding financing-based crowdfunding in April 2017. The regulations are implemented on both conventional and Islamic lending, which enables SMEs in Bahrain and the region to raise funding.

On September 2017, the CBB also introduced equity-based crowdfunding regulations that allow the raising of capital through the issuance of ordinary shares.56

Such development highlights Bahrain’s role as the first country in the GCC to regulate crowdfunding onshore. The benefits of introducing crowdfunding regulations is that it provides a lower cost of funding that in turn encourages the establishment of SMEs and increases competition.

Additionally, it also provides further opportunities and options for venture capital to invest in startups.

For firms operating a financing platform, it must be registered and licensed in Bahrain in accordance to the CBB’s "Rulebook Volume 5 Financing Based Crowdfunding Platform Operator". These guidelines were implemented to govern conventional financing based crowdfunding businesses.

Key benefits of adopting crowdfunding operations in Bahrain include the reduced cost of raising funds, increased investment opportunities, promotion of competition, and enhanced engagement of the domestic community.56

Bahrain introduced Shari’a-compliant crowdfunding so that it differentiates itself as a leading actor globally for the promotion of FinTech solutions for Islamic finance.

During September 2017, the CBB also announced amendments to the Rulebook. Specifically, requirements were incorporated into the CBB’s Rulebook Volume 6. to regulate platforms operating equity-based crowdfunding.

3.6 Regulations

Regulatory Features of Crowdfunding Framework

Crowdfunding platform operators are legally required to comply with the CBB’s regulations regarding anti-laundering, combating financing of terrorism, and consumer protection.

Crowdfunding platform operators are required to have a minimum capital requirement of $132,000.

Platform operators are required to publicly disclose their fees, charges and commissions.
3.7 HUMAN CAPITAL

Current Labour Force

The human capital in any business ecosystem is essential; it is the real asset that can be used for the advancement of a whole industry. Bahrain’s bilingual local workforce is one of the most highly skilled amongst GCC countries with high communication skills in spoken and written English. Additionally, the cost of manpower is lower in comparison to its neighbouring countries making local talent a competitive advantage for Bahrain in the GCC region.

Quality Of Education

The government takes an active stance in investing in formal education in order to develop excellence in human assets. It established a labor Fund (Tamkeen) that provides training to employees to be qualified in their field of study.56 Specifically, Tamkeen has accepted more than 14,000 participants in programs for career progression.

Additionally, Tamkeen’s investment in human capital for the private sector has currently exceeded $440 million. Another organization is Injaz Bahrain, a non-profit organization, which helps in developing the skills of young students starting from primary school to higher-level education.57 The organization offers varied programs and opportunities to qualify and equip Bahraini students with the needed skills to be ready for the workforce market.

Key institutions in Bahrain also provide direct support to train local talent for the financial services industry. The Bahrain Institute of Banking and Finance (BIBF) has provided qualification for over 200,000 individuals in the past three decades in Bahrain.58

Availability Of Talent

The FinTech ecosystem requires a combination of entrepreneurial, technical, and financial talent to function effectively.

The ratio of business management graduates to ICT graduates is 8:1. Thus despite high levels of expertise there is an imbalance in the labour market of Bahrain.

<table>
<thead>
<tr>
<th>Management Graduates</th>
<th>ICT Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>1</td>
</tr>
</tbody>
</table>

The BFB’s FinTech Talent program aims to support the expansion of the FinTech ecosystem in Bahrain by contributing to the development of human capital. This program will ensure that candidates have practical knowledge through internships and mentoring opportunities to develop new prospects in the FinTech industry.
3.8 Infrastructure

ICT Infrastructure

Bahrain is regarded as the fastest-growing country in terms of technology, becoming a hub for key global ICT players. The United Nations 2017 ITU Index for ICT and youth development also recognized Bahrain.

Furthermore, Bahrain once more provides a gateway to regional markets with the Middle East estimated to have reached an approximate value of $20 billion for its IT market during 2017.59

Bahraini governmental organizations, such as IGA, which is responsible for the ICT governance and procurement of data, have made use of AWS to digitize governmental services across the country by introducing a cloud first policy. Presently, the GCC region’s cloud market is valued at approximately $670 million.60

Bahrain’s highly progressive and liberalized ICT infrastructure permits easy collaboration between parties. The Kingdom is recognized globally as one of the top 30 countries for network readiness and first for mobile coverage.

Connected to five international high-bandwidth fibre optic cables, the advanced networking capabilities of Bahrain make it an ideal landscape for testing the launch of innovative technologies such as big data and analytics, cloud computing, and gaming.60

AWS will launch in Bahrain by early 2019 as part of major initiatives to develop the domestic ICT infrastructure. AWS is a secure cloud service platform that provides database storage, computer power, delivery content, and other helpful functionalities that will help business to grow rapidly in key markets.

In March 2018, the CBB announced the launch of a secure private network that will connect all retail banks operating within the Kingdom. This effort was organized as a method to align the banking industry’s standards to the global Payment and Settlement System (CPSS) standards.

This network allows for real-time inter-bank payments settlement (RTGS) and will act as the primary communication hub.61
3.9 SUPPORTING PLATFORMS

There have been numerous initiatives by the government and the Economic Development Board (EDB) since 2014 to attract key players to Bahrain.

In regards to incubators and accelerators in Bahrain, the following are currently present in the domestic ecosystem:

**Bahrain Business Incubator Center:**
Focuses on assisting entrepreneurs in Bahrain through physical workspaces, advice, and administrative support.

**Brinc:**
Provides support for Internet of Things (IoT), connected hardware, drones, and robotics companies.

**C5 Accelerate:**
Technology investment firm that aims to promote the growth of startups through a cloud computing accelerator program.

**CH9:**
A business accelerator that provides pitching events, workshops, and workspaces to support startups in Bahrain.

** Flat6Labs:**
A startup accelerator that provides seed stage investments, mentorship, workspace, and training in the MENA region.

**Nest:**
Provides seed and Series A funding for FinTech, Healthcare, or Smart cities startups.

**Riyadat:**
Incubator launched to promote and support women-owned startups in Bahrain.

**Rowad:**
Rowad aims to assist and support entrepreneurs in Bahrain at every stage of the business cycle. Additionally, Rowad offers coaching, training, incubation, and mentorship.

The common theme among these prominent accelerators and incubators in Bahrain is to fuel the entrepreneurial initiative and empower startups to resolve challenges capitalizing on their competitive advantages to grow and achieve success. With assistance in business development and planning, these accelerators and incubators help in securing investments to expand their customer base.
3.9 Supporting Platforms

Funding

Foreign direct investments (FDIs) achieved a record high year in 2017, attracting $195 million worth of investment.\(^{62}\)

The majority of these investments were directed towards tourism, real estate, manufacturing, logistics, and financial services.

Throughout their life cycle, FinTech startups require funding to grow and scale. Presently, FinTech firms can refer to different entities as sources of funding in Bahrain.

Angivest Venture, a Bahraini investment group, provides support through angel investments, consultancy, and advice to startups.

Angivest provides seed investment between $25,000 and $100,000 and are able to syndicate larger funds for innovative opportunities with other venture firms and angel groups.

Additionally, Tenmou is a business angels company and aims to assist entrepreneurs with either financial support or mentorship.

Established in 2006, Tamkeen is a semi-governmental organization tasked with making the private sector, the key driver of economic development.

Through their programs, Tamkeen offer micro-financing, subsidies, and wage support for all sizes of enterprises, from pre-seed to scale ups and mature companies.

The company provides mentorship, support, and capital from Tenmou's angel shareholders to highly innovative Bahraini entrepreneurs from seed stage.

The Bahrain Development Bank, through its Rowad program, also have been a leading force in the startup ecosystem. Through their program they offer mentoring, coaching, training, and funding through their seed fuel program. Seed Fuel Rowad is part of the Global Accelerator Network (GAN) and offers up to $67,000 in equity investment to innovative startups at the early/seed stage.

The Development Bank's operations are in concordance with Bahrain's Economic Vision of 2030. BDB provides both Shari'a compliant and conventional financing with a minimum start of $8,000.

The Bahrain Development Bank also launched Al Waha Fund, which is a $100 million venture capital fund of funds. The aim of which is to boost and circulate funds within Bahrain's ecosystem and the MENA region.

