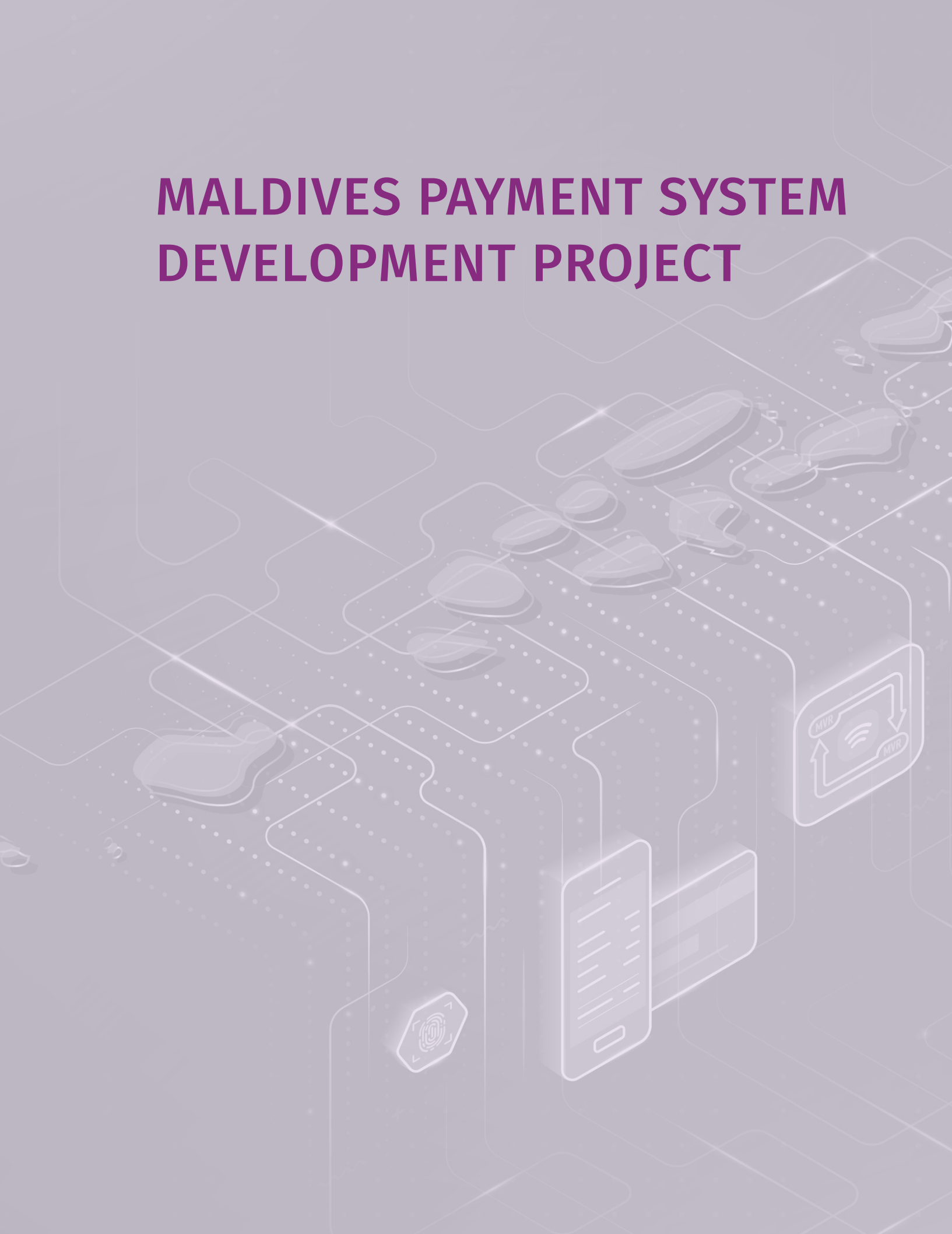


MALDIVES PAYMENT SYSTEM DEVELOPMENT PROJECT

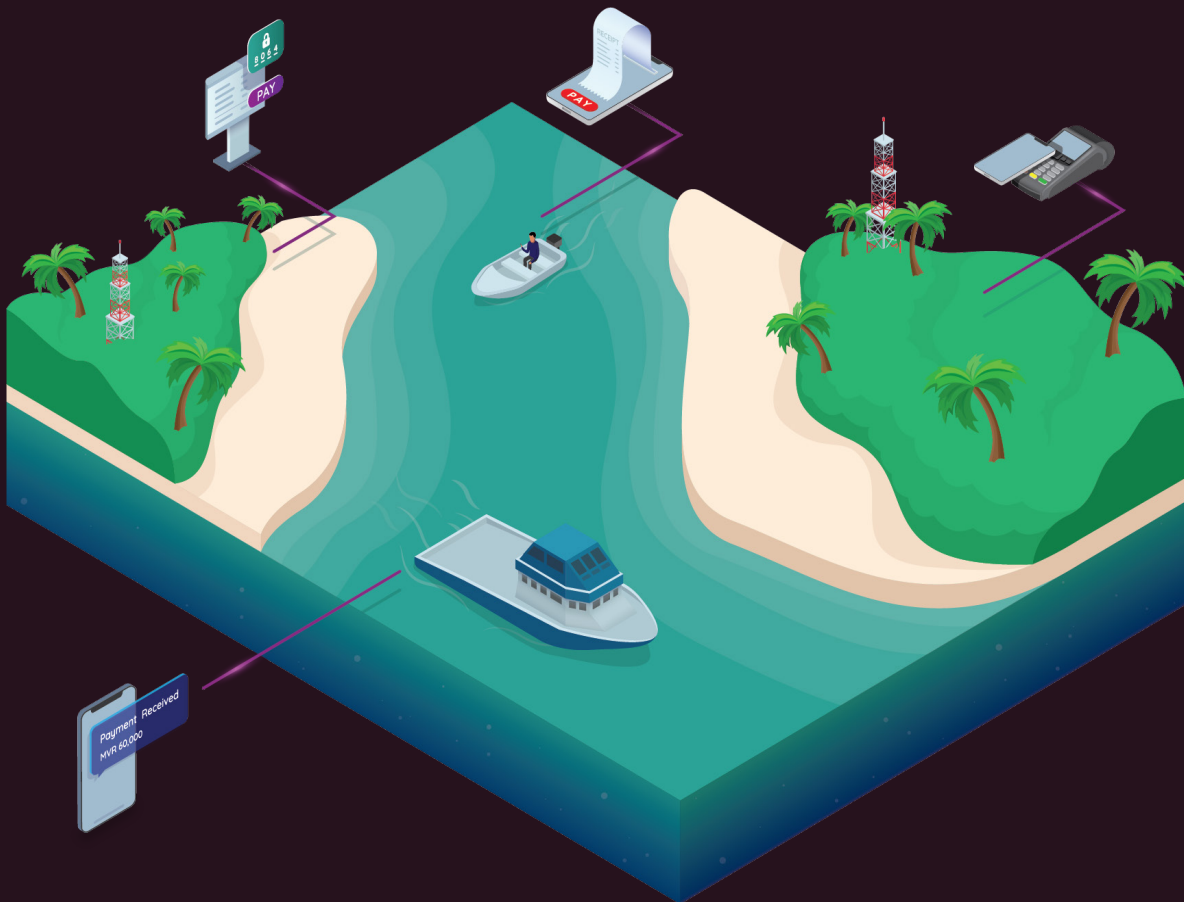


MALDIVES PAYMENT SYSTEM DEVELOPMENT PROJECT

With the rapid modernisation of the Maldivian economy, we are becoming increasingly interconnected both within and across networks. While the greater degree of connectivity has the potential to allow more automated and integrated payment solutions, the appropriate infrastructure development is required to capitalise upon this transition and cater to future developments in the economy.

Accordingly, the MMA is leading an initiative to transform the payment landscape in the Maldives by establishing an all-inclusive

payment system enabling fast, secure and convenient payments. The primary objective of the project is to ensure that users are able to make and receive payments instantly, irrespective of the island on which they live or where they bank. It is also aimed at establishing a level playing field for the banks and other potential payment service providers which will promote electronic payment services. The new payment infrastructure will be open and flexible to accommodate and foster innovation and competition in the Maldivian payment domain.



OBJECTIVES

The new payment infrastructure will enhance the end-user experience and deliver better services to Maldivians via the following key objectives.

