

# SDG Digital Finance Ecosystem (SDFE) Assessment for Morocco

**REPORT, 2022**

Evidence-based policy recommendations to navigate the future of digital finance for the SDGs and tomorrow's unknown at the nexus of the world of finance and achieving the SDGs in Morocco.



Unlocking Public and Private  
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This report has been produced by UNDP and UNCDF.

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# Acronyms

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3G	Third Generation (Wireless Network)
4G	Fourth Generation (Wireless Network)
ADD	Agence de Développement du Digital
APIs	Application Programming Interfaces
ANM	Agent Network Managers
ANRT	National Telecommunications Regulatory Authority
ATM	Automated Teller Machine
B2G	Business to Government (payments)
BKAM	Bank Al-Maghrib
DEFI	DEcentralized Finance
Dfs	Digital Financial Services
e-KYC	Electronic KYC
e-money	Electronic Money
EU	European Union
Fintech	Financial Technology
G2P	Government to Persons (payments)
GDP	Gross Domestic Product
GP2M	Groupement du Paiement Mobile Maroc
GSMA	Global System for Mobile Communications
IDES	Inclusive Digital Economy Scorecard
IOB	Intermediaire en Operations Bancaires
ITU	International Telecommunication Union
LDCs	Least Developed Countries
KYC	Know Your Customer
MSME	Micro, Small and Medium Enterprise
OTC	Over the Counter (transfer)
P2G	Person to Government
P2P	Person to Person
SDFE	SDG Digital Finance Ecosystem
SDGs	Sustainable Development Goals
SME	Small and Medium Enterprise
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Programme

WB

World Bank

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# Executive Summary

The past decade has witnessed a boom in Digital Financial Services (DFS) development. More recently, the upsurge of business models with embedded finance became even more compelling to countries across the globe since the benefits of these technological trends are not reduced to economic growth. Globally, governments are turning to digital finance to advance financial inclusion and the UN Sustainable Development Goals (SDGs)<sup>i</sup>. However, for governments to make the most of tech-powered pathways to inclusion requires them to utilize policies, investments and regulations as tools that generate tipping points bolstering an Inclusive digital ecosystem — governments will need to be digital-finance ready. In this report, UNDP in Morocco together with UNDP/UNCDF Global and Regional Digital Finance Team present the findings of the 2022 Morocco SDG Digital Finance Ecosystem Assessment (SDFE).

The assessment deploys a methodology with more than 100 indicators across a number of key areas of the digital finance ecosystem, which provides an indicative score (1-100%) to highlight performance and point to potential gaps. The following scores for 2022 indicates an overall positive development that sets the country's digital finance ecosystem at its expansion phase: Digital Economy 57%, Digital Financial Ecosystem 41%, SDG-Alignment 52%, Digital Inclusiveness 51% and Women's Inclusiveness 52%. The Digital Financial Ecosystem is evolving, but to keep up with the local needs and the global, gaps remain substantial.

It was apparent that a major impediment to Morocco's digital financial inclusion is the country's insufficient business models creation that adds to an uncondusive business environment for learning and innovation — further reinforcing the same impediment. Despite having numerous innovation support programs and

incubators, Morocco ranks unfavorably in indicators measuring its digital economy innovation.

These divides come with the backdrop of an entrenched banking system structure, an unoptimized infrastructure, and a static neo-banks ecosystem (as a result of the inexistence of non-bank payment institutions). We find signs that an open banking APIs policy can have a positive impact on digital financial players, including licensed financial institutions, outsourced service providers, telco, manufacturers of payment instruments or hardware equipment, as well as innovative fintech companies.

As the findings point to, designing a national payment system that also helps effectively orchestrate between multiple layers of stakeholders is set to drive financial inclusion and the value addition needed to spur an inclusive digital economy.

Helping the local digital financial ecosystem to thrive will require enabling policies, reflexive and pro-innovation regulations, digital infrastructure investments, as well as brokering a new breed of partnerships whilst ensuring a level playing field.

Ultimately, improving digital and financial literacy, encouraging active usage, and upholding safety and trust could be enabled by a diversified rural financial service ecosystem with a lower entry threshold that bring rural fintech companies to support underserved segments such as small farmers, women with low incomes, underprivileged youth and more.

“Digital finance has been a revolution in enabling people who traditionally would never have been considered in a formal banking system to be viable account holders to suddenly be able to transact, to trade to get access to information. And suddenly we have seen hundreds of millions of people who are not wealthy people that are poor people, being able to, for example, even borrow money in the morning now on their smartphone in order to buy, perhaps, the produce in the wholesale market, take it to their local market, sell it and repay that loan in the evening, all done on smartphones where financial inclusion has created an entirely different economic universe.”

**Achim Steiner, UNDP Administrator**

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# Introduction

The past years have witnessed a wave of digital financial disruptions with some of the most impactful levers to accelerate the SDGs [1]. Spanning the effervescent mobile money industry [2], the many breakthroughs of neo-banks [3], and the advent of decentralized finance (DeFi) and hybrid finance, Digital Finance is transforming finance as we know it — opening out to new regenerative sustainable development pathways. Digital finance can be a powerful equalizing force, giving low-income households new tools to increase their incomes, improve financial resilience and access [4].

Beyond the hype, digital financial services show no signs of slowing down and are already having massive shocks on financial services access, affordability, and transparency [5]. This development offers a welcoming opportunity for the millions of unbanked (and underbanked) people, to hedge against economic uncertainties, develop their financial resiliency, and gain access to new livelihoods. Even more so, given the present bleak economic outlook as economies dwell in issues like inflation, food insecurity and other byproducts of global health and climate crises [6]. Millions of people who otherwise would not have had traditional financial services, can now safely send, and receive money from their families living overseas or in the countryside without having to travel long distances with cash [7]. People can use digital financial services to afford an education for their school-aged kids and get access to healthcare insurance. In the same way, digital financial services provide a new lifeline for smallholder farmers to buy products such as yield enhancing seeds and fertilizers, to access affordable and clean energy, or digital crop payments. Digital finance and fintech innovations have emerged as a top priority for governments to shape up in support of their national development priorities [8]. In 2018, the Moroccan government had set its sights on improving financial inclusion and envisioning the transition to cashless, digital, and future-smart local economy. This materialized in the development of the National Financial Inclusion Strategy which mandate is conferred upon the Central Bank of

Morocco [9]. Additionally, the Central Bank, together with the National Telecommunications Regulatory Agency, developed both a regulatory framework and an interoperable M-Wallet platform for mobile payment.

However, for a lower-middle-income country [10] with a high underbanked proportion of the population, the potential of digital finance for inclusive growth remains largely untapped [11]. Digital payments lock in tremendous opportunities to expand access for the unbanked and underbanked as highlighted by the World Bank Global Findex 2021 analysis. Yet, both the uptake and the regular use of digital payments is still nascent in the country [12].

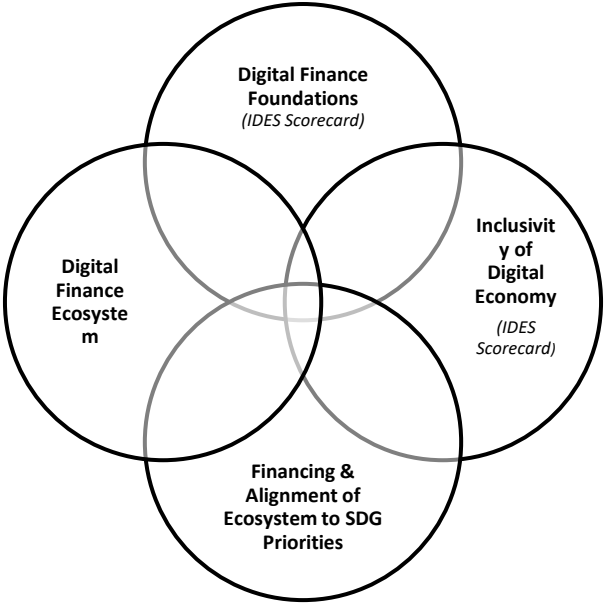
Based on the 2022 World Bank GTMI survey data, covering 198 countries, Morocco's digital government index of 0.613 is considered high and shows that the country has recently developed relevant strategies to address country-specific digital transformation challenges [13]. With a Digital Citizen Engagement Index of 0.61, the survey articulates how Morocco has improved the maturity of Government Technologies foundations during the last two years. Despite these sound efforts, several elements hinder the growth and inclusiveness of the into the local digital economy growth and inclusiveness, resulting in missing out on some of the most tremendous digital finance opportunities.

The SDG Digital Finance Ecosystem Assessment for Morocco highlights that not only must regulatory and policy bodies stay current with technological advancements and risks, but they also need to tap into the unique opportunity of anchoring the fintech ecosystem in the SDGs as the core of the government's strategy— not as an afterthought [14].

# Objectives of the Assessment

The SDG Digital Finance Ecosystem Assessment [15] is designed to provide an in-depth understanding of the drivers that make a country digital finance ready, which in turn helps design the policy interventions and investments needed to fast-forward its digital journey. The assessment helps link digital finance policies with financing of the SDGs and the government and regulators' climate-resilience commitments. It also investigates the digital economy and digital finance ecosystem to understand the current level of (digital) financial inclusion for underserved segments of the population, with a specific focus on women, in order to identify key drivers and opportunity areas within the digital economy that can be taken forward to advance inclusion.

**Figure 1** - Areas of Indicators for SDFE Assessment



This assessment report and associated Digital Financing Strategy will be instrumental for the Bank of Morocco to propel digital finance, gender-sensitive fintech, inclusion-themed innovation mechanisms, digital green bonds and others inclusive growth levers.

In addition to the scores, the assessment's report summarizes the findings,

points to the underdeveloped areas, and articulates a set of regulatory and policy recommendations to develop the digital finance ecosystem and seize upon market opportunities in order to advance financial inclusion and SDG financing through interventions in the digital economy. The recommendation draw inspiration

and/or consider UNDP and Government of Morocco expertise, capabilities, and digital financing opportunities.