The Waha Fund invests in venture capital funds to provide additional funds and support for startups in Bahrain.\(^{63}\)
Survey

4.1 Scope | Page 45
4.2 Findings | Page 46
4.1 SCOPE

The BFB's annual survey delves into the FinTech industry in Bahrain from a domestic and global perception. We asked respondents to provide their input on 26 questions covering key subjects including collaboration with FinTech firms, the role of stakeholders in the FinTech ecosystem, the disruptive nature of the FinTech industry, and Bahrain's role as a FinTech hub in the MENA region.

Our key findings provide insight on the domestic and global community's perception of the FinTech industry in Bahrain. Specifically, the Bahrain FinTech Ecosystem report looks at six driving themes:

• **Collaboration:** The population in Bahrain appears supportive toward the rise of the FinTech industry in the country.
• **Embracing technology:** Bahrain's population view themselves as tech-savvy. However, concern toward technology remains apparent.
• **Human capital:** There is a high interest from Bahrain's young population to participate in the FinTech industry amid a growing need to develop the local human talent pool.
• **Innovation:** Entrepreneurs are viewed as key drivers of innovation elevating the prospect of developing innovative financial solutions.
• **Regulation:** The general consensus is that Bahrain's greatest strength as a FinTech hub is its enforcement of financial regulations that foster growth to enable innovation.

- Bahrain as a FinTech hub: respondents viewed Bahrain as a leading FinTech hub in the MENA region.

The individuals invited to participate in the survey possess diverse social and professional backgrounds. The respondents are residents of 24 countries and represent 25 industries. Responses were collected from residents in and out of Bahrain to provide a domestic and global perception of the FinTech industry.

In total, the survey collected responses of 814 individuals that included 372 professionals and 385 students.
4.1 Scope

**Employment Status**

- Student: 47.4%
- Employee: 33.3%
- Entrepreneur: 12.5%
- Other: 6.8%

**Country of Residence**

- International: 21.9%
- Bahrain: 78.1%

**Industries**

- Financial: 27.5%
- Consulting: 11.5%
- Education: 3.4%
- FinTech: 17.5%
- Government: 4.8%
- Information Technology: 9.8%
- Marketing: 4.5%
- Energy: 4.0%
- Other: 17.0%

4.2 FINDINGS

**Disruption to Collaboration**

The outcome of the BFB’s survey highlighted that there is a present optimism within Bahrain toward the role of FinTech on its domestic economy.

Approximately 87% of surveyed professionals in Bahrain from a variety of industries, including financial and government, voiced interest in collaborating and/or investing in the FinTech industry.

The results were similar to the respondents that were based outside of Bahrain.
What best describes your institution’s approach to FinTech companies?

- Trying to collaborate: 47%
- Have an existing relationship: 15%
- Want to invest: 13%
- Not interested: 25%

What would be the key reasons for your company to adopt new FinTech solutions?*

- Offer new products or services: 43.5%
- Generate new revenue streams: 43.5%
- Automate manual procedures: 40.2%
- Gain an advantage over competitors: 39.1%
- Keep up with existing market trends: 34.8%
- Cheaper to adopt than build inhouse: 33.7%
- Quicker to adopt than build inhouse: 29.5%
- Strengthen and secure the data platform: 21.7%

4.2 Findings

Competitive Advantage

Innovation appears to be a prime reason for the adoption of FinTech solutions in Bahrain whether to enhance existing product lines or internal operations. The results also highlight the limitations that financial institutions are facing in producing solutions internally, which increases likelihood of collaboration with FinTech firms.

Benefits Outweigh Risks

Among the surveyed respondents from financial institutions in Bahrain, only 34% viewed collaboration with an early-stage FinTech startup to be a high risk. The confident perception toward early-stage FinTech startups could be in relation to the perceived benefits outweighing the potential costs that are associated with early-stage FinTech startups.

As the FinTech ecosystem in Bahrain is relatively new, fewer global respondents (24.1%) viewed collaboration with an early-stage FinTech startup as a high risk. As the FinTech ecosystem matures in Bahrain, it is plausible that confidence will increase.
Market Exposure

Why would you believe that FinTech companies would collaborate or partner with financial institutions?*

- Gaining Market Credibility
- Increasing Customer Base
- Scaling Up
- Leveraging regulatory licenses

In regards to the report’s survey, more than half of the respondents that were professionals in Bahrain believed gaining market credibility is one of the top reasons for collaborating with financial institutions.

Alternatively, only 37.6% of respondents highlighted the benefit of leveraging regulatory licenses; which could indicate domestic confidence in existing regulations for FinTech firms.

In comparison to global perception, less respondents residing in Bahrain viewed leveraging regulatory licenses as highly beneficial compared to respondents based internationally.

Embracing Technology

Bahrain’s population appears to be confident in their awareness of modern technology. However, there are still concerns toward technology especially in regards to data privacy and cloud computing.

Capabilities

In your opinion, how would you rank your proficiency in the use of technology?

- Very High: 34.60%
- High: 35.70%
- Average: 23.30%
- Low: 4.90%
- Very Low: 0.90%

Adoption

Would you rather use a mobile application or visit your branch to process your payments?

- Mobile Applications: 55.6%
- Traditional Banking Services: 10.4%
- Both: 33.5%
These results reflect that although individuals are transitioning towards using technology to process payments, there is still a fair percentage of people that would use mobile applications but would not mind visiting a branch to make payments.

**Security Concerns**

There is an equal divide between students in Bahrain in regards to their views on the cloud. However, the results contrast with the professionals in Bahrain as only a quarter were cautious about using the cloud.

64% of the respondents in Bahrain highlighted that they were concerned about adopting FinTech solutions due to cybersecurity threats. The results are similar with the responses from residents outside of Bahrain as 59.8% highlighted concern with the security of FinTech solutions. However, security concerns are unlikely to hinder developments as only 34% viewed collaboration with an early-stage FinTech startup to be a high risk.

**Human Capital**

There is a growing need to develop the local human capital to support the rise of FinTech in Bahrain. There is high interest from students in Bahrain to partake in a career in FinTech but many feel they lack the knowledge or expertise.

**Students**

What level of understanding do you have of FinTech?

<table>
<thead>
<tr>
<th>Very High</th>
<th>High</th>
<th>Average</th>
<th>Low</th>
<th>Very Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.5%</td>
<td>31.7%</td>
<td>9.3%</td>
<td>29.5%</td>
<td>12.0%</td>
</tr>
</tbody>
</table>

Would you be comfortable with sharing your data on a cloud storage platform?

- Yes: 41%
- No: 12%
- I don’t know what is ‘cloud computing’: 47%
As per the report’s survey, 41.5% of the students residing in Bahrain claimed to have minimal understanding of the FinTech industry. Therefore, increased awareness campaigns and educational programs need to be organized in the country.

Presently, only 26.8% of surveyed students in Bahrain expressed a high level of understanding of the FinTech industry. However, 72% of university students in Bahrain expressed interest in pursuing a higher education course on FinTech.

Variety of Expertise

Insight from the industry highlighted the need to develop local talent especially in regard to technical expertise to assist in FinTech recruitment in Bahrain. From the students in Bahrain that expressed interest in FinTech, 86% were ICT majors whereas 64% were business management majors illustrating that the supply between both expertise can be in equilibrium in the upcoming years.

Financial expertise is perceived as the second greatest strength of Bahrain as a FinTech hub, as specified by 66% of surveyed professionals and students from Bahrain.

Job Market

The effect of diversifying the Bahraini economy through pioneering in the FinTech industry is highly promising as it was suggested by the conducted survey with about 66% of respondents in Bahrain agreeing to the positive effect FinTech will have on the job market.

Innovation

Who do you believe drives FinTech innovation?*

<table>
<thead>
<tr>
<th>Who</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurs</td>
<td>69.7%</td>
</tr>
<tr>
<td>Private Sector</td>
<td>46.2%</td>
</tr>
<tr>
<td>Investors</td>
<td>47.3%</td>
</tr>
<tr>
<td>Public-Private Relationships</td>
<td>43%</td>
</tr>
<tr>
<td>Government</td>
<td>32.3%</td>
</tr>
</tbody>
</table>

In regards to innovation, the results prove distinct from the responses of individuals based outside of Bahrain. In a global perception, it appears more respondents (58%) view the private sector as a primary driver of innovation in FinTech.
As per the survey’s respondents, 67% of individuals residing in Bahrain believe regulations will support the enhancement of the FinTech industry.

