

Bahrain

Digital Payment Landscape Report 2022



Central Bank of Bahrain



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Overview

The growth and development of the banking and financial sector in Bahrain has been marked by a commitment to inclusive growth, financial stability and innovation.

An emphasis on delivering a safe, reliable and secure environment for the industry has ensured the sector continues to earn the trust of its stakeholders, and remains a key contributor to national prosperity.

The sector has been undergoing substantial transition over the years. The payment landscape, for instance, has moved from traditional systems to digital alternatives. Technologies have been introduced that address consumer and market dynamics, and support the drive towards greater autonomy and flexibility.

The Central Bank of Bahrain (CBB) performs a crucial role in ensuring that these developments take place without compromising on strict security and regulatory standards. As a regulator and facilitator, CBB has supported the introduction and structured development of advanced payment systems that have enabled the growing digitalisation of the financial sector.

In this report, we will look at the various initiatives undertaken by CBB, explore the digital tools and technologies that have been adopted, and examine the steps taken in ushering a digital economy.



Introduction

The payment value chain has undergone radical transformation in recent decades. New and innovative products and services have helped energise an already dynamic industry, and set the stage for more personalised experiences in customer engagement.

In Bahrain and around the world, the pandemic served as a catalyst to accelerate the rapid digitalisation of the payment landscape. With greater priority given to public health and safety concerns, consumer preferences began to shift towards contactless payment and socially distanced retail.

Today, Bahrain is on par with other international communities in dismantling the domination of tangible and in-person modes of financial services, and in paving the way towards a payment ecosystem characterised by flexibility, diversity and in some cases, instantaneous.

While traditional systems continue to operate side by side, the idea is to recalibrate the overall strategy into one that's customer-centric at its core, with the aim of formulating diversity in payment options and financial services. This approach is not new and it also underlines the rationale behind many of the steps Bahrain has taken over the years to strengthen its credentials as a regional financial centre.

CBB in its role as the Kingdom's financial regulator has overseen numerous digitalisation efforts that have helped in adding value to every customer interaction and also in enriching the overall experience.



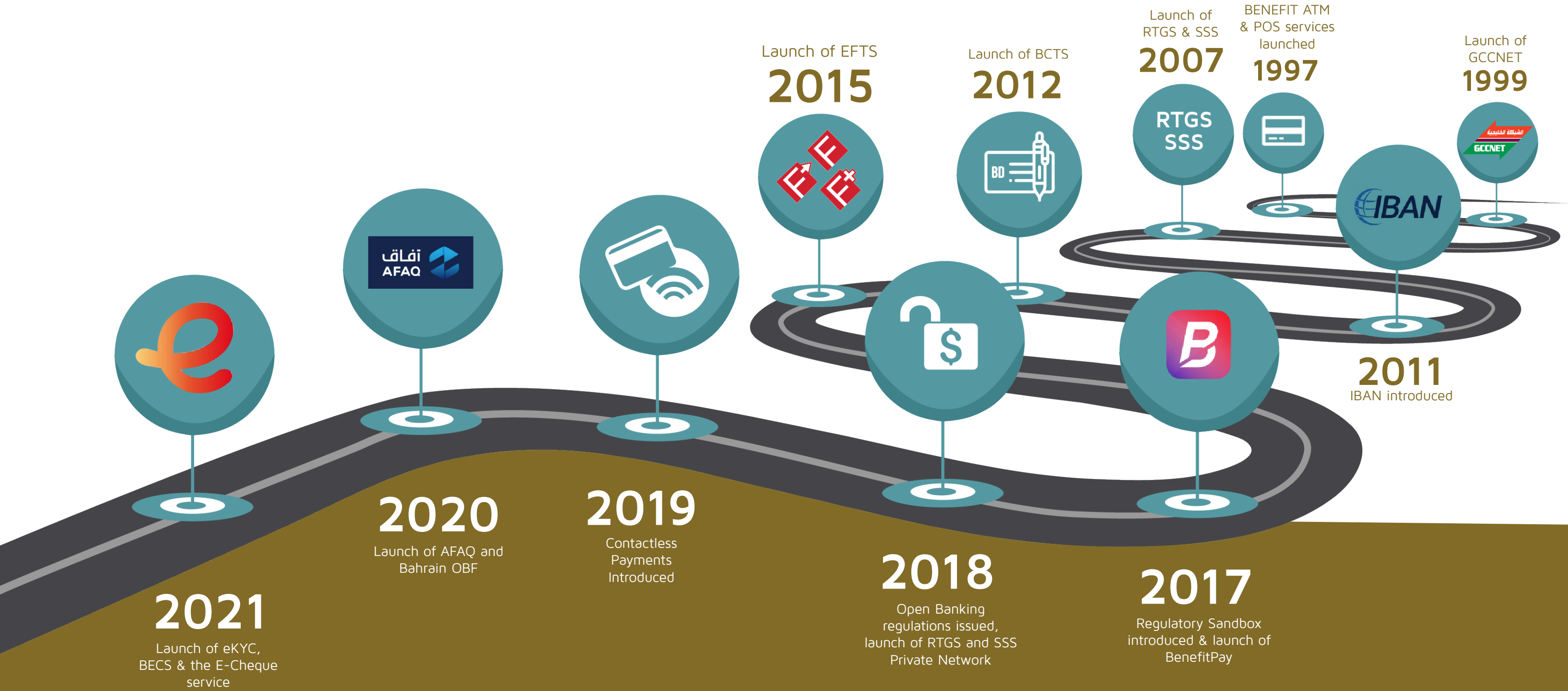
Amongst the earliest steps taken by CBB was the implementation of a semi-automated cheque clearing system, and then, in 1996, a common ATM switch was set up for all participating banks. The success of these initiatives prompted CBB to outsource the development of innovative banking services to a newly formed organisation, The BENEFIT Company (BENEFIT) in 1997.