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# Approach & Methodology

In this assessment, UNDP in Morocco is supporting the government in identifying gaps and opportunities within their domestic digital finance ecosystems, in terms of their level of development, assessing the level of inclusion of vulnerable segments in digital finance and the broader digital economy and measuring the extent to which the digital finance ecosystem is aligned with national SDG priorities.

The SDFE Assessment is a standardized tool developed by UNDP/UNCDF that looks at over 100 indicators in the areas of (i) policy and regulation, (ii) digital infrastructure, (iii) skills, (iv) fintech and innovation and (v) SDG-alignment of fintech and government digital strategies. The assessment utilizes a mix of desk review, surveys and interviews to gather its large collection of data. An outcome of this assessment is a Technical Report that outlines its findings, contextualizes it to other comparable countries and provides a series of recommendations on how to better harness the digital finance ecosystem in catalyzing financing for national SDG priorities.

To facilitate, ease and mainstream this process, UNDP and UNCDF have jointly developed a methodology for an SDG-Anchored Digital Finance Ecosystem (SDFE) Assessment along with a number of supporting tools and templates. The methodology of the SDFE Assessment brings together a mix of global and local data sources concerning a country's digital economy to assess the level of development, barriers, inclusivity, and potential of its digital financing ecosystem to finance SDG-related national priorities. The assessment maps and assesses a host of indicators within the areas of, amongst other, government strategies and plans, policy and regulations, digital infrastructure, innovation and fintech sector, skills and awareness, trends, transaction volumes, SDG-aligned fintech solutions and financing flows. It also maps stakeholders such as mobile network operators, e-money issuers, banks and fintech companies. The SDFE assessment includes and

builds upon UNCDF’s Inclusive Digital Economy Scorecard (IDES), which constitutes part of the assessment and provides the methodological base for the SDFE assessment.

The outcome of the assessment is this Assessment Report that provides the scores, summarizes its findings and outlines the underdeveloped areas and constraints along with areas of opportunities for targeted sectoral, market and policy intervention. Based on the objective of the assessment, a number of recommendations are outlined and expanded upon in the digital finance strategy section. The SDG Digital Finance Ecosystem Assessment for Morocco in 2022 has one core learning question: **How ready is Morocco to develop an inclusive digital finance ecosystem?**

#### Analytical Scoring Framework


Area of analysis	Sub-areas & Scores
Digital Economy	<ol style="list-style-type: none"> <li>1. Policy &amp; Regulation</li> <li>2. Digital Infrastructure</li> <li>3. Innovation</li> <li>4. Skills</li> </ol>
FinTech Ecosystem	<ol style="list-style-type: none"> <li>5. Fintech Sector Size</li> <li>6. Fintech Diversification</li> <li>7. Access to Financing</li> <li>8. Supportive Environment</li> </ol>
SDG alignment of fintech Ecosystem	<ol style="list-style-type: none"> <li>9. Sustainable fintech Policy</li> <li>10.1 Green fintechns</li> <li>10.2 fintech Alignment</li> </ol>
Digital & Women’s Inclusiveness	<ul style="list-style-type: none"> <li>▪ Women</li> <li>▪ Youths</li> <li>▪ Elderly</li> <li>▪ Rural</li> <li>▪ Refugees</li> <li>▪ Migrants</li> <li>▪ Disabled</li> <li>▪ MSMEs</li> </ul>

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# Section 1. Detailed Assessment

## Overview of Morocco's Digital Finance Ecosystem

Figure 2 – Morocco's promises and red flags

- 
- 1<sup>st</sup> Mobile Money solution launched **12 years ago** (Maroc Telecom in 2010)
  - **> 100% adoption of Mobile Phone** (ITU, 2021)
  - **99% 3G & 4 G penetration** (ITU, 2021)
  - **86% of the population has access to the Internet** (ITU, 2021)
  - **20+ FinTechs**
  - **+248 % e-wallets between January and December 2021** (Central Bank reports)
  - only **33%** of Women are financially included (**44%** overall)
  - **1 Financial access point for 7,384 adults in rural areas** (BKAM, 2021)
  - **0 Green FinTech**
  - Mobile Money adoption is **17%** (Central Bank, 2021)
  - **44% of the digital wallets are Tier 1 users** (threshold up to USD20)



Morocco has had a slow uptake of mobile money, despite being one of the first countries in the region to launch such solutions in 2010 [16]. In 2017, the country had a financial inclusion rate of only 27%, and that was particularly low in rural areas [17]. There are several reasons for this low adoption rate. One is the widespread presence of traditional banking institutions and the postal network, which have extensive brick and mortar branches [17]. This strong traditional financial infrastructure may have deterred people from switching to mobile money. Additionally, there is a cultural resistance to digital payment methods in Morocco, with many people preferring to use cash [18]. This preference has been supported by the proliferation of OTC transfer agencies such as Cash Plus and Wafacash, which have a combined network of more than 4,000 access points [16].

Another reason for the slow uptake of mobile money in Morocco is the cautious approach taken by the government in regulating digital financial services. This has led to challenges for players seeking to develop agent networks and offer inclusive financial services, particularly for women and vulnerable groups [17]. Moroccan banks have not been able to easily open correspondent agents throughout the country, as all players must apply for a specific payment license [17]. This has made it difficult for consumers to easily cash in and cash out at their local retailers, hindering the adoption of mobile money.

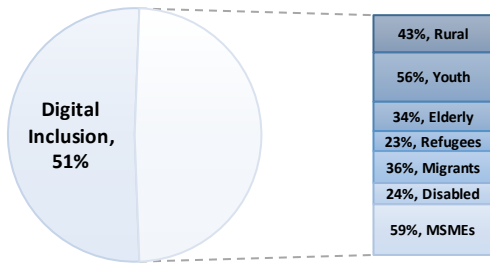
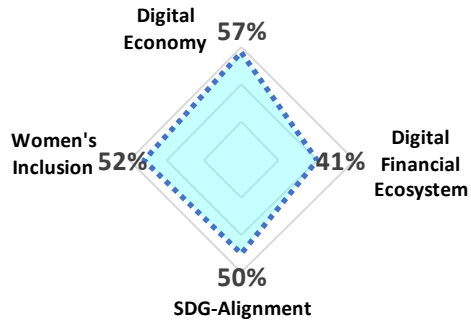
Despite these challenges, there is hope for a more digitally-inclusive future in Morocco. Players like Maroc Telecom and Orange are entering or re-entering the market [16], and the adoption of smartphones is on the rise [19]. The expansion of 3G and 4G coverage has also improved access to online services and technology [20]. However, the digital divide in Morocco is still widening, with a need to shift consumer behaviors from an OTC approach to one that is more inclusive, with funds being transferred to a solution where they do not need to be withdrawn all at once and can be used for savings, insurance, and credit services [17]. This will require increased education and awareness about the benefits of mobile money, as well as addressing issues of trust and security.

In this section, the scores of the elements constituting an inclusive sustainable digital finance ecosystem will be presented together with a high-level analysis of each section.

Each of the constituting elements play different roles for enabling the leveraging of digital technology for sustainability-focused economic growth – from driving innovations in the fintech sector to enabling innovative green solutions to enhancing financial inclusion. Hence, the scores of the different elements are presented separately in this section to identify the key gaps or shortcomings within each element that currently may inhibit broader developments.

These findings will be analyzed and contextualized to the objectives of this report in **section 2 – Ecosystem Analysis.**