This is supported by the CBB’s ongoing initiative to improve regulations. Industry insight highlighted that Bahrain is more forward thinking from a regulatory perspective than other GCC countries, which is a positive trend seen over the last two years.

Regulatory Concerns

The CBB worked toward several regulatory reforms to improve the regulatory environment for FinTech firms to operate efficiently without any issues. Globally, intellectual property rights (37.4%) and fraud risk (57%) appear to be of greater concern in comparison to within Bahrain.

Supportive Versus Restrictive

4.2 Findings

Which regulatory/compliance issue(s) would be of concern if firms were to collaborate with FinTech companies?*

<table>
<thead>
<tr>
<th>Issue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Data Privacy</td>
<td>68.5%</td>
</tr>
<tr>
<td>Anti-Money Laundering Compliance</td>
<td>57.0%</td>
</tr>
<tr>
<td>Fraud Risk</td>
<td>55.5%</td>
</tr>
<tr>
<td>Consumer Protection</td>
<td>46.5%</td>
</tr>
<tr>
<td>Intellectual Property Rights</td>
<td>36.5%</td>
</tr>
<tr>
<td>Competition Laws</td>
<td>18.5%</td>
</tr>
</tbody>
</table>
**Bahrain as a FinTech Hub in the MENA Region**

The survey’s results highlighted that a majority of the respondents both in Bahrain and globally viewed Bahrain (44%) as a leading FinTech hub in the MENA region. Bahrain’s top attributes as a FinTech hub include the enforcement of financial regulations (69%), financial expertise (67%), and market access to regional markets (61%).

Furthermore, 54% of the survey’s respondents acknowledge Bahrain’s advanced ICT infrastructure. Industry insight suggested that Bahrain’s technological readiness is ranked the highest in the GCC.

**Challenges**

Respondents both based in Bahrain and elsewhere expressed that the greatest challenge for FinTech firms in Bahrain is perceived to be achieving scale and reach (60.0%), talent recruitment (50.3%), and funding (49.3%).

However, in regards to the respondents that are residing outside of Bahrain, they expressed that they anticipated that the greatest challenge for FinTech companies in Bahrain would be talent recruitment and gaining visibility, which highlights an existing need for Bahrain to promote and develop its talent pool.

What are the greatest challenges for FinTech companies in Bahrain?*

- **Achieve Scale and Reach**: 60.2%
- **Talent Recruitment**: 50.3%
- **Funding**: 49.3%
- **Gaining Visibility and Awareness**: 45.8%
- **Technological Innovation**: 32.3%
- **Customer**: 19.9%
- **Retention Competition**: 19.4%
Predicted Trends

On average, both international and Bahrain residents revealed their prediction for the top three FinTech verticals to grow by 2020 in Bahrain as digital banking, big data analytics, and artificial intelligence. This is a key opportunity for investors as the CBB is currently working on developing the national eKYC regulatory framework, which can be used for big data analytics.

Which FinTech Verticals have the most potential to grow by the year 2020 in Bahrain?*

- Payments: 65%
- Digital Banking: 51%
- Big Data Analytics: 46%
- Artificial Intelligence: 42%
- Cryptocurrency: 38%
- Capital & Debt Markets: 35%

4.2 Findings

Crowdfunding: 32%
Insurance Technology: 26%
Lending Payments: 18%
Regulation Technology: 16%

*respondents were able to choose more than one answer
Looking Ahead

5.1 Cloud | Page 55
5.2 Continued Development of Regulation | Page 55
5.3 Traditional Financial Institutions are embracing FinTech | Page 56
5.4 Blockchain | Page 56
5.5 Raising Awareness | Page 57
5.6 Increasing FinTech Investments | Page 57
5.7 Talent Development | Page 58
Looking Ahead

FinTech is not a temporary phenomena but here to stay. FinTech’s continued adoption and rise will continue to challenge traditional forms of financial services. This is coupled with consumers that are demanding a simpler and seamless digital experience. Traditional financial institutions are required to re-imagine their core journeys and design better customer experiences.

Moving forward, there are seven areas that will further drive the development of Bahrain’s FinTech ecosystem:

- Cloud
- Continued development of regulations and financial inclusion
- Traditional financial institutions are embracing FinTech
- Blockchain
- Raising awareness
- Talent development
- Increasing FinTech investments
5.0 Looking Ahead

5.1 CLOUD

Businesses are now increasingly moving to the cloud to address their current and future technological needs with the cloud forming the backbone of digital transformation.

Cloud adoption and digital transformation are expected to accelerate with the introduction of an AWS Infrastructure Region and 3 Availability Zones in Bahrain by early 2019.

This will allow businesses and governments to store their data and run their workloads with much lower latency, which will not only help create data-driven businesses, but also allow such businesses and governments to compete globally.

As regional countries look to transform into digital and innovation-driven economies, technology with the cloud at the heart of it will play a major role in this transformation.

Bahrain as a country has adopted a “Cloud First Policy” where government infrastructure is being moved to the cloud to streamline and simplify processes, reduce costs and increase the protection and maintenance of servers. New legislation focused on data sovereignty and privacy was announced to ensure that the data centers in the country are compliant with the highest global standards and address any privacy and cybersecurity concerns.

5.2 CONTINUED DEVELOPMENT OF REGULATIONS AND FINANCIAL INCLUSION

Regulation remains a top priority for FinTech firms. The CBB has already established a dedicated FinTech and Innovation Unit and launched key regulatory initiatives centered around the Regulatory Sandbox, Equity Based Crowdfunding Regulation both conventional and Shari’a compliant and a Cloud Policy that complements Bahrain government’s Cloud First Policy.

The CBB jointly with the IGA and the Benefit Company (national switch) have started working on introducing an advanced national Electronic Know-Your-Customer (eKYC) utility that aims to streamline the customer onboarding process and customer information updates by Bahrain’s financial institutions. This will be a boom to the FinTech ecosystem.

Bahrain is also currently in the process of rolling out a Wage Protection System (WPS) to bank the unbanked and address financial inclusion.

WPS will include the deployment of the latest technologies such as digital wallets. This will increase the opportunities for Payment Service Providers and banks to partner with FinTechs to deliver such technologies.
Traditional financial institutions are embracing FinTechs and seeking partnerships with them. We are starting to see increased development and deployment of digital strategies and digital-only banking platforms.

Consumers and especially millennials are demanding digital-only platforms that offer streamlined and secured services around the clock.

Banks are in the process of overhauling their legacy core banking systems and moving from a product-centric to customer-centric focus, centered around the cloud. Other financial institutions are also migrating to the cloud.

These systems and platforms will be supported by the adoption of AI and Big Data Analytics to better understand customer expectations, needs and behaviors to ultimately create a personalized experience.

Additionally, chatbots will further support customer experience and understanding customer behaviors. The proliferation of digital-only platforms is expected to accelerate further over the next 12 months.

Bahrain is looking at adopting blockchain at a national level and is in the process of identifying key standards and areas where the technology can be deployed in association with the private sector.

The first initiative announced in May 2018 is by the General Directorate of Traffic, which is planning to develop a blockchain-based vehicle registration system aimed at increasing the level of transparency for all stakeholders in the vehicle registration ecosystem and reducing the overall cost of maintaining such a registry.

From a financial services standpoint, institutions are currently in the process of exploring potential tie-ups and proof of concepts in the blockchain space. Bahrain-based Bank ABC became the first regional bank to join the R3 distributed ledger consortium in a bid to assess how blockchain can help it better deliver its digital strategy.

As WPS is rolled-out, the opportunities to adopt blockchain to make cross-border payments quickly, efficiently and cost effective will increase.
5.0 Looking Ahead

5.5 Raising Awareness

Awareness is key to promoting the rise of the industry within this region. As per the results of the survey, only 26.3% of respondents in Bahrain voiced that they had a high level of understanding of the FinTech industry.

Furthermore, 74% of the respondents claimed that they are currently unaware of FinTech conferences, workshops, and events being held in Bahrain.

Hence, as the industry is relatively new, it will require further promotion and awareness-raising about what FinTech is, how is it affecting the financial services sector, why do we have innovation-enabling regulations, and how does it impact and enhance the customer experience.

This is already happening in Bahrain as we are witnessing more FinTech-related workshops, seminars and conferences. Over the upcoming months, dedicated events on blockchain, InsurTech, RegTech and the cloud will be organized.