FAST PAYMENTS

- The system will enable all Maldivians to send and receive money instantly regardless of the island on which they live or the payment solution they use.
- Transactions will be transparent with rich and informative messages for both payer and payee, and will be received instantly.
- End users will have access to funds in real time and will be able to use it immediately.

EASY PAYMENTS

- The process of making payments will be more flexible and modular.
- Users will be able to use easy-to-remember identifiers such as email addresses, phone numbers, biometrics and social media handles to execute payments.
- The simple account-to-account instant payment system will enable innovation and enhance the customer experience for Maldivians.
- Easy-to-use and cost-effective digital and integrated payment solutions will be introduced to eliminate cheques and reduce the level of cash in circulation.

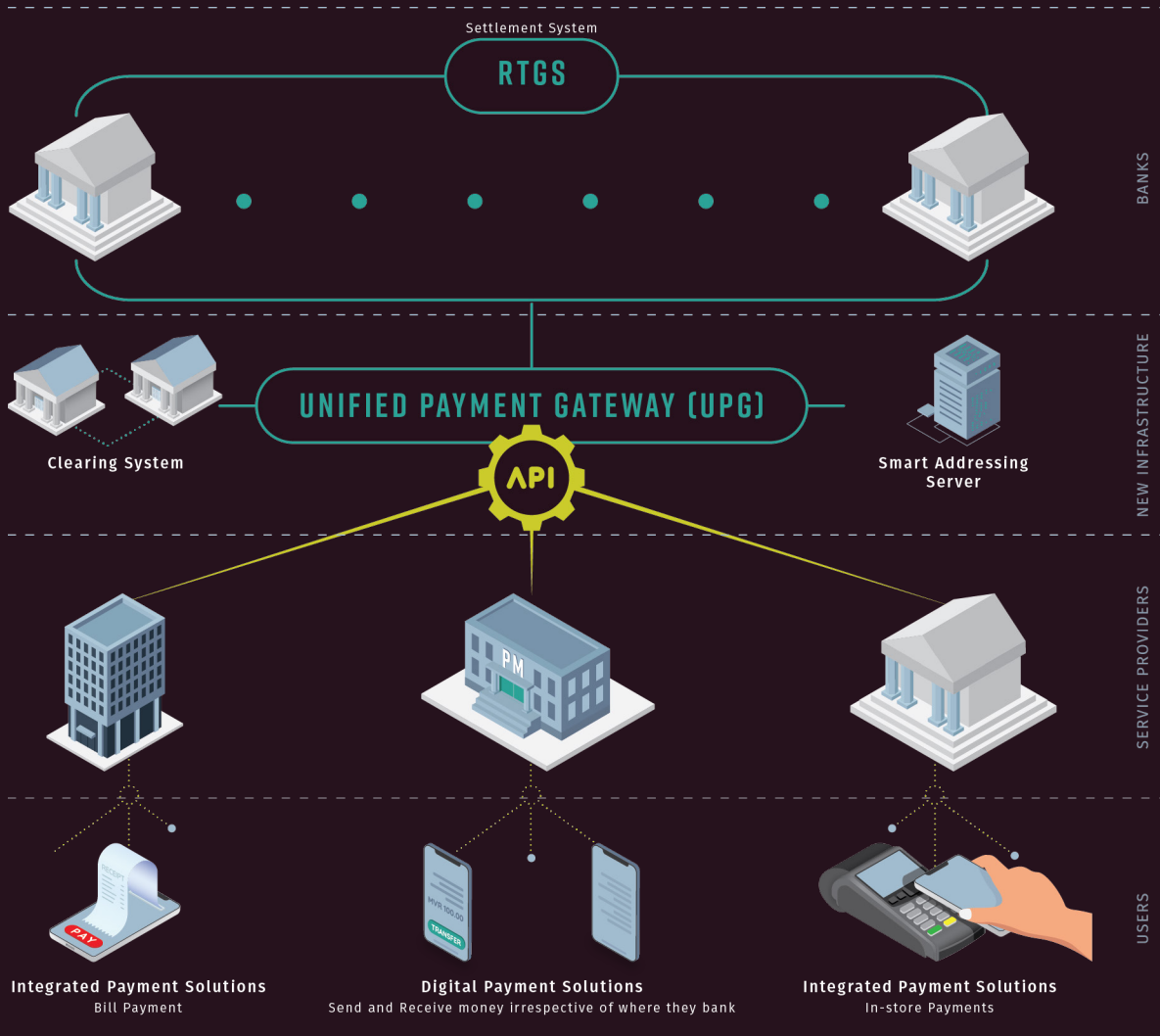
SAFE PAYMENTS

- Secure payment will be ensured through the use of multiple-factor authentication.
- Payment processes will be standardised and automated to minimise costs and risks.
- System errors will be minimized and fraud will be resolved quickly.
- Payment regulations will be developed as the payment system continues to evolve to ensure that users and payment service providers have a high level of confidence in the payment

OPEN, BUT RISK-EVALUATED ACCESS

- Payment service providers will have access to the account-to-account domestic payment scheme, providing them with digital and integrated payment services.
- Open application programming interfaces (APIs) and rich transaction information will promote data-driven innovation and new value propositions.
- The system will be flexible and potential payment service providers will have activity based access to the system.

INFRASTRUCTURE



The core infrastructure, Unified Payment Gateway (UPG) will be an open, API-based modular system consisting of an account-based, real-time payment system augmented with the functionality of smart addressing.