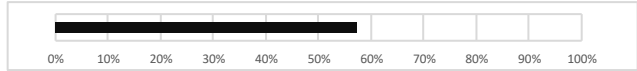
Morocco



Areas of Analysis

Score

Digital Economy Score



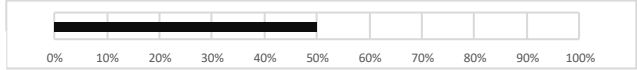
57%

Digital Finance Ecosystem Score



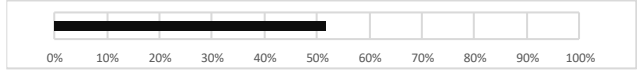
41%

SDG-Alignment Score



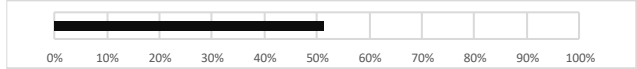
50%

Women's Inclusiveness Score



52%

Digital Inclusiveness Score



51%

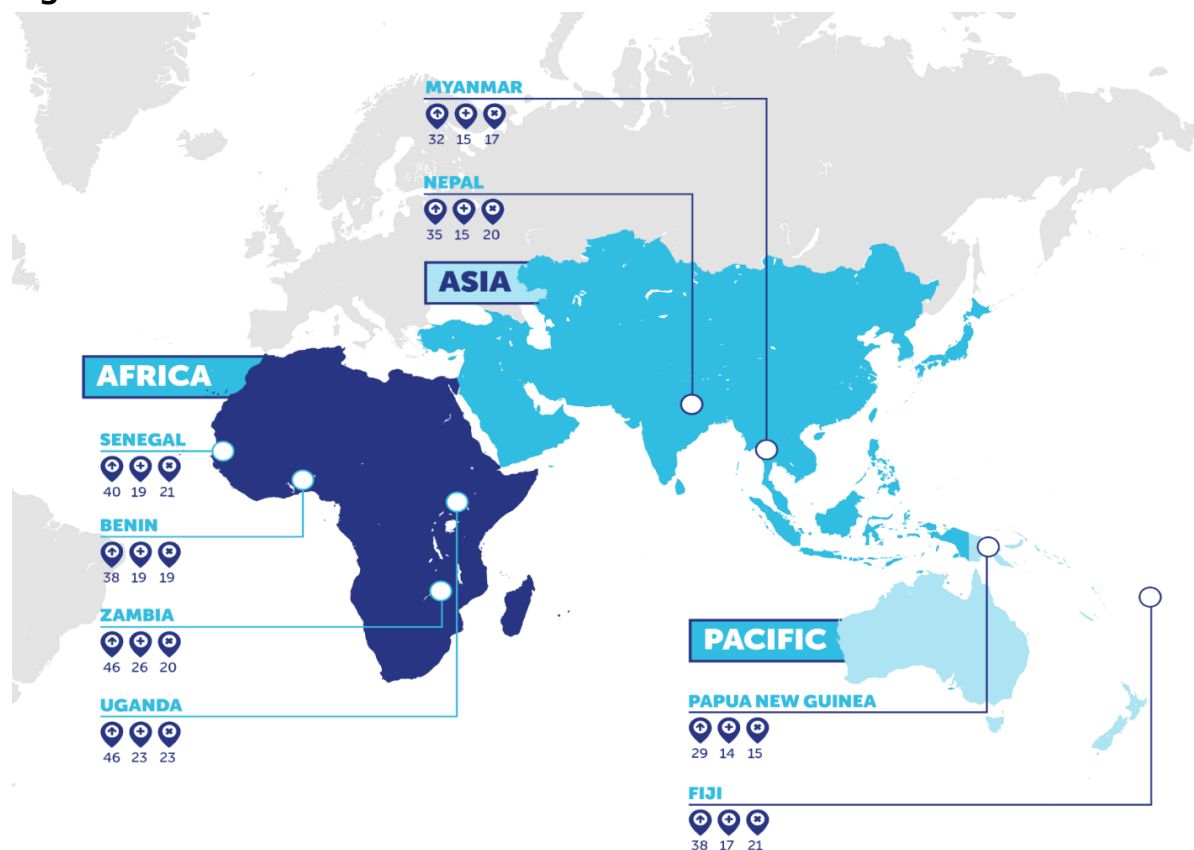
Subareas Score

Subarea	Score	Subarea	Score	Subarea	Score
Digital Economy	57%	Women's Inclusion	52%	Digital Inclusion	51%
Policy and Regulation	75%		47%		27%
Infrastructure	58%		62%		65%
Innovation	52%		31%		45%
Skills	44%		68%		68%
Digital Finance Ecosystem	41%	SDG-Alignment	50%	Target Segments	
FinTech Sector Size	33%	Enabling Policy	50%	Rural	43%
FinTech Diversification	3%	Green FinTech	0%	Women	52%
Access to Financing	67%	FinTech-Alignment	100%	Youth	56%
Supportive Environment	60%			Elderly	34%
				Refugees	23%
				Migrants	36%
				Disabled	24%
				MSMEs	59%

# Morocco's digital economy is in its Expansion stage

The digital economy in Morocco is in an expansion stage, characterized by the presence of digital rails, increasing availability and active use of digital payment, and an innovation ecosystem that starts to develop with various new partnerships and services in various domains (finance, agriculture, energy, health, education, ecommerce, etc.). Citizens are gaining access to a wider range of services beyond just payments, and several new players (providers, fintech, start-ups, entrepreneurs, incubators, etc.) are emerging in the market. However, limited competition and inclusivity are significant challenges facing Morocco's digital economy. Moving beyond this stage requires both the government and private sector to provide robust support for developing innovation through putting in place the right incentives for start-ups to grow, expanding access to expertise and talent, and access to financing along all stages of business development. This will enable the growth of the innovation ecosystem, which in turn will further reinforce the digital infrastructure through increased investments and usage.

**Figure 3 – IDES Benchmarks**



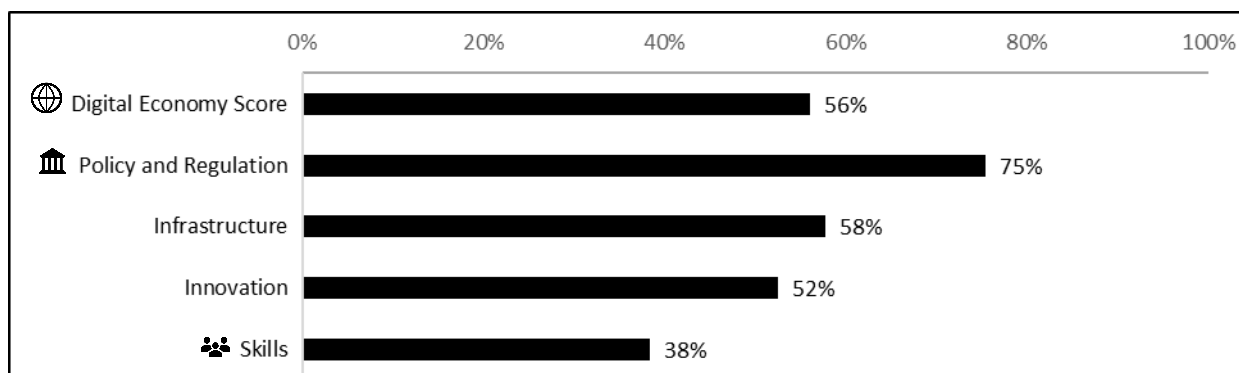
# Digital Economy Scores Scorecard Profile

The SDG Financial Ecosystem Assessment provides scores for the development of a digital economy based on several indicators for its main components (policy and regulation, infrastructure, innovation, and skills). It also provides scores for the Inclusiveness of the digital economy for marginalized segments (rural population, women, youth, micro-, small- and medium-sized enterprises [MSMEs], migrants, refugees, older people and people with disabilities).

The inclusiveness of the digital economy is primarily through the qualitative assessment of the efforts made by the public and private sectors to include specific segments in the expansion of the digital economy.

The Digital Economy Score indicates the status of the overall digital economy and its components (enabling policy environment, mobile infrastructure and digital payments, innovation ecosystem and customers skills).

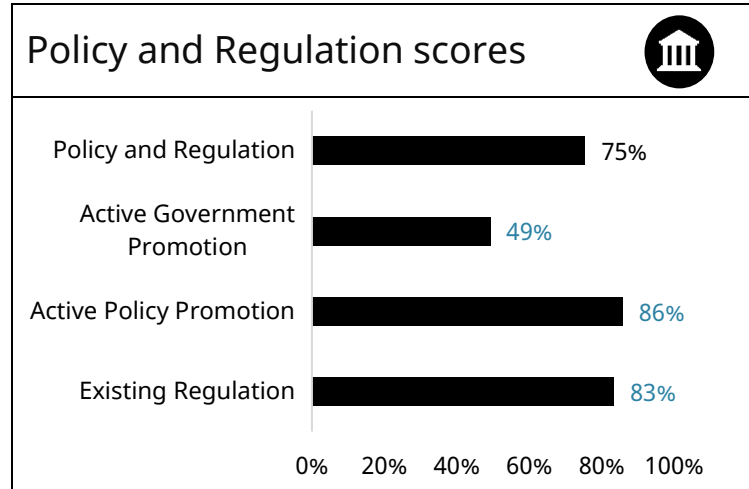
**Figure 4 - Digital Economy Scores**



Morocco scores high in terms of policy and regulation (75%), infrastructure (58%) and innovation (57%), while only modestly in skills (38%). As described in the next chapter, most of the Moroccan government agencies have been key advocates for promoting the digital economy. Laws regulating digital initiatives have been enforced as early as in 2014 and the government also oversees the development of the interoperability between the digital finance actors as well as cybersecurity measures.

# 1. Policy and Regulation

The Moroccan government's regulatory framework provides a strong focus on enabling the digital economy, as evidenced by its relatively good scores across the three relevant areas. Of particular note are the various initiatives outlined below and further discussed in the following chapter.



In an effort to regulate the mobile

payment ecosystem, Morocco has taken proactive steps. In December 2014, the "new banking law" was published, and two detailed circulars were released in June 2016. This law, introduced by Bank Al-Maghrib, established the role of the "*Etablissements de Paiement (EP)*" (later referred to as Payment Providers in the document) as a key player in the country.

The new law clearly defines the responsibilities of the Payment Provider, including the opening of Payment Accounts ("*compte de paiement*"), the processing of payments, and the mobilization of cash in and out. It also introduced a tiered KYC system, summarized in the table below:

**Table 1** - Mobile Money tiers in Morocco

Level	Threshold	KYC documents	Registration	% of clients in 2020 [21]
Tier 1	MAD 200 (≈USD19)	None, only a phone number is required	Online (website or applications)	42%
Tier 2	MAD 5,000 (≈USD469)	ID justification (ID card, passport...)	Could be done remotely	39%
Tier 3	MAD 20,000	ID justification +	An interview is	20%

(≈USD1,875)	proof of address	required with an agent of the Payment Provider
-------------	------------------	------------------------------------------------

Payment Providers initiate the development of the agent network by directly contracting with agents. Agents can be classified as either Main Payment Agents ("*agents de paiement principaux*") or Retail Payment Agents ("*agents de paiements détaillants*"). The key differences between these two categories are summarized in the table below:"

**Table 2** – Main Payment Agents and Retail Agents in Morocco

Decription	Enrollmen t of client	Cas h In	Cas h Out	Can recrui t other agent s	Exclusivit y clause	Security measures
Main Payment Agents	Level 1, 2 and 3	Yes	Yes	Yes	Yes, can only be linked to one EP	Dedicated structure (physically) , security guard, safe
Retail Payment Agents	Only level 1	Yes	Yes	No	No	No

Agency banking is a way for traditional banks to provide their services and extend their reach without building physical branches. Instead, they use authorized agents to offer their services in a cost-effective way. This type of banking is becoming more popular because it allows for greater product availability, better risk management, and improved financial inclusion. However, Agent banking is relatively underdeveloped in Morocco. If a financial institution wishes to establish an agent network, it has two main options:

- The first option is to have a contract with each one of the agents through an "*Intermerdiaire en Operations Bancaires*" (IOB). This requires the bank to apply to the Central Bank with a constraining agreement each time for a

single agent. This is not conducive to developing a robust agent network in remote areas (where potential agents do not fill in many prerequisites).