BENEFIT provided an appropriate platform to channel these initiatives with the support of 17 commercial banks that were also its shareholders. The ATM service was extended to all GCC countries through the shared GCCNET ATM network, and soon after, debit card transactions received the same level of access across the region through the GCCNET Point-Of-Sale services and its Payment Gateway.

Subsequently, many more products and services were added to strengthen the modernisation drive of the banking system as well as the payments and settlements infrastructure. It included Real-Time Gross Settlement System (RTGS) and a Scripless Securities Settlement (SSS) System, introduction of the IBAN standard, Bahrain Cheque Truncation System (BCTS), Bahrain Electronic Cheque System (BECS), eKYC, BenefitPay, e-Cheques, to name a few.

What these initiatives did — and continue to do — is to showcase the dynamic nature of Bahrain's digitalisation efforts, and highlight that the digital tools continue to evolve in alignment with developments in technology and newer market trends. They further demonstrate the industry's ability to adapt itself to changes in the economic environment, and prepare a solutions-driven framework that would yield healthy returns for all stakeholders.

Digital payments timeline



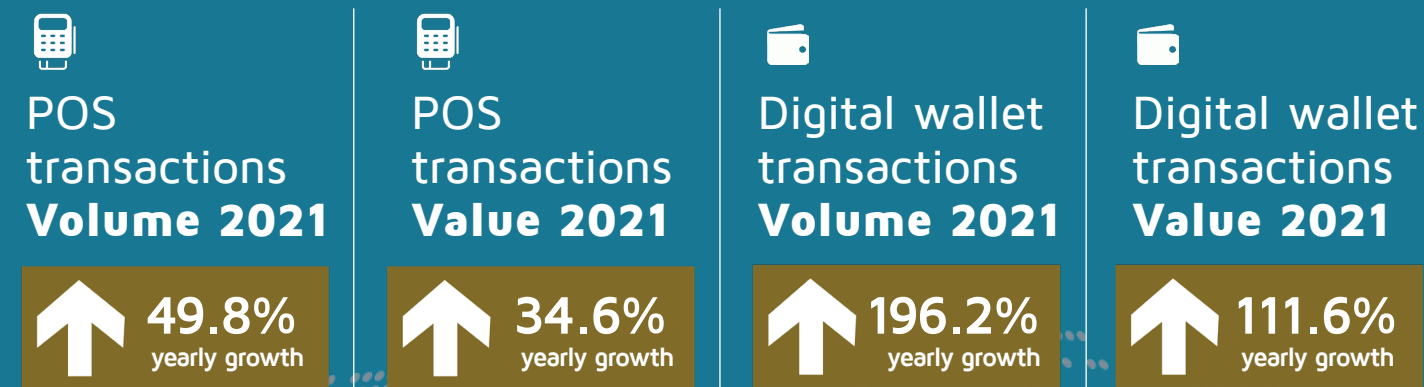
1 The regional and global payment landscape