5.6 Increasing FinTech Investments

A more comprehensive funding ecosystem is required to enable FinTech to not only base their operations in Bahrain, but to scale up. A growing number of local, regional, and international accelerators being established in Bahrain has grown thus increasing sources of potential capital that could flow into FinTechs.

This is coupled with the launch of the $100 million VC Fund of Funds (Al Waha Fund), which will have an allocation to FinTech, and the announcement of dedicated FinTech funds by other institutions.
5.7 TALENT DEVELOPMENT

Human capital is necessary to support the positioning of Bahrain’s FinTech ecosystem as a regional and global leader. Advancements in technologies such as cloud, artificial intelligence, and machine learning alongside data analytics have transformed the way businesses are run and developed. This makes it critical to identify and address the skills gaps required to succeed.

Bahrain already has strong financial services-related talent. Nonetheless, technology and entrepreneurial skills need to be developed further. This would require equipping the local market with the practical skills and knowledge through substantive educational resources such as targeted courses to bridge the gap in technical and entrepreneurial skills.

Efforts are already underway to develop the talent pool over the upcoming years in partnership with universities, industry and other bodies. The intention is to equip students and graduates with specific skills that will allow them to pursue a career in FinTech and the financial services industry.

Additionally, local universities are now exploring partnership opportunities with industry and FinTechs to further their innovation-related research and contribute more to the development of the FinTech ecosystem.

The University of Bahrain (UOB) launched a program called “Forsati for her” that aims at equipping 3000 females with relevant programming skills, with the intention of ultimately launching 30 startups of which some would be in FinTech. This is part of UOB’s five year transformation plan of making STEM education more attractive, increasing digital literacy and participation in the entrepreneurial and innovation ecosystem.

Additionally, the Bahrain Polytechnic organized an AI Hackfest with Microsoft for both university and high-school students to gain practical skills in AI.

With the country’s Cloud First Policy, we are starting to see an increase in cloud-related training to help accelerate the digital transformation and equip individuals with the skills and tools needed to contribute effectively to the country’s innovation and smart initiatives.

Microsoft has launched their Azure Skills cloud training and certification programs alongside AWS’s programs aimed at decision makers, solutions architects, developers, and systems operations administrators.
6 Partners

A list of leading institutions that are partners with Bahrain FinTech Bay. These institutions have partnered with Bahrain FinTech Bay to align with its objectives and initiatives.
Our partners showcase a wide range of verticals and industries including: governmental bodies, financial institutions, corporates, consultancy firms, universities, associations, and FinTech startups.
6.2 Founding Partners

Founding Partners

Arab Financial Services

http://www.afs.com.bh
P.O. Box 2152
Manama, Kingdom of Bahrain
Middle East and North Africa
50-200

Owned by 39 banks and financial institutions and regulated by the Central Bank of Bahrain, AFS offers innovative and end-to-end payment and FinTech solutions to its clients along with state-of-the-art value added services suite. Operating three live data centers in Bahrain, Oman and UAE, AFS is certified by ISO22301 for business continuity and disaster recovery capabilities. With a strong capital base and client support, AFS continues to drive performance and create value for its clients across the region and beyond.

Ahli United Bank

http://www.ahliunited.com
P.O. Box 2424
Manama, Kingdom of Bahrain
Middle East and North Africa
1,000-5,000

Ahli United Bank (AUB) is a leading regional financial services group, offering a comprehensive range of retail, corporate and private banking as well as wealth management, treasury and investment services to clients throughout the Middle East and the UK. AUB is geared towards balanced, sustainable growth through the development of a larger customer base across sectors and geographies. To date, AUB network comprises the following subsidiary and associate banks: Ahli United Bank (Bahrain), Ahli United Bank (Kuwait), Ahli United Bank Limited (UAE), Ahli United Bank (Egypt), Ahli United Bank (United Kingdom), Commercial Bank of Iraq (Iraq), Ahli Bank (Oman) and United Bank for Commerce & Investment (Libya).

AUB’s strong performance and achievements over the years have earned it a string of prestigious international awards, including most recently: “Bank of The Year, Middle East, 2016” for the second time by FT’s The Banker and ‘Best Bank in Bahrain, 2018’ by both Global Finance and Euromoney for the thirteenth consecutive year.

© 2018 Bahrain FinTech Bay
Founding Partners

Al Baraka Banking Group

Al Baraka Banking Group is a Bahrain Joint Stock Company licensed as an Islamic wholesale bank and listed on Bahrain Bourse and Nasdaq Dubai stock exchanges. It is a leading international Islamic banking group providing its unique services in countries with a population totaling around one billion. Al Baraka offers retail, corporate, treasury, and investment banking services in accordance with Shari’a principles. The Group has a wide geographical presence in the form of subsidiary banking units and representative offices in 16 countries, which in turn provide their services through 675 branches.

Al Salam Bank

Al Salam Bank-Bahrain (ASBB) was established on January 2006 and it is listed in Bahrain Bourse and Dubai Financial Market. The Bank offers its diverse customers with a comprehensive range of unique and dynamic Shari’a-compliant Retail Banking, Private Banking, Investment Banking, Corporate Banking and Treasury Services. ASBB is adopting internationally recognized standards and it is equally committed to its role as a concerned corporate citizen by contributing to the social and economic well-being of various local communities in which it invests and operates.
6.2 Founding Partners

Founding Partners

AMEX (Middle East) B.S.C.(c)

http://www.americanexpress.com.bh

P.O. Box 5990
Manama, Kingdom of Bahrain

Middle East and North Africa

500+

American Express Middle East (AEME) provides reliable, flexible, tailored and rewarding solutions for its Cardmembers, merchants and business partners. American Express is the Card for those individuals who value world class service, rewards, access and peace of mind wherever they are in the world. Operating in the MENA Region since 1959, AEME set up its first office in Bahrain in 1977. Today, AEME covers its consumer card, corporate payments and merchant businesses across the region.

At AEME, innovation is something we keep close to our hearts. It is the driving force that shapes our business and the services we provide that make a difference every day. AEME hosted its first Hackathon, which gathered digital coders, disruptors and innovators from across the region. The objective was to build a solution that embraces digital payments, making it more accessible and relevant as we move towards a cashless society.

Arcapita

https://www.aricapita.com

P.O. Box 1357
Manama, Kingdom of Bahrain

Middle East and North Africa, North America, Europe, Asia

50-200

Arcapita is a global leader in Shari‘ah compliant alternative investments, with offices in Bahrain, Atlanta, London and Singapore, Arcapita is a gateway into global markets for investors, offering opportunities across MENA, the US, Europe and Asia. The Firm’s principal lines of business are private equity and real estate, and its management has a 20-year track record of over 80 investments exceeding $30 billion in transaction value.
6.2 Founding Partners

**Batelco**

- [https://www.batelco.com](https://www.batelco.com)
- P.O. Box 14
  Manama, Kingdom of Bahrain
- Middle East and North Africa
- 1,000-5,000

Batelco, the leading digital solutions provider in the Kingdom of Bahrain, is proud to be onboard as a founding partner of Bahrain FinTech Bay. Batelco serves the corporate and consumer markets through the delivery of cutting-edge communications solutions. Its comprehensive portfolio for the residential, business, multinationals and government segments in Bahrain and globally include fixed and mobile communication services, broadband internet services and data communication services.

The company offers a large portfolio of other services including content, IPTV, ICT solutions, Mobile Finance services and Cloud services. Batelco is committed to ensuring the best in class digital and FinTech solutions for Bahrain’s consumers and businesses, and through collaboration with partners is dedicated to supporting the further development of the industry.

**Bank of Bahrain & Kuwait**

- [https://www.bbkonline.com](https://www.bbkonline.com)
- P.O. Box 597
  Manama, Kingdom of Bahrain
- Middle East and North Africa
- 500-1,000

Bank of Bahrain & Kuwait (BB)K has been the pioneer in Retail and Commercial Banking for 48 years in the Kingdom of Bahrain. As an innovative market leader, BBK has built a reputation respected locally and internationally, sustained by constantly being at the forefront in incorporating the latest technologies and providing superior products and services while expanding into new territories. High standards in corporate governance have been fundamental in maintaining BBK’s leading position within the financial sector.
Founding Partners

**BENEFIT**
- [https://www.benefit.bh](https://www.benefit.bh)
- P.O. Box 2546
  - Manama, Kingdom of Bahrain
- Middle East and North Africa
- 50-200

BENEFIT was established in November 1997 by 17 commercial banks as the National ATM and Point of Sale switch of Bahrain. It was initially licensed by the Central Bank of Bahrain (CBB) to be ‘the provider of ancillary services for the financial sector,’ and soon expanded to cover markets outside Bahrain. The company’s mandate was very simple – to improve, to enhance, to add value and to enable the local and regional financial industry to thrive on a global scale.