- The second option is to open a subsidiary as a Payment Provider. This is the path followed by several banks in Morocco. On the downside, this solution does not give the clients the possibility to directly cash in and cash out from their bank account. This is inhibiting the financial institutions to open financial accounts in very remote areas and complicates the access to credit and savings.

In addition to the Central Bank, several ministries, offices, and agencies are seizing the digital opportunity and promoting policies for the digital economy, including the competition regulatory body, the ministries of finance, agriculture, commerce, and the homme office. The Agence de Développement du Digital (ADD) was created by the Moroccan government in 2017 to oversee transversal digital programs. ADD is actively promoting digital in the Moroccan economy and has identified five priority streams to work on:

- Build an interoperable platform of data sharing between the public administrations and the private sector
- Set up a digital factory that would support the public administration to be digitalized
- Build an ecosystem that would enable AI to play an active role
- Build a digital nation by embedding digital training in the Moroccan education
- Support the required regulatory shift

Bank Al-Maghrib's "test and learn" approach, which encourages innovative players to test their innovations in the market and refine them, is effective in protecting consumers, but it may also delay the testing of innovations on the market (Bank Al-Maghrib, 2018).

Morocco has long recognized the importance of cybersecurity. In 2012, the country developed a national cybersecurity strategy, which was strengthened by a new law published in July 2020 (Law 05-20) that took effect in 2021 with the corresponding decree (Government of Morocco, 2020) [22]. Morocco also established a data protection framework in 2009 [23] to ensure effective protection of individuals against the misuse of data that may infringe their privacy and to harmonize the Moroccan system with those of its partners, particularly those in Europe (Government of Morocco, 2009). The law also established the National Commission



for the Protection of Personal Data (CNDP). In addition to what has been said, financial services are at the intersection of two different worlds: the financial world and the telecom world. This explains why there is a need to collaboratively work between the two regulators: the Central Bank monitoring, regulating, and supervising the financial flows and the telecom regulator ensuring that the channel to access and use the mobile financial services are appropriately working. In this context, the Moroccan Central Bank signed a cooperation agreement in February 2022 to foster collaboration on Digital Financial Services with the National Telecommunications Regulatory Authority (ANRT).

Morocco established a national financial inclusion strategy in 2019 [24] stressing the importance of the new technologies. This financial inclusion strategy is led by the ministry of economics and finances in collaboration with Bank Al-Maghrib. The latest annual report monitors the number of e-wallets launched, their offer, the number of agents and estimates potential outcome. In 2020, a cartography showed that there is a potential of at least 6.6M of adults not having access to one access point in their municipality (see table 3). As described in this table, the proposed recommendations still rely on the importance to develop low-cost banking branches and not yet on agency banking models.

**Table 3** - National financial inclusion strategy per access point

Size of the rural municipalities	> 20,000 habitants	Between 10,000 and 20,000 habitants	< 10,000 habitants
Access points			
No access point	1.3M habitants for 66 locations	2.8M habitants for 289 locations	2.5M habitants
At least one access point	1.8M habitants for 82 locations	1.3M habitants for 134 locations	0.5M habitants for 101 locations
Recommendation (Moroccan National strategy)	Ease up the regulatory constraints to allow the setting up of low-cost banking branches	Financially incentivize the setting up of low-cost banking branches	Rely on alternative point of access

Source: adapted from the latest annual financial inclusion strategy report, 2020.

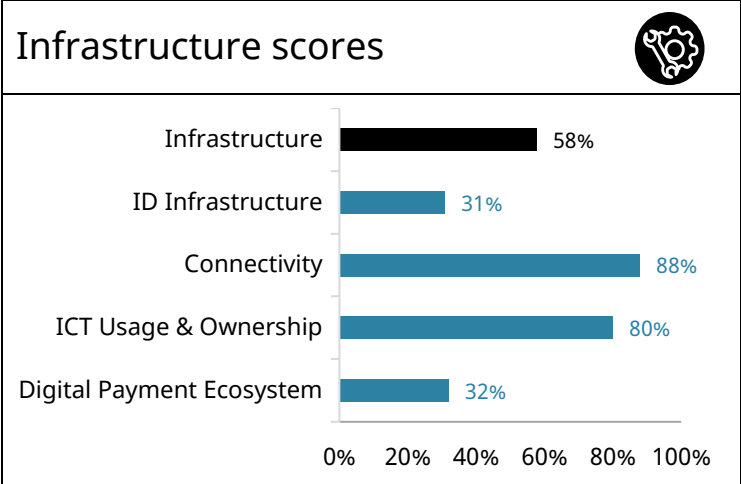
In summary, Morocco has taken steps to foster collaboration and support the development of digital financial services, with a focus on financial inclusion. However, the country still faces challenges in expanding access, particularly in remote areas.

#### **Measures that have been taken during the COVID-19**

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During the COVID-19 pandemic, Bank Al-Maghrib took several measures to encourage the adoption of digital payments. One of these measures was temporarily relaxing the requirements for opening payment accounts and by local merchants to accept mobile payments until the end of June 2020 [25]. The Central Bank also asked banks and payment institutions to follow recommendations on new technologies for remote account opening. Additionally, Bank Al-Maghrib made it easier to recruit agents by only requiring an ID card and a business license number for those not registered with the Commercial Register. Furthermore, the Amending Finance Law of 2020 granted a 25% tax exemption on mobile money turnover for local grocers.

# 2. Infrastructure

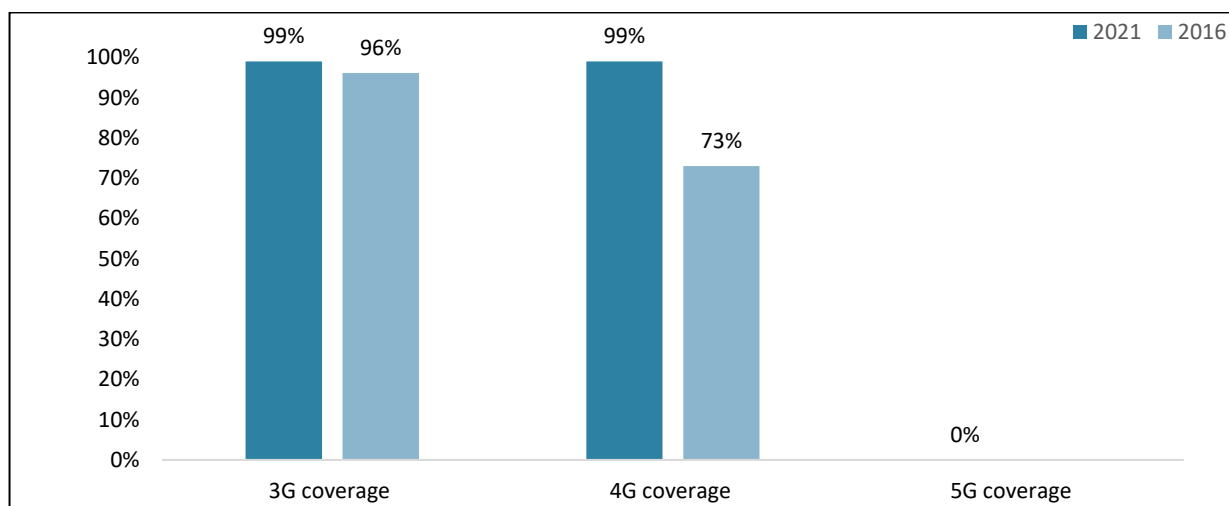


In Morocco, 93% of the population is registered for a national ID, but it is currently not possible to use a national ID or digital ID to conduct transactions, even though it is a priority and the minister and the General Directorate for National Security Commonly (DGSN) are working towards this goal. In addition to ID documents that are required to open a tier 2 account (more than MAD 200), the findings show that two main factors could increase the adoption of digital services: mobile phone adoption and connectivity (a standard mobile phone is not very useful without network access).

Mobile phone adoption in Morocco is very high, with a penetration rate of over 100%, but the percentage of the population with a SIM card is about 81% (according to GSMA intelligence). This is because one person can have access to multiple phones and SIM cards. GSMA also reports that the affordability of mobile services and devices could be improved (score of 56%).

Connectivity is also very high, with more than 99% of the population covered by 3G and 4G networks (according to GSMA intelligence). Network coverage has significantly improved over the past 5 years (a 26-point increase in 4G coverage between 2016 and 2021). The 5G network is still in its early stages and is being tested. 84% of the population also uses the Internet on various devices (according to the ITU). Combined with a high rate of smartphone penetration, it should be a conducive environment for Digital Financial Services accessible via mobile applications. On the downside, according to the GSMA Mobile Connectivity index, the network performance could be improved (score of 53%).

**Figure 5 - Network coverage of the population**



Source: based on ITU data 2021

Morocco has a robust digital ecosystem that enables interoperability among actors. The payment infrastructure in Morocco consists of three layers: the electronic payment switch, the mobile switch, and the Moroccan interbank clearing system. HPSS is the institution that manages the mobile switch. It was live with up to 22 actors at the end of 2020.