Regionally and globally, the growth of digital payments has been on a steady rise in recent years. It has been supported by the proliferation of new technologies along with changes in consumer behaviour. These changes have helped in the emergence of electronic and e-commerce transactions as a powerful source of revenue for organisations — and also, as an opportunity for expansion.

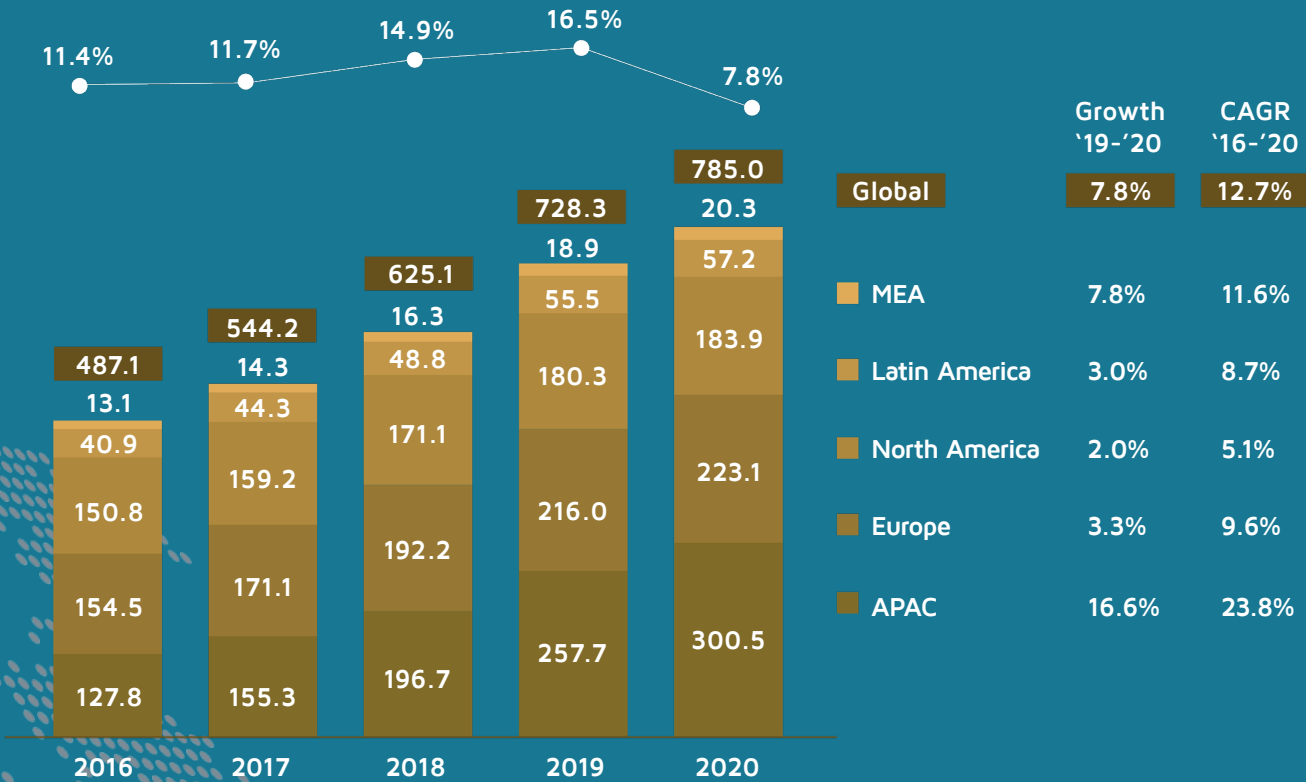
While the Covid-19 pandemic proved to be a key catalyst for accelerated adoption of digital payments, it needs to be emphasised that the idea of non-tangible financial transactions goes a long way back. The financial sector has always been current with technological trends, and thus, has adapted itself to newer developments that helped in delivering smooth and efficient service to customers.