The Company was formed to enable the financial sector in Bahrain and it remains committed to strengthen Bahrain’s position as the financial hub of the region. And hence continues to provide robust infrastructural support for the financial industry – enabling the banking community to seamlessly connect with their customers and help them achieve their goals. In addition, BENEFIT strives to create synergy in financial services through facilitating Fintech and establishing strong alliances with different stakeholders.

**BFC Group**
- [https://www.bfcgroupholdings.com](https://www.bfcgroupholdings.com)
- P.O. Box 243
  - Manama, Kingdom of Bahrain
- Middle East and North Africa
- 500-1,000

BFC Group specializes in global money transfers, foreign currency exchange, and wholesale currency services. The history of the Group dates back over 100 years when Bahrain Financing Company (BFC) first traded in gold bullion and currency exchange. Today, the Group includes a fully licensed Bank in the UK, BFC Payments who operate as a Payments Solutions Provider, Card Processor and offer other ancillary services, as well as an international network of money exchanges with over 135 branches in 5 countries. The Group’s EzRemit money transfer product extends our worldwide reach with agents in over 30 countries in over 46,000 locations.
Bahrain Insurance Association has about 50 members, comprising local insurance companies, foreign insurance companies, reinsurance, brokers and service providers. The association’s main objectives include bringing together the insurance industry to facilitate exchange of information and cooperation in all matters relating to the industry, creating better insurance awareness for the various segments of the society, stimulating education and training, improving the technical skills within the insurance industry, attending relevant conferences, meetings and events and organizing seminars and specialized programs.

A.A. Bin Hindi Group is one of the most reputed conglomerate representing few of the world’s best brands namely KIA, Renault Trucks, numerous globally reputed construction equipments, Samsung electronics, Apple, turnkey solutions in technology to B2B customers, Sixt rent a car, ENOC oil, Sumitomo Tires, Federal Tires, wide range of car care products and services offered through modern Car Care centers namely Enaya Car Care, quick & easy vehicle maintenance services through Quickfix Centers, – all under various divisions namely Bin Hindi Motors, Bin Hindi Heavy Vehicle & Construction Equipment Division (HVCE), Bin Hindi Informatics, Bin Hindi E-zone, Enterprise Electromechanical Division (EEMD) Bin Hindi Transport co., and Bin Hindi Car Care.

A trusted household name, Bin Hindi’s commitment to customer service and its ability to maintain and deliver as per promised schedules has seen the group carve a prominent niche for itself in the upper echelons of Bahrain’s business and trading.
Incorporated in 1979 as the first Islamic bank in the Kingdom of Bahrain, Bahrain Islamic Bank (BisB) has played a pivotal role in the development of the Islamic banking industry and the Kingdom’s economy. The Bank operates under an Islamic Retail banking license from the Central Bank of Bahrain and is listed on the Bahrain Bourse. A steadfast focus on continuous innovation, strong corporate governance and risk management, employee development, and the use of state of the art technology to deliver superior customer service, has cemented Bahrain Islamic Bank’s position as the leading Sharia’a – compliant bank.

BNP Paribas have been present in the Middle East for over 40 years and have operations in five countries: Bahrain, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates in addition to covering Oman. In Africa, we have been active for more than 70 years, first through our Retail Banking network followed by the more recent addition of Corporate & Institutional Banking covering North Africa, South Africa and West Africa.
Cisco (NASDAQ: CSCO) is the worldwide technology leader that has been making the Internet work since 1984. Our people, products, and partners help society securely connect and seize tomorrow’s digital opportunity today.

Cork Information Technology is part of the Cork Bahrain Holdings and one stop Solution provider for Digital Transformation of the organization and focus on MEA market having offices in Bahrain, UAE, KSA and India. Our key focuses are ERP (Epicor, iScala), Microsoft Services, Rapid Application Development (Out systems) and eMudhra solutions (eKYC, Paperless Office, emSigner, Digital Certificates). In addition to CIT, we have subsidiary company Cork VSoft Fintech, providing financial services solutions like Internet & Mobile Banking, Payment solutions, Core Banking Solution, Cheque Truncation, Block chain, Big Data Analytics. The Fintech entity is also Founding Partner member in Bahrain Fintech Bay.
6.2 Founding Partners

Founding Partners

GFH Financial Group

https://www.gfh.com
P.O. Box 10006
Manama, Kingdom of Bahrain
Middle East and North Africa
50-200

GFH is considered to be one of the leading Gulf banks and underscored by its ability to unlock investment opportunities and potential through the harnessing of economic growth in some of the world’s most dynamic emerging economies. GFH has a long track record of identifying and delivering investment opportunities for its investors and shareholders, and has been awarded for its outstanding innovations in Islamic Finance.

Gulf International Bank

https://www.gib.com
P.O. Box 1017
Manama, Kingdom of Bahrain
Middle East and North Africa, North America, Europe
1,000-5,000

GIB is owned by the governments of the six Gulf Cooperation Council countries, with Saudi Arabia’s Public Investment Fund being the main shareholder. GIB aims to deliver bespoke banking solutions to a wide customer base in the region and beyond. This includes corporate banking, the world’s first Shari’a compliant digital retail banking service, meem by GIB, and investment banking through its fully owned subsidiary GIB Capital.
Founding Partners

Ibdar Bank

https://www.ibdarbank.com

P.O. Box 1001
Manama, Kingdom of Bahrain

Middle East and North Africa

50-200

Ibdar Bank BSC (c) is a fully licensed Islamic Wholesale Bank, regulated by the Central Bank of Bahrain. The Bank is active in the ethics driven debt and capital market providing Islamic Bond issuance, wealth management, alternative investments and other investment banking services. The Bank’s roots stem back to 1981 and today Ibdar Bank is in the top tier of Bahrain’s Islamic Wholesale Banks. Ibdar understands itself as a top Islamic challenger bank focusing on the Global Islamic Digital Economy (GIJE) providing sector expertise and a proven track record in Real Estate, Aviation, Trade & Manufacturing and FinTech. The Bank’s shareholder base includes blue chip financial institutions from Kuwait, Bahrain, Saudi and the UAE.

Ithmaar Bank

https://www.ithmaarbank.com

P.O. Box 2820
Manama, Kingdom of Bahrain

Middle East and North Africa

200-500

Ithmaar Bank B.S.C. (closed) ("Ithmaar Bank") is a Bahrain-based Islamic retail bank that is licensed and regulated by the Central Bank of Bahrain and provides retail, commercial, treasury & financial institutions and other banking services. Ithmaar Bank is a wholly-owned subsidiary of Ithmaar Holding B.S.C. (formerly named Ithmaar Bank B.S.C.) which is listed on the Bahrain Bourse, Bourse Kuwait and Dubai Financial Market. Ithmaar Bank provides a diverse range of Sharia-compliant products and services that cater to the financing and investment needs of individuals and institutions. Ithmaar Bank also maintains a presence in overseas markets through its subsidiary, Faysal Bank Limited (Pakistan).
Investcorp is a leading global provider and manager of alternative investments. It focuses on generating value through a disciplined approach in corporate investment, real estate, alternative investment solutions and credit management. Since inception in 1982, Investcorp has made over 175 corporate investments in the U.S., Europe and MENA region. Investcorp operates across its offices in Bahrain, New York, London, Abu Dhabi, Riyadh, Doha, and Singapore. As at December 31, 2017, the Investcorp Group had $22.2 billion in total AUM.

Kuwait Finance House-Bahrain provides Islamic commercial and investment banking services. Established in 2002 as a wholly owned subsidiary of Kuwait Finance House-Kuwait; which was established on 1977; KFH-Bahrain specializes in developing and bringing to market the highest quality Islamic compliant banking and investment products, all of which are delivered by a staff of experienced and dedicated professionals with a deep understanding of the market and the clients we serve.
Microsoft

Microsoft empowers financial institutions to reimagine the customer experience, enable a secure and productive digital workplace, optimise operations and risk management and transform products with real-time predictive digital processes.