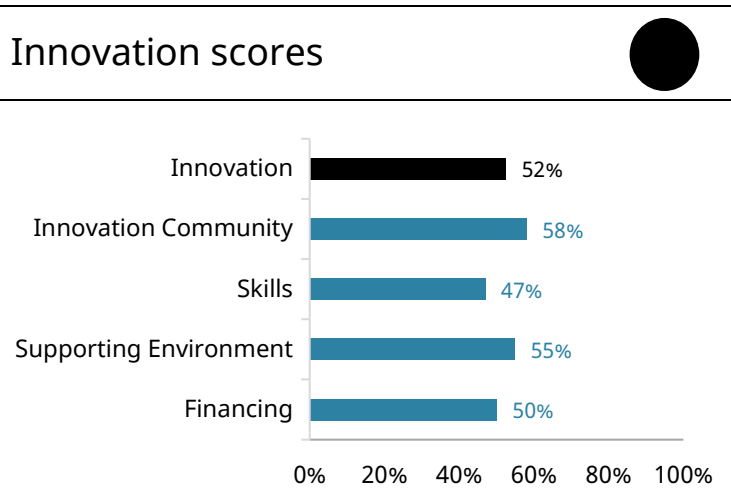
#### **Groupement du Paiement Mobile Maroc (GP2M)**

To support the institutional change, an Economic Interest Group (EIG) called the Groupement du Paiement Mobile Maroc (GP2M) was established in January 2020. As of September 2022, it included 23 players, such as payment providers, transfer companies, and key stakeholders (M2T, CMI). This EIG promotes the use of the "Maroc Pay" brand, which indicates to customers that they can pay with a mobile wallet. Its other objectives are to:

- Ensure the implementation of market principles and rules for mobile payment and the application of common technical standards for mobile payment in accordance with regulations and best practices in the field.
- Regulate inter-member operational disputes.
- Monitor security and fraud prevention on mobile payment.
- Promote mobile payment with flow generators on behalf of all EIG members and coordinate with public and private actors on incentive mechanisms.
- Implement the communication strategy.
- Negotiate technical and pricing conditions with third party stakeholders.

## 3. Innovation

Morocco was found to have an Innovation sub score of 52%, meaning that the country's innovation ecosystem is at its expansion level. The score signals a relatively strong digital infrastructure and the existence of several players (incubators, investors, mentors, etc.) that are supporting the innovation ecosystem (212 Founders for instance). The analysis found that both the growth of



innovative companies (44%) and the university and industry research collaboration (31%) to be insufficient. The skills and education of the people working in the fintech sector and other supporting professions, such as software development, are also limited. Likewise, high-skilled labor forces are not available as much as necessary to back the digital finance innovation ecosystem. New and emerging fintech like innovative digital solutions delivering secure and real-time payments call for increased data availability and representativeness underline the critical importance of a networked multilateralism, bringing together government, civil society, academia and the private tech sector. Creating a thriving digital finance ecosystem relies on the government's ability to foster high innovation capacities, underpinned by a conducive business environment and a good flow of R&D spending.

The globally sourced data show is a modest local innovation community synergy, as highlighted by the country's growth of innovative companies (44%), University and industry research collaboration (31%) and E-Government Development Index (57%).

It is still too early to determine their outcomes. However, there are major hurdles to delivery platform with innovative finance and new technologies to solve some of the most pressing problems facing vulnerable groups of people, at scale.

What emerged — not surprisingly — is that Level of Skills (availability of skills, experience of skills) in the innovation community is limited. This comes as a result of a multitudes of difficulties: Skillset of graduates (41%), Ease of finding skilled employees (49%), Attitudes towards entrepreneurial risks (46%), Tertiary enrolment (41%), Reliance on professional management (58%). However, the local innovation supporting environment is showing a good sign of progress as shown by a relatively good number of innovation hubs (96% compared to regional leader). Others innovation supporting environment areas remain modest though. For instance, the state of national innovation hub development (43%), the legal framework's adaptability to digital business models (42%) and multi-stakeholder collaboration (38%).

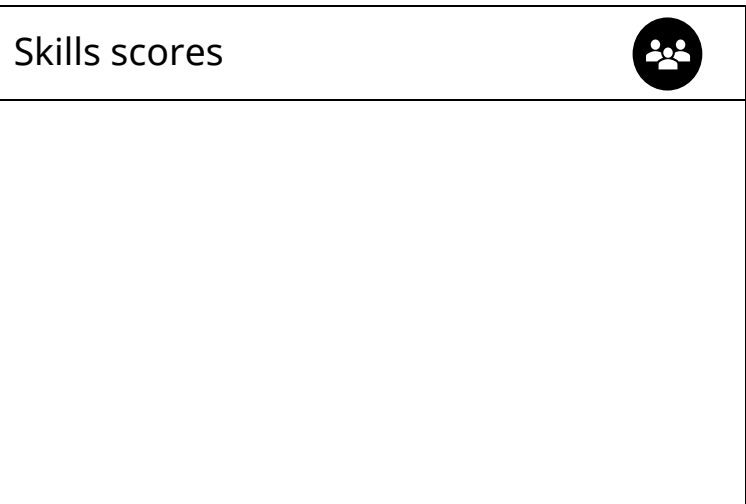
Ultimately, the Financing (availability of financing at all stages of the entrepreneur journeys and exits) leaves the innovation index somewhat retrained as there exists a lack of venture capital availability (33%), though, financing of SMEs (50%), and domestic credit to private sector (67%) score higher.

# 4. Skills

Morocco's digital finance maturity would essentially consist of the ability of everyone to participate in a digital economy. Which requires the country to have a good provision of basic, intermediate and advanced digital skills. With a Skills sub score of 44%, Morocco is facing a shortage of digital skills of all the levels. First, 48% of the population is digitally skilled.

Second, the proportion of schools with internet access is 88%. Digital literacy (24%) and financial literacy (34%) both score low and miss the opportunity to help grow the economy and reduce poverty by helping people in remote areas to get the basics. Even more so that talent development is at the core of the growth of digital finance activities and/or players.

More than this, however, people are left unemployed while talent is in hot demand in the local digital finance ecosystem. The lack of skilled workers and those with new or scarce skills, as a result of brain drain, is a growing challenge that places enormous value on quality education along with country-wide upskilling and reskilling.



# Digital Finance Ecosystem Scores

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The Digital Finance ecosystem score rates the Digital Finance adoption, its activity, and the number of the stakeholders with open systems.

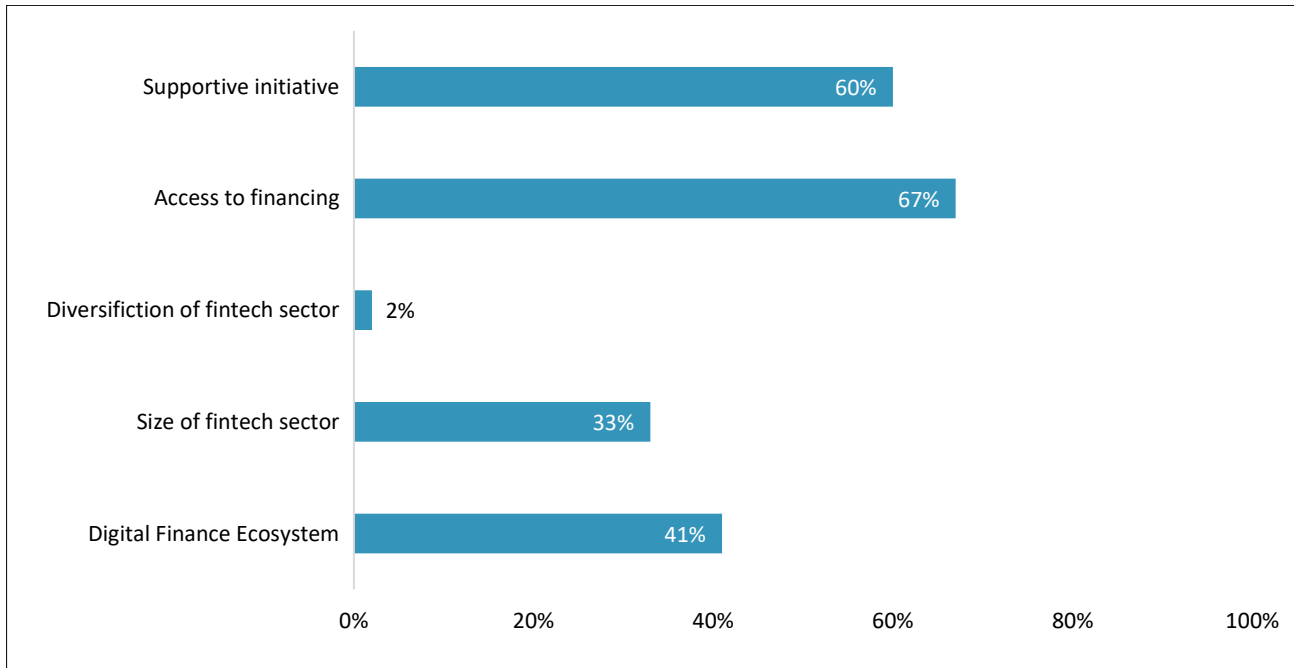
The size of the fintech sector score assesses the number of players, fintechs and their transaction volumes.

The diversification of the fintech sector score estimates the importance of the payment fintechs in the country.

The access to financing score measures the capacity of the fintech startup to raise capital and credit.

The supportive initiative score indicates the easiness for the players to innovate in the market in a supportive environment.

**Figure 6** – Digital Finance Ecosystems Scores



The diversification of the fintech score (2%) indicates that the fintech sector is almost exclusively delivering payment services, even though the size of the fintech sector is becoming increasingly significant (score of 33%). The Digital Finance ecosystem score (41%) confirms that digital payment is gaining more traction in Morocco. The good



Access to financing score (67%) and supportive initiatives score (60%) show that there is a favorable environment for fintechs to thrive in Morocco.

# Level of development of Digital Finance Ecosystem

The regulatory framework of the government receives a relatively good score across the three areas, indicating that the government has placed a key emphasis on enabling the digital economy. A few areas worth highlighting are specified below and expanded upon in the next chapter. According to the latest report from McKinsey, "Fintech in Africa: The End of the Beginning" (2022), Morocco is one of the eleven countries where fintech growth will be concentrated in the coming years.