The system will be designed to cater to an environment in which there will be two types of major players: account information providers (AIPs) and payment service providers (PSPs). AIPs include all institutions

that hold customer accounts used in the payment process, either directly or indirectly through a third party. PSPs are institutions that provide payment solutions built on top of the payment infrastructure, possibly utilising the information provided by AIPs.

The core infrastructure will include three main components: the UPG, smart addressing and a clearing service.

UNIFIED PAYMENT GATEWAY

The UPG will facilitate AIPs to provide account information through the gateway to PSPs based on set of system rules that are in line with the legal framework. All banks in the Maldives will be directly linked to the system, which will facilitate PSPs in offering innovative payment services to their customers. The UPG will enable customers to view and manage multiple bank accounts through a single interface, consolidating various banking features, including seamless fund routing and merchant payments.

SMART ADDRESSING

Smart addressing will allow customers to make payments using easy-to-remember tokens and identifiers such as national identification numbers, mobile numbers, email addresses and social media handles. The sharing of bank account numbers and other sensitive information may no longer be required.

CLEARING SYSTEM

The clearing service will allow real-time multilateral clearing of payment orders between AIPs. This will allow the customers to access the funds in real-time and use it immediately 24 hours a day and 7 days a week.

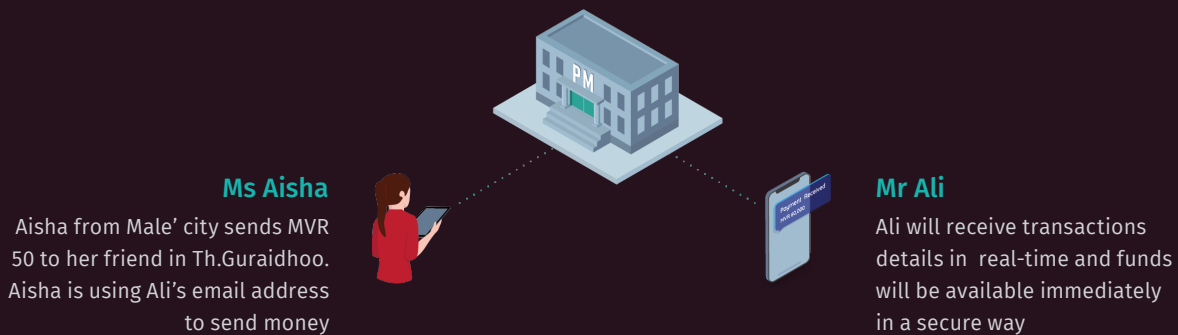
DIGITAL SOLUTIONS

An essential part of the project involves the introduction of multiple digital solutions that will allow users to send and receive payments instantly, regardless of the location of their bank accounts in the Maldives. A digital solution simply provides the facility to make payments without other add-on services or functionality. With this solution, all entities in the Maldives will have a fast, reliable and convenient option for making payments.