National Bank of Bahrain

Established in 1957 as Bahrain’s first locally owned Bank, the National Bank of Bahrain has grown steadily to become the country’s leading provider of retail and commercial banking services. With a major share of the total domestic commercial banking market and the largest network of 26 branches and 59 ATMs, the Bank plays a key role in the local economy. Additionally, the bank operates in Saudi Arabia and the UAE through its Riyadh and Abu Dhabi branches. The Bank currently operates in Saudi Arabia and the UAE through its Riyadh and Abu Dhabi branches.
6.2 Founding Partners

Founding Partners

NEC Payments

https://www.necpayments.com
Classic Tower, office 32
Manama, Kingdom of Bahrain
Middle East and North Africa
10-50

NEC Payments are a Digital Banking and Payment Technology company that create solutions to help banks to transform, and find new and efficient ways for businesses and consumers to manage money and make payments. Our innovative cloud-ready technology solutions support a broad range of consumer and business products and value propositions; they bridge the gap between legacy core banking and processing systems; enable multi-channel integration with external networks and acceptance/validation methods; and improve security, performance, and financial control.

PayTabs

https://www.paytabs.com
Business Bay Building, no. 1260
Manama, Kingdom of Bahrain
Middle East and North Africa, Asia
50-200

PayTabs is an innovative economy centric payment solution built to provide buyers and sellers an advanced technology to pay and get paid. The global company caters to small, medium and large enterprises via different business models. Paytabs offers instant online payment solutions to empower e-commerce entrepreneurs, merchants and professionals by allowing them to accept credit and debit payments at reasonable rates. This facilitates business growth with stronger cash flows while still providing a sizeable profit opportunity.
Founding Partners

Payment International Enterprise

Payment International Enterprise (PIE) is one of the first and largest fintech companies in Bahrain, licensed by the Central Bank of Bahrain as a Payment Service Provider, Card Issuer and eWallet and eMoney Issuer. PIE founders are serial entrepreneurs in the MENA region since early 1900’s where they started and founded several trade, real state, pharmaceutical, financial service, and e-commerce establishments. PIE has a vast experience in distribution services and building new products and services to meet MENA region needs for innovative, reliable, and efficient financial products for the masses. Their mission is to enhance the financial inclusion by working with banks, Telco’s, and distribution networks to provide effective efficient financial services that enable customers to reduce their cash dependence.

Roland Berger

Roland Berger, founded in 1967, is the only leading global consultancy of German heritage and European origin. With 2,400 employees working from 34 countries, the company has successful operations in all major international markets. The consultancy is an independent partnership owned exclusively by 220 Partners. Roland Berger advises major international industry and service companies as well as public institutions. The services cover the entire range of management consulting from strategic advice to successful implementation.
Founding Partners

Tap Payments

- https://www.tap.company
- 8 Mall
  Kuwait City, Kuwait
- Middle East and North Africa
- 10-50

Tap is amongst the first Fintech companies in the region and was established to revolutionize the way businesses manage their finances, providing easy, fast and smooth solutions with an innovative approach and user experience in online payments. Today, the company manages a large number of businesses, ranging from SME's to big corporations. Tap has boosted businesses internally by simplifying the process of adopting online payments that are aligned with the region's payment behavior, and has supported businesses with their global outreach by providing them with additional payment options. The company prides itself in constantly evolving its' products to exceed industry standards and in delivering impeccable customer service with the aim of helping businesses grow locally, regionally and globally.

01 Systems

- https://www.01systems.com
- P.O. Box 2065
  Manama, Kingdom of Bahrain
- Middle East and North Africa
- 50-200

With a portfolio of 300+ customers in over 90 countries, 01 Systems provides state of the art solutions and services in areas of Digital Transformation, Signature Management, Document Management, and Business Process Management, for financial and non-financial sectors. Over the years we have improved and enhanced our products through continued cooperation and interaction with our customers to ensure that we deliver a positive customer service and keep our clients satisfied with state of the art solutions for their mission critical operations.
6.3 Corporate Partners

Corporate Partners

Mohammed Jalal & Sons

Mohammed Jalal & Sons (MJS) is a diversified business conglomerate, and one of the region’s most trusted business names. Founded in 1947 in the Kingdom of Bahrain, the company has evolved to become a foremost business in the region with market leading operations throughout the GCC. MJS activities include construction, contracting, engineering, trading, IT solutions, food and beverage, travel, pest control, interior design, security, facilities management, and real estate to name a few.

SICO

SICO is a leading regional asset manager, broker and investment bank with more than $1.2 billion in assets under management (AUM). Operating under a wholesale banking license from the Central Bank of Bahrain, it also oversees two wholly owned subsidiaries, Abu Dhabi-based brokerage SICO Financial Services and specialised regional custody house SICO Funds Services Company (SFS) in Bahrain. Backed by a robust and experienced research team that provides regional insight and analysis of more than 90 percent of the GCC’s major equities, the Bank is known for its strong market making capabilities.
Corporate Partners

Adsertor

https://www.adsertor.net
P.O. Box 11299
Manama, Kingdom of Bahrain
Middle East and North Africa, Europe
10-50

A UK based technology company with a GDPR compliant platform that enables the centralization and consolidation of a business’s data into one space. Our platform then imports website visitor interaction and engagement insights captured from a visitor journey and overlays this information over the centralized database creating a 360 degree view of new and existing clients. The platform then produces instant business intelligence dashboards which are available for each and every business department. Adsertor is endorsed by the UK Governments Lead Tech Centre and our current clients include Fujitsu, Premier Inns, Manchester Chamber of Commerce and many more.

Murabaha Club

https://www.murabahaclub.com
6 St Andrew St
London, United Kingdom
Europe
10-50

Murabaha Capital provides small businesses access to automated funding through its financial services data and technology platform. It operates Murabaha Club, a fully automated and online lending platform to provide fully automated funding to businesses and support customer service. Murabaha Capital Limited, is a financial technology and data company that developed a new, automated way to lend money to small businesses. The company reduced the manual application process to one that is 100% automated. Businesses can use their own data to submit an application online and receive an immediate decision and access to funds.
6.4 Associate Partners

Associate Partners

Takaud Savings and Pensions

- https://www.takaud.com/bh
- P.O. Box 65167
  Manama, Kingdom of Bahrain
- Middle East and North Africa
- 50-200

Takaud Savings and Pensions is licensed as an Investment Business Firm and is a closed joint stock company incorporated in the Kingdom of Bahrain. Takaud is a specialist savings and pensions provider. Takaud has been established by experts in the field with a wealth of local and international experience. The company’s mission is to build long term savings and private pension products that address the needs of the citizens and residents of the MENA region.

Travelex

- https://www.travelex.com
- P.O. Box 24344
  Manama, Kingdom of Bahrain
- Global
- 5,000-10,000

Founded in 1976, Travelex has grown to become the world’s leading specialist provider of foreign exchange, with presence in 29 countries. The Group has built a growing online and mobile foreign exchange platform, across 23 countries, and developed a network of over 1,025 ATMs and 1,500 stores at both on-airport and off-airport locations globally. It also processes and delivers foreign currency orders for major banks, as well as for travel agencies, hotels and casinos. In addition, the Group sources and distributes large quantities of foreign currency banknotes for customers including central banks and international financial institutions. The Group is also active in the remittances and payments.
The Bahrain Association of Banks (BAB) was established by a Ministerial decree in 1979, and registered under the central bank of Bahrain in 2010. BAB brings together banking institution of all sizes and charters in kingdom of Bahrain and works towards enhancing Bahrain image as the financial hub of the Middle East. The Association provides an open forum where banks can come together to collectively discuss and solve their shared problems. BAB is also actively engaged in promoting banking conferences, exhibitions and seminars that bring overseas banking delegations to Bahrain and create business opportunities for all members.