A variety of stakeholders are shaping the Digital Finance ecosystem, including:

- E-wallet providers (payment providers)
  - Pure mobile financial services launched by Mobile Network Operators (MNOs) such as MT Cash (IAM), Inwi Money (Inwi), and Orange Money (Orange). In Morocco, MNOs must create a dedicated structure to provide Mobile Money Services and must partner with a financial institution to provide financial services (savings, loans).
  - E-wallets launched by financial institutions to offer new channel services to their clients (Banque Populaire, BMCE, CIH Bank, Barid Bank Mobile, Al Filahi Cash, Attijariwafa bank, Societe Generale, etc.).
  - Traditional transfer companies that launched a Mobile Money solution (Cash Plus, Damane Cash/BMCE, Wafacash/AWFB, etc.).
- Payment systems (SRBM, GSIMT, HPSS, HPSS Mobile) and Payment Service Providers (PSP) that enable e-commerce payment (Maroc Télécommerce, Payzone, Fpay).

Recently, we have also seen the emergence of several start-ups and fintech providers in Morocco described in the table 4 below:

**Table 4** – A sample of fintechs and innovative players in Morocco

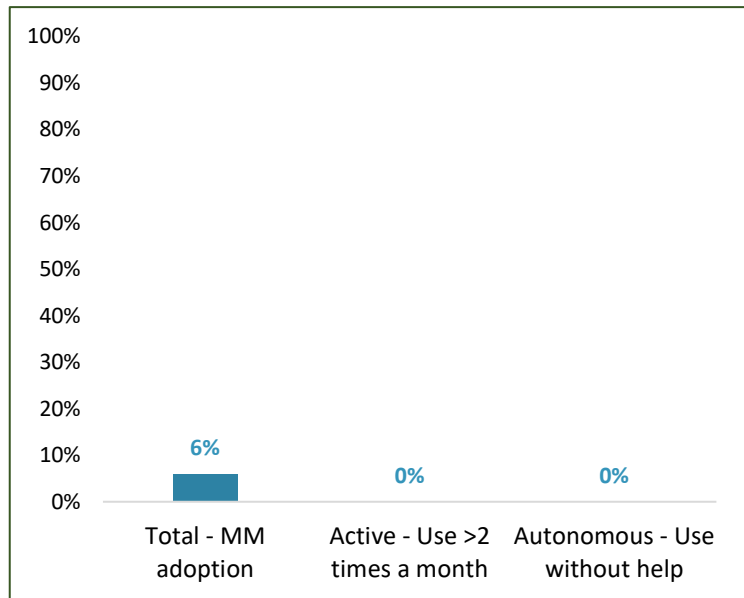
Players	Creation	Core business	Key figures / comments
HmizatePay	2018	E-commerce, Mobile Payments and Travel	As of 2022, Hmizate has a membership of over 600,000 people and has sold over 1.7 million products and services
CIWA	2018	Digital platform to securely manage ROSCAs and build a	CIWA is collaborating with Microfinanza to scale the service

		credit score	throughout Morocco
Chari	2019	B2B e-commerce and fintech platform for traditional proximity stores	Chari is valued at USD 100M in bridge round as it looks to pilot Buy Now Pay Later (BNPL) service. Chari had 50,000 clients in 2021
WafR	2019	Digital solution for the management of physical points of sale (POS)	WafR is valued at USD7M. Wafr reached 10,000 users in 2021
Yalla Cash	2018	Money transfer fintech startup operating between North America and Africa	Yalla Cash raised USD675,000 in 2021
LaCaisse.ma	2016	Digital solution for the management of physical points of sale (POS)	LaCaiss.ma secured some additional fundings in 2021

According to the latest data from Findex (2021), the uptake of Mobile Money remains low, with only 6% of respondents adopting it. Furthermore, none of the respondents who use Mobile Money use it on a regular basis or are using it on their own.

This demonstrates that there is still a significant gap before reaching widespread adoption in Morocco. The latest data from the Central Bank estimates that 17% of the adult population has adopted Mobile Money.

**Figure 7 - Zoom on the activity and capacity to**

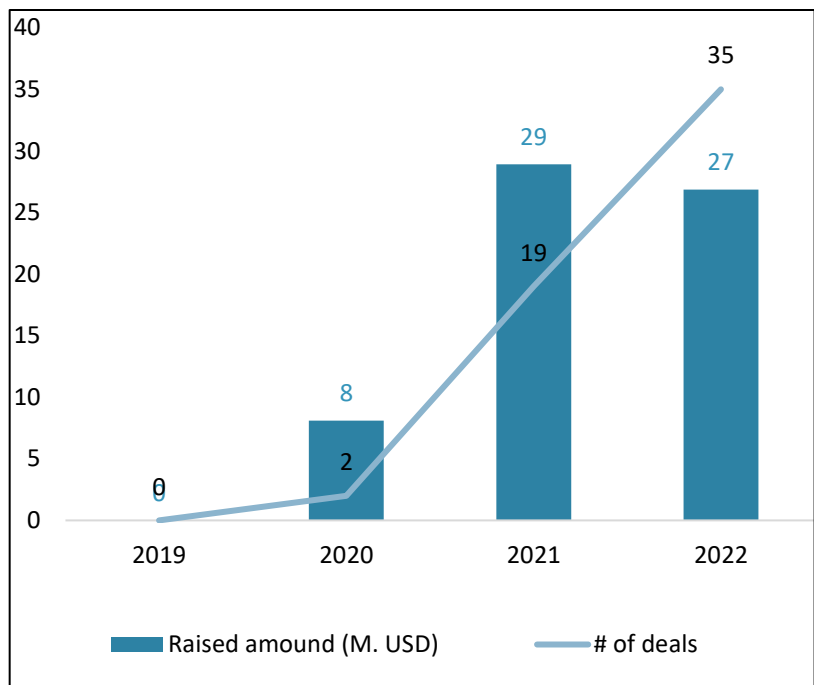


use Mobile Money

Source: based on the Findex data 2021

The Moroccan Digital Payment sector is supported by angel investors, has access to credit, receives funding through government programs, and can utilize crowdfunding. This sector has gained significant traction in Morocco, as evidenced by the number of deals in the region. Figure 8 shows publicly disclosed deals in Morocco since 2019 for startups above 100k USD.

**Figure 8 - Start up deals in Morocco**



Source: based on "Africa the big deal"

From no funding raised in 2019, Morocco saw an impressive jump to USD 8 million in 2020, followed by a further increase to USD 29 million in 2021, and a slight decrease to USD 27 million in 2022. In addition, the number of deals has also increased significantly, with no deals in 2019, only 2 in 2020, 19 in 2021, and 35 in 2022. This trend suggests a growing interest in the Moroccan startup ecosystem and a shift towards increased investment in innovative and technology-based startups in the country.

### Diversification of the fintech sector

There have not been many partnerships between traditional institutions and startups in Morocco. However, SOWIT, a Moroccan fintech, recently partnered with Banque Centrale Populaire (BCP) in September 2022 to accelerate the financial inclusion of farmers and provide digital advisory services to mitigate risks and improve performance.

No green (native or non-native) fintechs were identified in the country, which suggests that the market has not yet been mature enough for new solutions to emerge.

### **Enabling initiatives**

The Moroccan government has provided incentives for the development of the fintech sector, and fintechs can also rely on incubators, accelerators, and fintech government programs in the country. Morocco has established an innovation office ("*guichet unique*") to facilitate discussions between innovators and the Central Bank, but there is no regulatory sandbox to support fintechs. The country is yet to establish an official fintech association.

# SDG-Alignment Scores

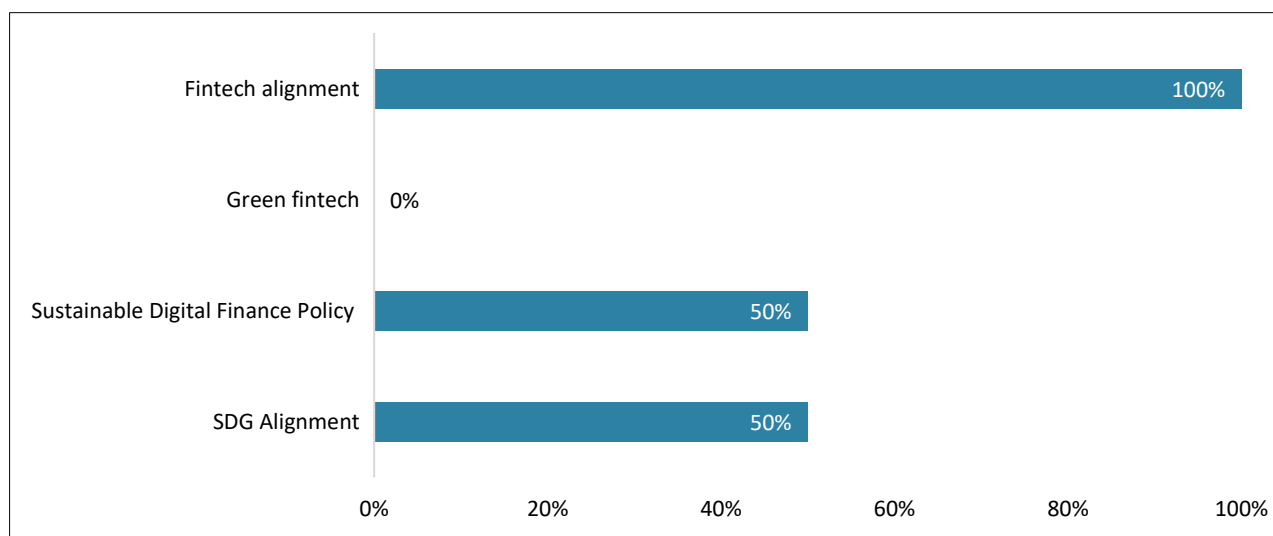


The SDG-Alignment Score measures, across 22 indicators, how digital finance ecosystem is aligned to green and government SDG priorities. The score offers an indication of how the local digital finance ecosystem can align to and help accelerate progress towards UN Sustainable Development Goals (SDGs). As Morocco places itself at the onset of the digital transformation of its economy, building inclusive digital ecosystems is utmost importance. With a 50% SDG-Alignment score, reflecting the existing divides in the digital economy. The score stresses the country's need of widespread access to digital financial services, meaningful connectivity, digital skills and digitally enabled climate finance.