The focus globally was to move towards faster and quicker services that cater to an audience that needed solutions that were immediate. With this approach, the drive towards a cashless economy incentivised the growth of digital payments. Technological developments made the transition from a traditional system much easier, and brought other players into the sector — companies dealing with FinTech, telecom and other tech firms.

Consumers, too, were more comfortable with digital payments, contactless shopping, remote delivery of products and services, and having a wider choice available at their finger tips. For such a demographic, the digital payment landscape provided a fertile ground for growth — not only regionally and globally but also here in Bahrain.



Bahrain digital payments yearly growth (%) 2021



Worldwide non-cash transactions volume (billions) & yearly growth (%) 2016–2020

Sources: Capgemini Financial Services Analysis , 2021; ECB Statistical Data Warehouse, BIS Statistics Explorer, countries’ central bank annual reports.

2 Progressive business model for payments

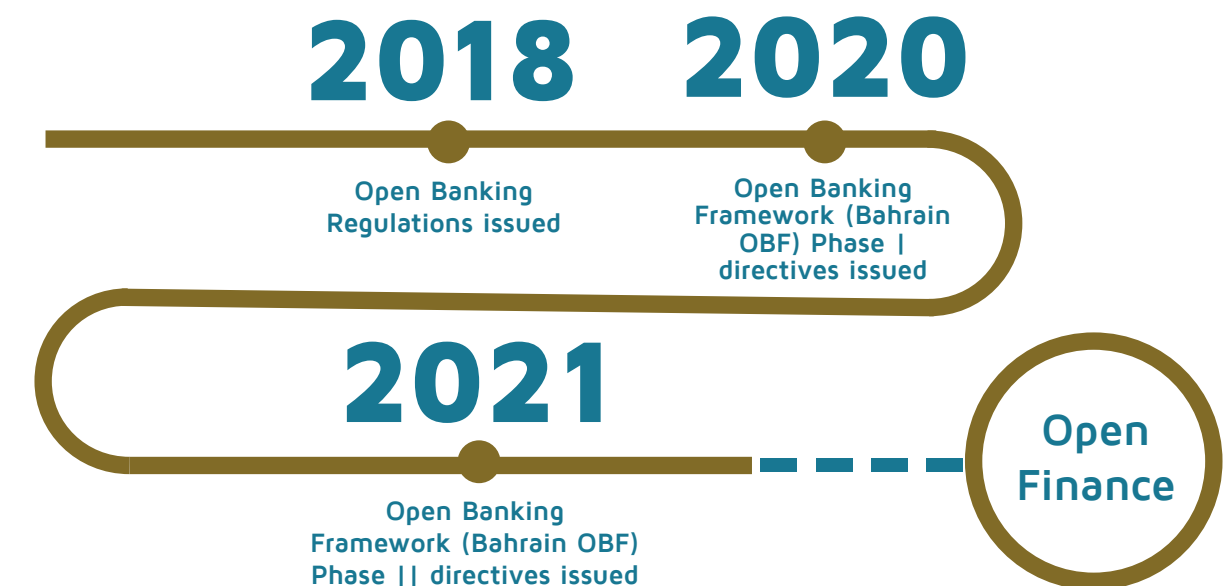
The influence of myriad technologies and digitalisation of financial services has had a huge impact on the banking and financial sector. Individuals and businesses have benefited from the way digital tools have been leveraged to strengthen performance, ensure greater productivity and deliver results.