PERSON TO PERSON TRANSFER

Users can transfer funds between various accounts in a number of ways:

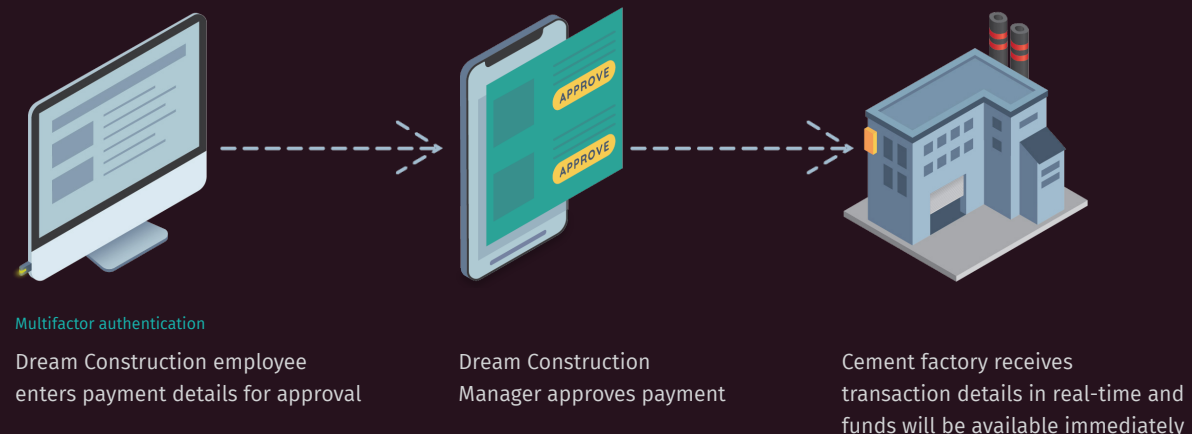
- All inclusive, multi-channel instant digital payment solution to all Maldivians



WHOLESALE PAYMENTS

These are generally high-value payments made by corporate entities. A digital payment solution will be provided in which the corporate entities' payment initiator and approver are segregated, providing an alternative solution to cheques.

Dream Construction Pvt. Ltd. paying MVR200,000 to Cement Factory



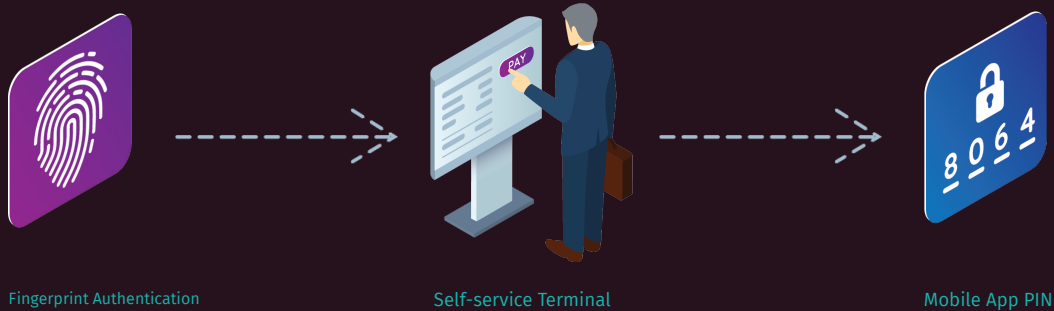
PAYMENT GATEWAY

A local internet payment gateway will be introduced that will provide users the option to use the local scheme to make online payments on e-commerce platforms.



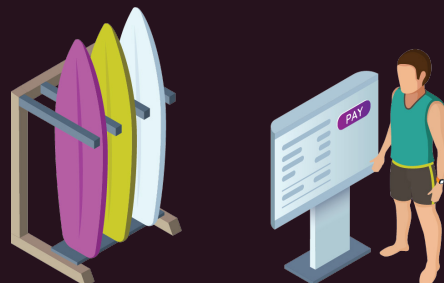
SELF-SERVICE TERMINALS

Self-service terminals or kiosks will be available in all inhabited islands at convenient locations, mainly to facilitate Know Your Customer procedures via biometric verification or any other identifiers. Further, all payment services that can be accessed as part of the digital solution will be available through the self-service terminals. In simple terms, these kiosks could be a smart ATM without cash.