Developing SDG-aligned digital financial ecosystems will require the country to both make sure everyone can access affordable and safe digital financial services and at the same time create an innovative digital finance ecosystem geared towards serving women, people with disabilities, children, seniors and others vulnerable groups. This is underpinned by building data infrastructures that are highly conducive to developing new SDG-aligned fintech. All along with bringing vulnerable groups of people along when responding to challenges which directly affect them

The Sustainable Digital Finance Policy Score takes stock of the alignment of existing digital finance policies and national strategies.

**Figure 9** - SDG Alignment scores



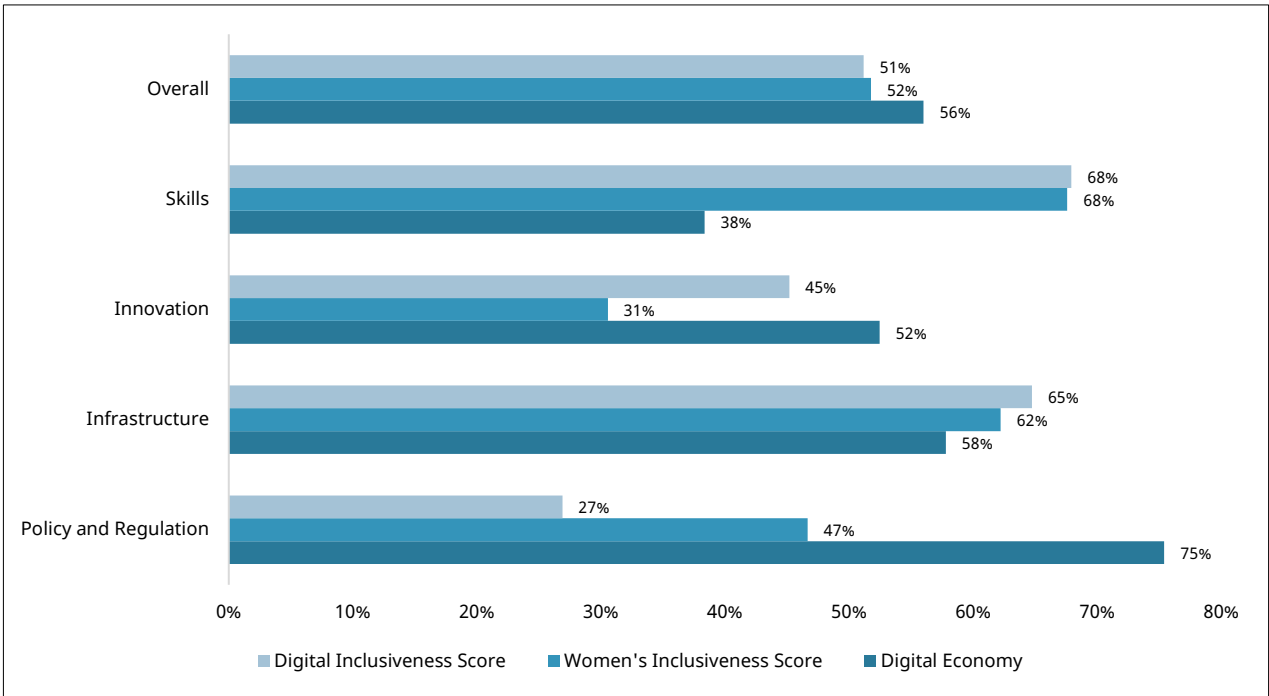
At the time of this assessment, there is no centralized policy that regulates the fintech ecosystem while considering alignment with the SDGs in Morocco; however, there are several strategies in place when it comes to serving people with low-income and women.

Financial inclusion tops the country's priorities with significant investment in reforms designed to increase public access to financial and digital services - most recently demonstrated by the government's USD450 million commitments to expand the availability of financial services and digital infrastructure for individuals and businesses, as well as improving financial inclusion and digital entrepreneurship. With the government paving the pathway to building inclusive and resilient digital ecosystems, the onus is still on bridging the gap between policies strategy and execution. The local fintech and digital finance seem to be missing when it comes to delivering or catalyzing green energy biodiversity, blue economy, climate-resiliency and other aspects with direct bearing on the environment.

# Inclusiveness Scores

The Digital Inclusiveness Score measures the level of inclusion in the digital economy for key customer segments, others than women for whom a dedicated score has been put together. The underserved segments include youth, elderly, refugees, migrants, people with disabilities, micro-, small- and medium-sized enterprises, and rural inhabitants.

**Figure 10** - Inclusiveness scores





# Women's inclusiveness

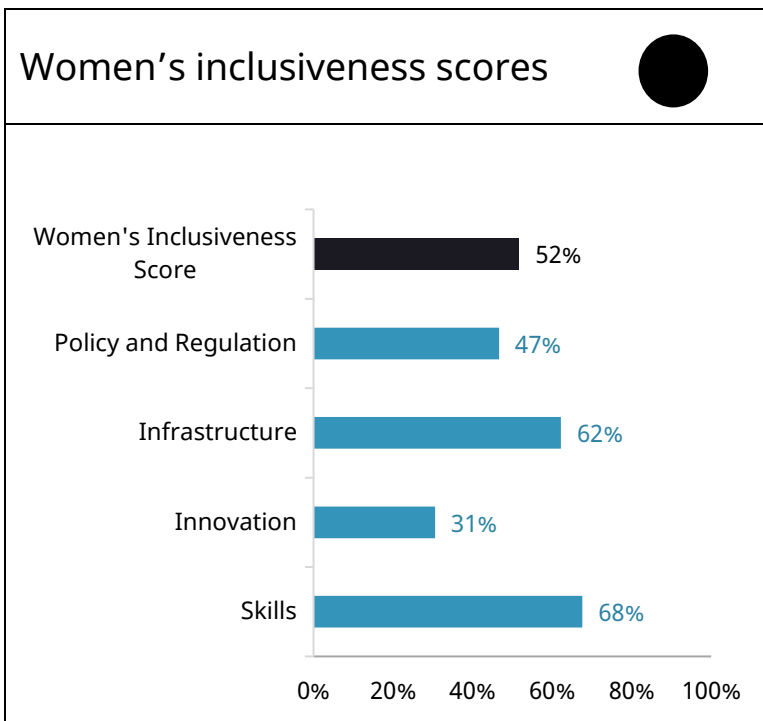
The country strongly advocates for equality between men and women. This principle has even been incorporated into the design of public budgets through gender-responsive budgeting (a program supported by UN Women). This approach involves allocating sufficient and optimized resources for budget programs that aim to reduce gender inequalities and associating them with specific impact indicators. The Central Bank collects sex-disaggregated

data and publishes a snapshot of the results in its annual reports. Morocco is taking a holistic approach and has not set specific objectives for financial inclusion for women and other target segments (such as youth, rural and remote areas, and people with disabilities) in the national financial strategy.

In 2021, the GSMA estimated that in the Middle East and North Africa (MENA) region, women were 9% less likely to own a mobile phone and 16% less likely to have access to the internet. Specifically in Morocco, the ITU estimated that the gender ratio in mobile phone ownership was 40% and that men used the internet twice as much as women (25% for women compared to 50% for men).

The latest Findex study from the World Bank (2021) showed that there has been a tremendous increase in the use of financial services in Morocco by both men and women, but the gender gap has remained relatively stable (a gap of 24 points in 2017 and 23 points in 2021).

Morocco's digital finance ecosystem tend to address financial inclusion as a whole. None of the top three mobile money solutions have made a public commitment to



specifically serve women's specific needs. Additionally, the means years of schooling estimated for women in the country is five years (according to the UNDP HDI database), and with a digital literacy rate of 70%, it may be more difficult for women to access digital solutions. This has rippling effects, for example, men are four times more likely to be business owners.

# Key **gaps** in the Ecosystem

## Infrastructure

- The Moroccan infrastructure is developed, but not inclusive. Online Registration are not made possible using a national ID or a digital ID.
- The Mobile Switch serves as an open ecosystem, but it is also a barrier to new players and innovation due to financial costs for setup and maintenance.
- Government to Person (G2P) programs tend to favor a one-time cash transfer ("*mise à disposition*" or OTC transfer) rather than transferring money directly onto Mobile Money accounts.

## Policy and Regulation

- The Mobile Money threshold is not inclusive and limits the attraction of the service. Hindering the possibility to disburse G2P payments and designing new financial services.
- Becoming a Main Payment Agent requires a physical dedicated structure with a security guard.
- Agent banking requires a lengthy process to apply to an Intermediary in Banking Operations.
- The exclusivity clause of the Main Payment Agents prevents other players from conducting business with them.
- Full electronic enrollment is not well developed nor recognized in the country.

## FinTech services and products

- FinTech companies face difficulty in accessing data (APIs) which is further intensified by the lack of collaborations between startups/FinTechs and financial institutions.
- First generation Mobile Money services are well developed in Morocco, aside from the merchant payment feature, but there are no second-generation digital financial services in Morocco (savings and credit).
- Players struggle to break-even, particularly new and pure digital actors, due to several factors including interoperability, challenges to recruit agents and clients, valuable agents are locked by the historical players such as banks and transfer companies.
- Financial regulations do not support the three major innovation sources Open Source, Open Protocols and Open Networks.

## Customers/Users Women's Inclusiveness

- Financial Institutions do not seem to have a dedicated design to reach specific segments such as women, MSMEs, youth and excluded segments (migrants, elderly, etc.).
- Women are not targeted as a specific segment for client enrollment, usage or even playing an important role in the distribution model.
- Migrants, elderly, and the youth are disproportionately financially excluded

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# Section 2. Ecosystem Analysis

In addition to the analysis of the scores presented **in section 1**, this section aims to provide a more detailed landscape of the Moroccan digital finance ecosystem. By highlighting the supply, demand, and key inhibitors, this analysis aims to provide valuable insights for the development of digital finance in Morocco, which will be elaborated further in **section 3**.