For banks in Bahrain, in particular, the enhancing of the payment infrastructure has opened up tremendous growth opportunities in customer engagement. Not only banks but other organisations in telecom and other service sector have also stepped in to deliver enhanced payment services for their customers. The idea is ensure ease and flexibility when it comes to financial transactions, and allow customers greater autonomy in the way they conduct business with them.

Open Banking

Open Banking is all about giving consumers the ultimate power to control their financial data, and to have the final say when it comes to sharing that data with other financial services providers. It allows secure interoperability with regulated third party providers through the use of open APIs. As part of its initiative to implement this service in the Kingdom, CBB developed the

Bahrain Open Banking Framework (Bahrain OBF) in 2020. It was based on global ISO standards that were further customised to be made suitable for Bahrain's payment ecosystem. The following year, the second phase of the framework was issued to enhance the range, effectiveness and cost-efficiency of services in a more customer-centric manner.



Real-Time service

The ability to conduct safe and secure financial transactions in real time is, undoubtedly, one of the main advantages of operating within a digital payment ecosystem. This allows customers to be in greater control of their financial decisions, and be able to address any issues or concerns as and

when required. Real-time banking service has given customers in Bahrain the ability to access their data or initiate transactions or pay bills using a suite of products and services that have been tailored with this component.

Unique identity through IBAN

The digitalisation of banking services requires systems in place that would protect the identity of account holders, and at the same time, prevent the possible duplication or replication of any account. CBB's adoption of the International Bank Account Number or IBAN is a step towards building a safe environment for

financial transactions as well as integrate the national banking system with the internationally accepted ISO numbering system to identify bank accounts. IBAN is used in making or receiving local and cross-border payments, and minimises delays and costs associated with incorrect account numbers.

AFAQ

The GCC member countries implemented the Arabian Gulf System for Financial Automated Quick Payment Transfer (AFAQ) in 2020, a regional payment system that offers an additional channel of transferring funds through a faster and more secure means at lower transaction cost. AFAQ, operated by the Gulf Payments Company (GPC) is a Real Time Gross Settlement service for cross-border payments between GCC countries, which aims to support the growth of

trade and flow of investments between the GCC member states, and as a result accomplishes economic diversification.

AFAQ will enhance and strengthen the trust in economic co-operation and development arenas among the GCC member states, and support the integration of financial policies and monetary strategies between them.



Efficient clearing processes

The move from traditional payment channels to automated ones has been prompted by the need to develop efficient systems that help in cutting through the backlog, and create a smooth experience for all stakeholders. Cheque clearance is one such activity that has always been viewed as a labour intensive process.

CBB authorised the BENEFIT Company to operate the Bahrain Cheque Truncation System (BCTS) to help speed up clearing of cheques by eliminating physical movement of cheques, and allowing depositors to receive proceeds of their cheques in their account by 15:00 on the same day.



9.6 M

Transactions
in Fawri
in 2021



140 M

Transactions
in Fawri+
in 2021



9.1 M

Transactions
in Fawateer
in 2021

Source: Benefit

Faster fund transfers

A key element in making digitalisation effective was to pave the way towards fund transfers that are instantaneous — or near instantaneous. A one-stop-solution was envisioned that would allow safe, contactless, person-to-person payment through the CBB authorised Electronic Fund Transfer System (EFTS). It enables bank customers to make immediate low-value payments using Fawri, Fawri+ and Fawateer. Fawri allows same-day or future-dated payments to single or multiple recipients.

Fawri+ enable transfers to be made available within 30 seconds to the account of the recipient. Fawateer, the Electronic Bill Presentment and Payment (EBPP) enables bank customers to settle bills from both online and offline billers, immediately or on a date of their choice. In 2017, EFTS services were enabled in the BenefitPay mobile application, and since then this service has been hugely popular amongst customers.

Settlements made easier

Amongst the earliest instances of bringing innovation into the payment infrastructure, CBB helped create a system that provided banks with real-time information and querying facility to monitor their settlement account balances along with used and available intra-day credit, queue status and transaction status. Real Time Gross Settlement (RTGS) and the Scripless Securities Settlements (SSS) systems were the platforms for these transactions that tackled both interbank and customer credit transfers along with securities amongst others.