Bahrain Bourse is a self-regulated multi-asset marketplace. Bahrain Bourse aims to offer its investors, issuers, and intermediaries a comprehensive suite of exchange-related facilities including offering listing, trading, settlement, and depository services for various financial instruments. Bahrain Bourse aims to offer its stakeholders with the best investment and trading solutions, and pair it with creative insights and problem-solving skills to provide its investors, issuers, and intermediaries with valuable resources to meet their every expectation. Bahrain Bourse’s key growth pillars underpin its way of conducting business and how it interacts with the stakeholders: Origination, Innovation, Collaboration, and Pioneering Spirit, and all of them working together is what enables them to offer you with an “Oasis of Investment Opportunities.”
BDB commenced its operations on January 20, 1992 as an effective public policy instrument which assists in the creation and development of SMEs in Bahrain. Over the years, the services provided by BDB have been fundamental in the development of the SME segment in Bahrain and are catalysts for the establishment of start-ups and in the growth of existing SMEs. The bank has significantly contributed to the socio-economic development of the country through diversifying the economic base, creating new employment opportunities for Bahrainis, and supporting startups, entrepreneurs, and SMEs. Bahrain Development Bank (BDB) supports entrepreneurship in Bahrain by providing both financial (loans, financing tools, venture capital) and development (Rowad Program and Incubation) products & services. The services assist individuals and companies across the business spectrum from pre start-up all the way to expansion utilizing unique and specialized programs and business models.

Bahrain Polytechnic has been established by the Bahrain Government to address the need for a skilled Bahraini labour force, with the aim of supporting economic growth and diversification. Bahrain Polytechnic delivers applied, professional and technical qualifications. Graduates will be work-ready; confident and competent, aware of what is expected of them in the professional world, and able to perform to their full potential. Programmes, qualifications and courses, and the underlying methodology of how they are delivered are developed in consultation with businesses, industries, professions, international education and training institutions. This strategy, set by the Board of Trustees, will ensure that Bahrain Polytechnic graduates meet the needs of the labour market, thus supplying Bahrain’s economy with a source of highly skilled graduates.
6.5 Supporting Partners

Supporting Partners

Central Bank of Bahrain
- https://www.cbb.gov.bh
- P.O. Box 27
- Manama, Kingdom of Bahrain
- Middle East and North Africa
- 200-500

The Central Bank of Bahrain (CBB) is a public corporate entity established by the 2006 CBB and Financial Institutions Law. It was created on 6th September 2006. The CBB is responsible for maintaining monetary and financial stability in the Kingdom of Bahrain. It succeeded the Bahrain Monetary Agency, which had previously carried out central banking and regulatory functions since its establishment in 1973. CBB implements the Kingdom’s monetary and foreign exchange rate policies, manages the government’s reserves and debt issuance, issues the national currency and oversees the country’s payments and settlement systems. It is also the sole regulator of Bahrain’s financial sector, covering the full range of banking, insurance, investment business and capital markets activities. The CBB’s wide scope of responsibilities allows a consistent policy approach to be undertaken across the whole of the Kingdom’s financial sector.

C5 Accelerate
- https://www.c5accelerate.com
- 10th Fakhro Tower
- Sanabis, Kingdom of Bahrain
- Middle East and North Africa, North America, Europe
- 10-50

C5 Accelerate is a London, Bahrain and Washington D.C. based technology investment firm. C5 Accelerate is developing a Cloud Accelerator Cluster in Europe, the Middle East, Africa and the United States, alongside Amazon Web Services. Its mission is to accelerate best-of-breed startups to meet the growth opportunity being created by the geographic expansion of AWS, the world’s leading cloud computing platform.
Supporting Partners

Economic Development Board

https://www.bahainedb.com
P.O. Box 11299
Manama, Kingdom of Bahrain
Middle East and North Africa, North America, Europe, Asia
50-200

The Bahrain Economic Development Board (EDB) is an investment promotion agency with overall responsibility for attracting investment into the Kingdom and supporting initiatives that enhance the investment climate. The EDB works with the government and both current and prospective investors to ensure that Bahrain’s investment climate is attractive, to communicate the key strengths, and to identify where opportunities exist for further economic growth through investment. The EDB focuses on several economic sectors that capitalise on Bahrain’s competitive advantages. These sectors include financial services, manufacturing, ICT, tourism, logistics and transport.

Osool Asset Management

https://www.osool.com.bh
P.O. Box 11775
Manama, Kingdom of Bahrain
Middle East and North Africa
50-200

Osool Asset Management BSC(c) is an investment management company, serving the interests of its founding shareholders: the Bahrain’s Social Insurance Organisation (SIO) and the Military Pension Fund (MPF). The Company is headquartered in the Kingdom of Bahrain and is regulated by the Central Bank of Bahrain as a Category I Investment Firm. Established in 2011, the company’s sole aim is managing the investment portfolio on behalf of its clients and shareholders. Its main objectives are to deal in financial instruments as principle and agent and directing collective investment undertakings.
Rowad is a comprehensive platform run out of the Development Services division of Bahrain Development Bank designed to assist and empower entrepreneurs in starting their business. The program aims to support entrepreneurs and startup eco-system by providing product and services at any stage of the business cycle starting as early as the idea stage. The program’s objective is to foster the creation and development of enterprises and provide support to enhance the productivity and growth of enterprises and individuals by providing a holistic eco-system for entrepreneurs. The Rowad Program offers a variety of solutions supporting the needs of entrepreneurs to help start or grow their business through either the Rowad Program, Seed-Fuel, and the Invested platform.

StartUp Bahrain is a community initiative made up of startups, corporates, investors, incubators, educational institutions and the Bahrain government to promote startup culture in Bahrain. While having a focus on technology, the initiative seeks to help and promote startups in every sector and stage. Areas of focus are: community, incubators, funding, education, corporates and policy & regulation. Efforts are being made in each pillar to make Bahrain a great place to startup and scale companies regionally and globally. There have been a number of successes so far: an increase in the number of startup companies, new incubators and accelerators established, a fintech sandbox introduced as well as Crowdfunding regulation and a pipeline of items to be introduced this year including: new bankruptcy laws and new funding schemes.
Supporting Partners

University of Bahrain

https://www.uob.edu.bh
P.O. Box 32038
Zallaq, Kingdom of Bahrain
Middle East and North Africa
10,000+

The University of Bahrain is the national university dedicated to excellence in teaching and learning; innovative research; the generation and dissemination of knowledge; development of the student’s personality, skills, and knowledge; and building partnerships with the public and private sectors through distinction in its academic programs, use of technology, faculty student activities, fostering innovation, cultivating a culture for quality, and reaching out to the local, regional, and global communities. UOB research focus is on solving regional issues in water security, food security, renewable energy and disruptive technology working with leading global universities to achieve sustainable development goals.

In the 2019 QS world university rankings, university of Bahrain was the only ranked university from Bahrain cementing its place as a leading institute both regionally and internationally. UOB graduates are recognized globally for their skills and many alumni hold senior positions in both the public and private sector both in Bahrain and overseas.
Bahrain FinTech Bay

Information on Bahrain FinTech Bay, our programs, and events
7.0 Bahrain FinTech Bay

Bahrain FinTech Bay is the largest FinTech hub in the Middle East and is a dedicated FinTech co-working space to position Bahrain as a regional FinTech hub.

The purpose of Bahrain FinTech Bay is to: accelerate local early stage FinTech companies to the next growth stage of commercialization and expedite partnership opportunities; attract foreign growth stage FinTech companies to establish their regional head-offices in Bahrain and facilitate their go to market approach into GCC and; accommodate FinTech companies to accelerate their customer acquisition and scale their product and services offering through our partner ecosystem.

We aim to: offer both private and public sector with a physical meeting point to co-create, share resources, and align initiatives; operate in a platform neutral (not a single corporate branded/affiliated) dedicated FinTech space to foster the development and interaction between all the stakeholders in Bahrain’s FinTech Ecosystem and; to further solidify Bahrain’s international reputation as the FinTech hub for the GCC and Middle East through a global FinTech partner network.

We want to provide our partners with physical hub and a strong value proposition to incubate impactful FinTech initiatives, to ideate, develop, and accelerate the future proofing of Bahrain’s financial services sector in a leading regional FinTech hub. We believe in partnerships and the creation of a complete ecosystem that will drive the FinTech industry in the Middle East.
7.1 Bahrain FinTech Bay Dimensions

Ultimately, Bahrain FinTech Bay (BFB) aims to address key dimensions correlated with successful, thriving ecosystems for FinTechs and other players alike.