TOURIST PAYMENTS

A payment solution will be introduced for tourists whereby they receive an identifier such as a smart card or hardware token upon arrival. This can be topped up using international card schemes, which can then be used to make domestic payments. The solution will allow the tourists to make payments through digital and integrated solutions through the local scheme.



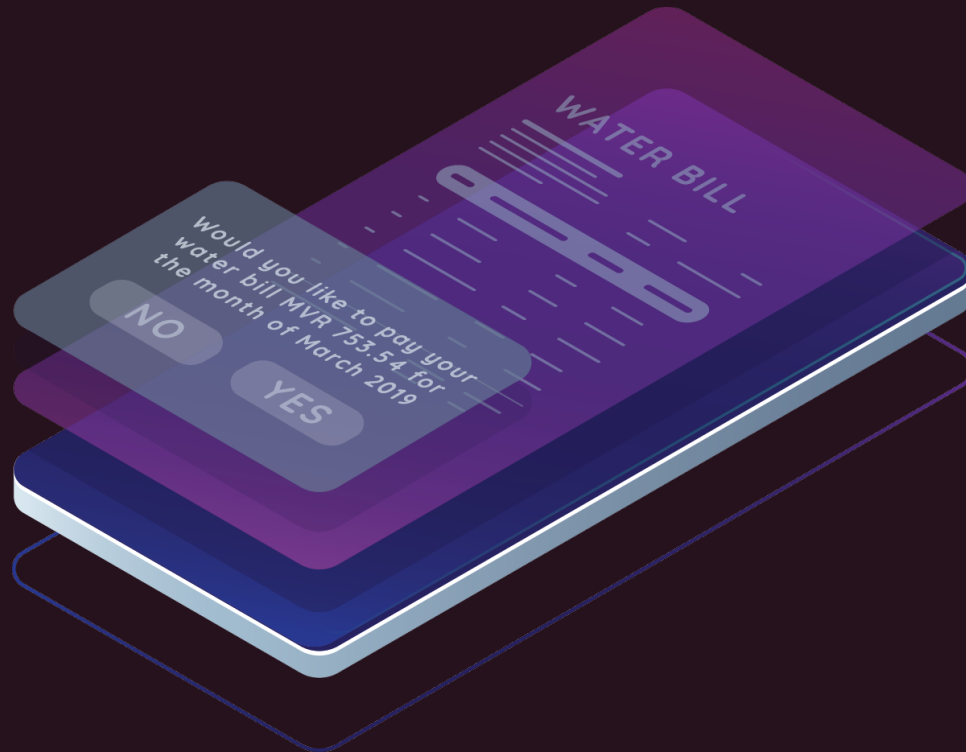
John rents water sport equipments using the local smart card

INTEGRATED SOLUTIONS

A number of integrated payment solutions will also be introduced under the project, to cater for selected segments of the payment space. Integrated payment solutions will seamlessly combine the payment process and provide convenient and value-added solutions. Strategic areas with lack of market-driven incentives and areas with the potential for maximum impact on users will be prioritised when deciding on the underlying use-cases of the solutions.

SOLUTION FOR REGULAR PAYMENTS

Integrated solutions could be geared towards catering for payments due at regular frequencies, such as bill payments, rents, recurring government fees and transportation services, all of which could be paid through a single interface, coupled with value-added services.



IMPACT ON KEY STAKEHOLDERS



CONSUMERS

- Access to payment services will no longer be restricted by physical location.
- Quick and convenient payments possible using easy-to-remember identifiers.
- Consumers may no longer need to share their bank account and other sensitive details.
- All payments executed from a single account instead of requiring multiple payments wallets.



BUSINESSES

- No longer restricted to business hours.
- More convenient tracking and payment reconciliation.
- Improved cash flow management due to quick realisation of sales proceeds.



GOVERNMENT

- Faster realisation of tax receipts.
- Richer payment data to complement tax compliance assurance efforts.
- Efficient and convenient means to electronically distribute welfare pay-outs.



BANKS AND PAYMENT SERVICE PROVIDERS

- Build innovative payment solutions and financial services via risk-based access to the payment system.
- Provide multiple services based on the common account structure provided by the system.