Digital Wallets

In the aftermath of the Covid-19 pandemic, Digital Wallets are proving to be increasingly popular amongst consumers seeking safe and secure contactless payment options. These digital wallets are able to store vital user data related to payment and other personal information that can then be used for credit or debit cards, loyalty cards, gift cards, coupons, hotel reservations, etc. Mobile companies, banks, airlines and retail outlets have championed the use of digital wallets and used them to offer customer convenience in transacting.



3

The BENEFIT Company payment services

The BENEFIT Company serves as the technology partner of CBB, and has been instrumental in developing and introducing a wide range of products and services that have paved the way towards building a robust digital payment infrastructure across the Kingdom. It was established in 1997 by a consortium of 17 commercial banks, and since then, it continues to play a proactive role in bringing innovation and leading consumer awareness towards digital adoption.

Automated Teller Machines (ATM)

BENEFIT’s current network comprises over 300 ATMs of participating banks, and enables locally and internationally issued debit card holders to withdraw cash from any ATM in Bahrain. This facility has now been extended to ATMs across

the GCC region with BENEFIT joining the GCCNET whereby any debit card holder can withdraw cash from any bank in the United Arab Emirates, Kuwait, Oman, Qatar and Saudi Arabia.

Point of Sale (POS)

POS terminals are used for processing electronic card payments, and are available at most business outlets in Bahrain. The idea is to create a seamless shopping experience for customers and enable effective digital transactions. All

of the newer POS terminals have taken advantage of Near Field Communication (NFC) technology for contactless payments. This service is also extended across the GCC with many POS terminals being linked to the GCCNet.

Volume

Value

POS Transactions 2021

125.5
Million

65.6%
Contactless

3.2
BD Billion

39.8%
Contactless



Bahrain Credit Reference Bureau (BCRB)

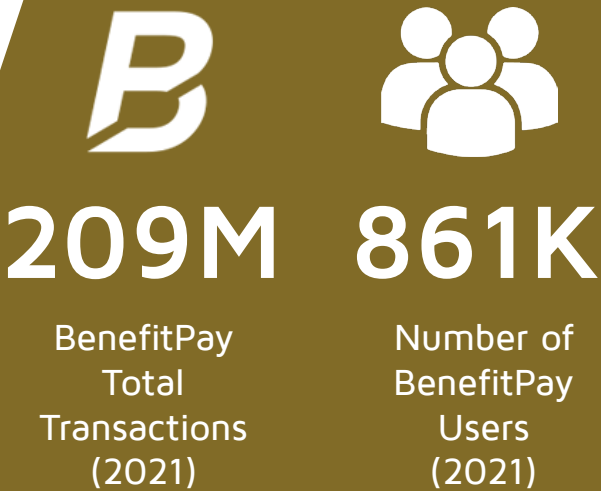
As a credit information aggregator, the Bureau receives, maintains, analyses and classifies credit information of customers located within Bahrain. The information is useful for any decision making, and also in formulating a picture of a customer’s credit worthiness.

Payment Gateway

Online payments are routed through the Payment Gateway, and is integrated with relevant websites and mobile applications. It is integrated with a variety of shopping cart software, relevant database, Internet merchant accounts and protocol exchange servers. It provides secure and reliable real-time transaction processing, easy report generation, payment settlements and account reconciliation process.

BenefitPay

BenefitPay is a mobile application that enables safe, secure and seamless financial transactions without the use of cash or plastic cards. It is one of the most powerful tools in the digital payment landscape especially since EFTS services are also attached to it, proving to be increasingly popular amongst individuals and businesses across the Kingdom.



Source: Benefit

eKYC

eKYC platform provides banks and other financial institutions with relevant access to information about a customer from data stored at the Information and eGovernment Authority (IGA) and other governmental entities. The purpose behind this service is to securely verify, identify, retrieve, and validate their information

and share it digitally before providing products and services. Earlier this service was provided physically and required the presence of the customer at the bank or financial institution, but with eKYC the entire process is simplified and routed through a single shared platform.