MARKET

As of January 2018, Bahrain hosts a network of roughly 400 financial services centers and financial institutions present in the country. Bahrain FinTech Bay can act as a bridge between the large network of financial institutions and FinTech firms to promote discussions and highlight solutions for the industry as a means of raising awareness of FinTech.

Bahrain FinTech Bay can further act as a conduit for collaboration in a model similar to that implemented in Singapore, motivating incumbents and FinTech firms to collaborate, raising awareness and ultimately innovative solution adoption. Firms can also strategically leverage BFB as a hub to supply domestic market demand, accessing a high concentration of financial institutions as well as a gateway to larger markets in the region.

Through BFB’s bespoke Venture Acceleration Program FinTech adoption in a growing ecosystem will be addressed by presenting mature and innovative solutions to real problems in the industry, setting a precedence for collaboration and partnerships.

FinTech Consortium also provides an opportunity to promote the outreach of FinTech firms in Bahrain’s market. FinTech Consortium is a FinTech Incubator, that aims to further the development, interaction and acceleration of FinTech ecosystems. It currently has offices in Singapore, Bahrain, and North America. As a result, FinTech Consortium can assist FinTech firms to reach global markets including in South East Asia and North America.

INFRASTRUCTURE

Impactful programs and organizations are required in FinTech to promote the ecosystem. Such programs offer a variety of tools to elevate the ecosystem including affordable office spaces for startups.
Additionally, infrastructure plays a substantial role in the success of FinTech with the access to fast Internet speed.

Bahrain FinTech Bay offers dedicated workspace to promote collaboration between key stakeholders in the ecosystem. Additionally, BFB is aiming to organize key programs promoting the role of Bahrain as a regional hub.

BFB is organizing key conferences in Bahrain during 2018 including BlockOn, InsurByte, and RegFact. BlockOn is a conference that calls on the community to investigate the challenges and opportunities of blockchain technology.

InsurByte is an annual conference focused on insurance technology that aims to provide knowledge exchange, foster synergies among market players to find solutions, and implement and promote innovative insurance practices in a collaborative, open, and transparent manner.

RegFact is the first global conference, featuring regulation and compliance related innovation. The conferences will involve the participation of key stakeholders including regulators, financial institutions, investors, incubators, accelerators, tech firms, startups, legal professionals, and media entities.

TALENT

The ability to tap into the existing pipeline of talent across financial, technical, and entrepreneurial areas is fundamental to the development of the FinTech ecosystem. Bahrain’s position as a regional financial center makes it prime for FinTech activity and innovation. Bahrain has a talent pool that is well educated and driven but is not yet fully equipped with the latest FinTech knowledge and has not been exposed to its real world applications.

Bahrain FinTech Bay aims to address both the lack of job opportunities for graduates and provide the expertise required to excel in today’s dynamic job market through the FinTech Talent Program. The goal is to support the organic development of the FinTech ecosystem and ensure Bahrain has the relevant skill-set and knowledge to capitalize on the new opportunities that FinTech disruption will create.

Candidates will get access to a dedicated job portal and internship opportunities with our partners whilst studying towards FinTech certification. They will also receive career development planning, mentorship, and access to events and workshops. Best performing candidates will also be given the opportunity for international internships.

The program underscores BFB’s commitment to creating a sustainable pipeline of local talent and its importance to the robustness of the local FinTech ecosystem, fuelling startups and incumbents alike.

Additionally, through the BFB’s Venture Acceleration Program, foreign entrepreneurship and expertise will be attracted to further develop local talent. The program underscores BFB’s commitment to the development of local startups and their importance to the robustness of the local FinTech ecosystem.

Bahrain FinTech Bay also partnered up with the McDonough business school, George Town University for FinTech
innovation and training. Collaboration initiatives may include development of FinTech certificate and degree programs, joint innovation labs, joint research and publication, and the exchange of FinTech ecosystem data. Furthermore, FinCon will facilitate faculty and student exchange programs and provide access to global hubs in Singapore and Bahrain for the purposes of research and academic residencies.

REGULATION

Successful FinTech hubs thrive in friendly regulatory environments that aim to support existing FinTech firms. Regulators are supportive in maintaining an ecosystem that both promotes innovation but also ensures the stability of markets. Key policies that can help FinTech hubs grow include adopting laws that assist the startup ecosystem. Bahrain's regulatory environment has adopted a collaborative and supportive approach toward FinTech.

BFB's existing relationship with Bahrain's regulating body, the CBB, can prove beneficial for a variety of stakeholders. Through the Venture Acceleration Program, which accelerates FinTech companies to the next growth stage, BFB can outsource potential applicants to the CBB's Regulatory Sandbox.
7.2 Bahrain FinTech Bay

Conferences

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Capacity</th>
<th>Location</th>
<th>Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>BlockOn</td>
<td>Q4 2018</td>
<td>200-300</td>
<td>TBC</td>
<td>Regulators, Financial Institutions, Investors, Incubators &amp; Accelerators,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tech Companies, Startups, Legal Professionals &amp; Media</td>
</tr>
<tr>
<td>RegFact</td>
<td>Q1 2019</td>
<td>100-200</td>
<td>TBC</td>
<td>Highly curated content and speakers to share on FinTech ecosystem, such</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>as blockchain, cybersecurity, and data analytics</td>
</tr>
<tr>
<td>InsurByte</td>
<td>Q2 2019</td>
<td>150-250</td>
<td>TBC</td>
<td>breakout events – reverse pitching sessions, fireside chats, masterclasses,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>and panels</td>
</tr>
</tbody>
</table>

InsurByte aims to be the knowledge-exchange platform to foster synergies among market players to find solutions to implement and promote best innovative insurance practices in a collaborative, open and transparent manner.

We aim to establish a platform where the latest innovations and applications for the insurance industry will be showcased.

RegFact is the first global RegFact conference, featuring Regulation and Compliance related innovation. RegFact will be expecting RegTech innovators and professionals of diverse backgrounds – including regulators, entrepreneurs, investors and financial industry executives.

BlockOn aims to aspire blockchain community to share ideas regarding collaboration, competition, culture and regulation needed for blockchain developments.

With a uniquely designed itinerary, blockchain enthusiasts of diverse backgrounds will find engagement in topics such as collaboration, competition, culture and regulation on blockchain.

This event is driven by the needs of the blockchain community, striving to bring together the best minds in the community.
7.3 Bahrain FinTech Bay Venture Acceleration Program

Validation and Assistance
Validate the product and assist in creating a value proposition answering the market needs.

Enterprise Engagement
Meet and collaborate with our partners and build lasting relationships with them.

Resources and Opportunities
Be considered an Venture Accelerator Partner, enabling you to access the various resources and regional contacts.

The Venture Acceleration Program is a customized program designed to accelerate FinTech Companies to the next growth stage of commercialization and expedite partnership opportunities with them.

Our accelerator program will leverage our strong partnership base to significantly improve startup growth and expansion outcomes. The program aims to accelerate companies’ commercial development by introducing their new innovative products and services to the high growth Bahraini market through our influential partners.

The Program underscores Bahrain FinTech Bay’s commitment to the development of the FinTech ecosystem by catalyzing startups’ growth locally and regionally.

Companies will also get exposure to several tools and services allowing them to develop in the region efficiently.

These tools include: access to regional sales opportunities, networking events, technical infrastructures, administrative, legal assistance, and local talent scouting.

- Research to create a broad picture of the market demand and problems.
- Having exposure to our diversified portfolio of partners.
- Support in setting up a venture in Bahrain tuned towards the regional growth and expansion.

Market Intelligence
Carefully review FinTechs that are available in the global market and choose the one that would have an impact the Bahraini market.

Selection Process
Exposure to Partners
Implementation & Regional Expansion
Execution & Validation
Assist in closing deals with early adopters in Bahrain.

© 2018 Bahrain FinTech Bay
REFERENCES

35. Hariharam, Sindhu."Insurtech Startup Democrance Raises US$800,000 To Make Insurance Accessible To All." Entrepreneur Middle East, 23 October 2017.
38. Innovating with RegTech. EY, 2016
40. Making BlockChain Real for Businesses. IBM, 2016.
47. KPMG report: Bahrain banking sector remains resilient in challenging times. KPMG, 5 July 2017.

7.5 References

56. "Welcome to Tamkeen.” Tamkeen.
57. “About.” Injaz Bahrain.
63. "Bahrain Development Bank Launches $100m Venture Capital Fund." Trade Arabia, 10 May 2018.