Bahrain Electronic Cheque System (e-cheque)

In a move to digitalise cheques and making them more secure and efficient, the Bahrain Electronic Cheque System (BECS) was launched in 2021 to allow for electronic cheque issuance and clearing. The digitisation of cheques brought a new level of convenience to customers and made the process

even more seamless. E-cheques retain all basic functions, legal validity and benefits of paper cheques while providing additional benefits for users including tracking and secure electronic signature functions.



Innovation and the future of payments

The future of the digital payment landscape lies in the way the banking and financial sector is able to respond to the evolving market dynamics, changes in consumer behaviour, developments in technology and other unforeseen events that might impact communities.

With digital adoption becoming increasingly commonplace across a variety of sectors, the banking industry, too, has remained agile in building a cohesive ecosystem for innovative ideas. The focus is always to create platforms that are future-ready, and deliver solutions that work in the best interest of both individuals and businesses.

As part of this drive towards shaping digital payments, Bahrain’s financial services sector has been making steady progress in developing newer and more dynamic financial technologies or FinTech.

Central Bank Digital Currency (CBDC)

CBB is currently working towards providing a digital version of the Bahraini Dinar that would help support customers making peer-to-peer payments, without the need of any intermediaries. It will mimic cash in every aspect whilst remaining intangible and virtual in nature, and will be operating on Distributed Ledger Technology (DLT).

With the growing popularity of e-Commerce and electronic payments, the CBDC is expected to gain wider adoption amongst individual and business customers and also transform the payment landscape by providing a powerful gateway for innovative banking services.

From a business solution perspective, for instance, DLT proved to be successful when the Blockchain-based JP Morgan Coin System (JPM Coin) was utilised for the benefit of Aluminium

Bahrain (Alba). The system enabled Bank ABC to initiate real-time payments for Alba’s counterparties in the US, and made it easier for them to transfer US dollars.

This collaborative effort by CBB, Alba, Bank ABC and JP Morgan in completing a cross-border payment transaction utilising the JPM Coin operated on DLT demonstrates how these leading emerging technologies can address and eliminate inefficiencies in the traditional cross-border payments arena.

Regulatory Sandbox

As a virtual space for testing new and innovative financial solutions, the Regulatory Sandbox offers CBB licensed institutions, FinTechs, startups and companies from other sectors such as telecom an opportunity to assess the viability and effectiveness of their innovations alongside volunteers in a live and controlled environment. CBB oversees and supervises the

sandbox and regularly reviews its regulations in line with new technologies and solutions being tested. Consequently, further regulations were introduced to address issues like payment services, digital wallets, crowdfunding, open banking, crypto-assets, cloud computing, digital financial advice (robo-advisory) and insurance aggregators, amongst others.

May 2017

Central Bank of Bahrain issues the Regulatory Sandbox Framework

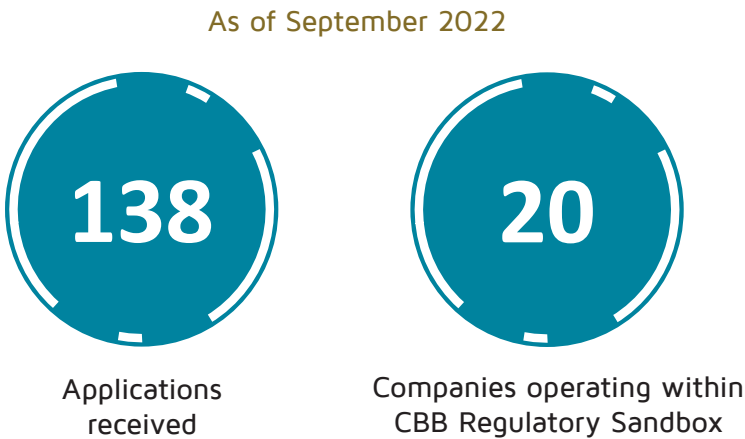
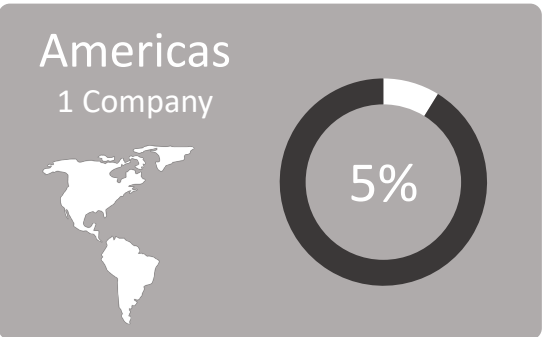
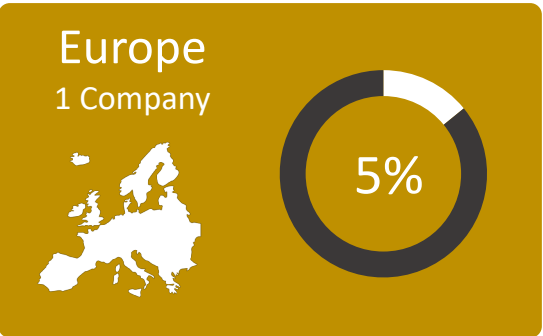
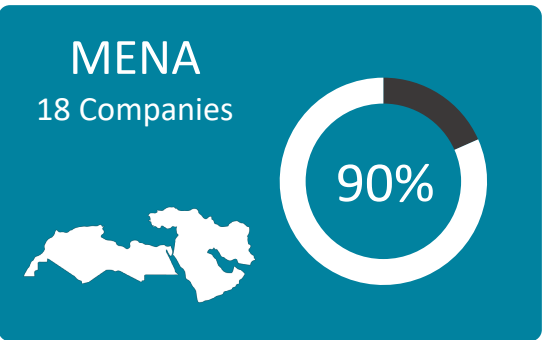
June 2017

Regulatory Sandbox Committee established to oversee applications and the progress of companies admitted into the sandbox

November 2021

Regulatory Sandbox Framework updated

As of September 2022



Central Addressing System (CAS)

The main purpose of CAS would be to ease the process of transferring funds by eliminating the need to input a long IBAN number and instead summarises the IBAN number into a unique identifier (such as national ID, phone number, etc.). It works as a central addressing directory, and allows participants to register their customers and map them to unique identifiers. Registered customers will then be able to send and receive payments and also request to pay using their unique identifiers.

Request to Pay (R2P)

R2P is expected to be both a module and a service that would enable applicable stakeholders to initiate a payment request from intended payers such as individuals and businesses. R2P will support online integration with businesses and other entities, and it will be extended to other authorised channels. R2P will follow the international ISO 20022 standards for implementation, data specification and content using a universal financial industry message scheme.

Open Finance

CBB is now focusing on transitioning to Open Finance, an extension of Open Banking which allows third-party providers (TPPs) to access customers' account data and initiate payments. Open Finance will empower customers by enabling them to gain control over their financial data, help them make better informed financial decisions and get access to customized financial services.



Direct Trading System (DTS)

DTS is expected to provide investors with easy access to buying, selling, rollover, transfers and settled government securities without the need of any intermediary. This system will cater to individual investors and will be available via a user-friendly mobile application and website that will also allow users to deposit funds from their accounts held in any bank across Bahrain.

Fast Fawri

Fast Fawri is the next generation iteration of the existing EFTS infrastructure, and is expected to allow bank customers to conduct frequent Fawri payments available 24/7, including weekends and public holidays. It will enable round-the-clock service with the support of a collateral management tool to track available securities, deposits, and reserves of each bank in the CBB's Collateral Pool (CP).

Buna

The Buna payment platform was launched in December 2020, and has been designed to enable central banks and financial institutions in the MENA region to send and receive multi-currency cross-border payments in a safe, risk-controlled and transparent environment in real time. Buna is operated by the Arab Regional Payments, Clearing and Settlement Organisation which is fully owned by the Arab Monetary Fund.

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