## Supply

Morocco was one of the first countries in the region to launch Mobile Money, as early as in 2010 (MobiCash). A decade later, Orange and IAM had to re-launch their Mobile Money solutions in 2020 and more than 20 providers are now offering digital financial services in Morocco. Below is a summary of the services provided in Morocco by the providers.

As shown on figure 5, Digital players in Morocco are currently offering first generation non-financial services such as deposits, withdrawals, transfers, merchant payments, bill payments, and airtime. However, no actors were identified to provide financial services such as savings, credit, and insurance. These players are also mainly offering traditional products, and there have been no joint ventures between fintechs, MM solutions, and banks to promote financial inclusion. Some initiatives, such as the partnership between SOWIT and BCP, have the potential to promote financial inclusion in remote areas and specific value chains.

**Table 5 – Analysis of the e-wallet features (UNDP analysis)**

Components	features		e-wallet provided by MNOs	e-wallet provided by financial institutions	e-wallet provided by transfer companies
Onboarding	Online subscription	▶	***	***	***
	Subscription at an agent	▶	***	***	***
	Available on USSD	▶	**	-	-
	Available on an application	▶	***	***	***
Incoming flows	International remittances	▶	**	***	***
	Cash In at agent	▶	***	***	**
	Salary and bulk payment	▶	***	***	-
Circulating value	P2P transfers	▶	***	***	***
Outgoing flows	OTC transfers	▶	**	**	***
	Merchant payment	▶	***	**	*
	Cash Out at agent	▶	***	***	***
	Cash out at ATM	▶	**	***	*
	Airtime top up and bill payment	▶	***	**	*
	International transfers	▶	**	**	*
Financial Services	Savings	▶	-	-	-
	Credit	▶	-	-	-
	Insurance	▶	-	-	-





Legend: - : no provider is offering the feature , \* one or a few providers are offering the feature, \*\* : approximatively half of providers offer the feature, \*\*\* : all or almost all the providers offer the feature

In other markets, such as Tanzania and Madagascar, we have noticed that interoperability can hinder the innovation of players offering first-generation services. However, digital providers seem to be more inclined to introduce new second-generation services, such as savings and loans, to attract more customers and reduce attrition rates. Interoperability can also be a hurdle for providers in terms of profitability. Moreover, in Morocco, a list of operations has been established that must be offered to customers for free, including e-wallet subscriptions, balance inquiries, cash-in with cash, merchant payments, and e-wallet termination.

Ten years ago, most solutions in Morocco were based on sophisticated technologies that were challenging for users to manipulate and utilize, such as USSD (Meditel Cash) and Java (Barid Bank Mobile). However, with the widespread availability of smartphones and internet access in Morocco, there is now an opportunity for new and agile systems based on apps that could significantly benefit Moroccan consumers and transform the traditional financial inclusion sector.

Through our interviews and research, we have noticed that although a wide range of products are available in Morocco, only a few of them are regularly used by the population. These include cash-in, P2P, airtime top-up, and cash-out. Many of these services are not well known by the general population.

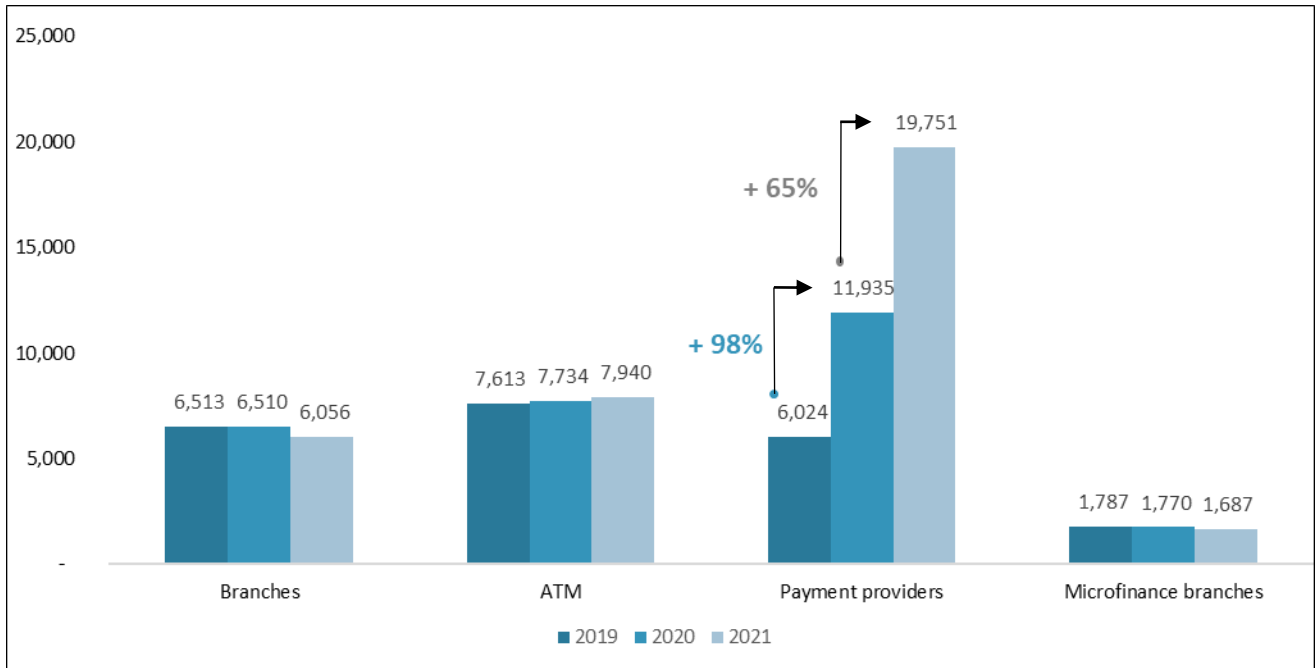
**Table 6** – usage of Mobile Money services

			
Services regularly used	Services often used	Services sometimes used	Services marginally used
<ul style="list-style-type: none"> <li>▪ Cash In</li> <li>▪ P2P transfers</li> <li>▪ Cash Out</li> <li>▪ Airtime top-up</li> </ul>	<ul style="list-style-type: none"> <li>▪ OTC transfers</li> <li>▪ Bill payment</li> <li>▪ Cash out at agents</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reception of salary and bulk payment</li> <li>▪ Cash Out at ATMs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reception of international remittances</li> <li>▪ Merchant payment</li> <li>▪ Sending of international remittances</li> </ul>

In the past three years, we have observed a shift in access points in Morocco. Payment providers agents have become the leading access points since 2020. On

the other hand, traditional brick and mortar branches have seen a decline, while ATMs have provided a country-wide access to liquidity.

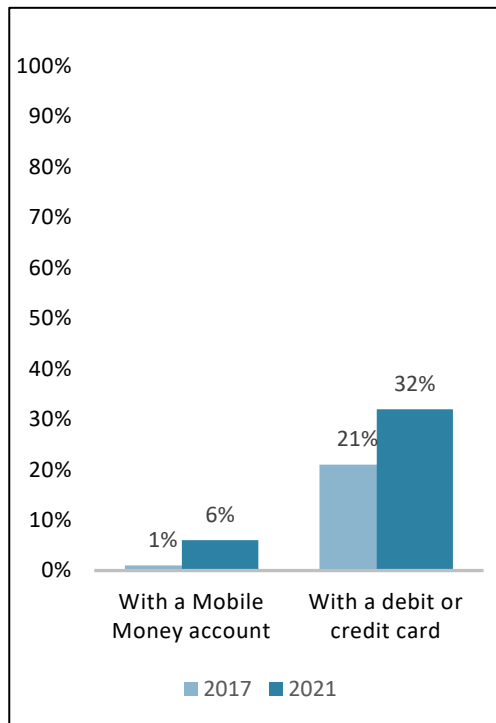
**Figure 11** – Financial Access Points over the last three years



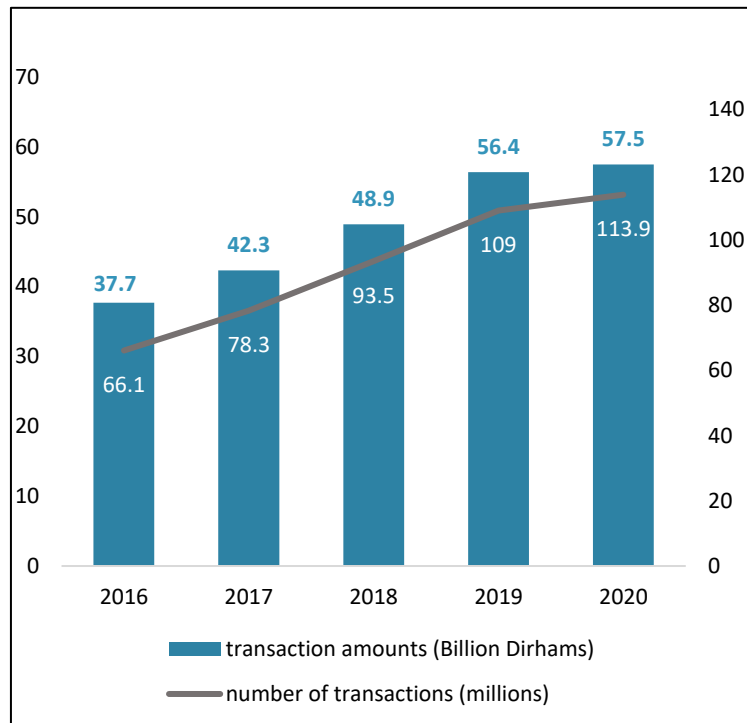
# Demand

In Morocco, digital financial services have been predominantly driven by monetary transactions, such as credit and debit cards. According to Findex, in 2021, these methods were used by 32% of the Moroccan population, while mobile money penetration stood at just 6% [26].

**Figure 12 – Mobile Money and card ownership**



**Figure 13 - Annual evolution of the monetics transactions**

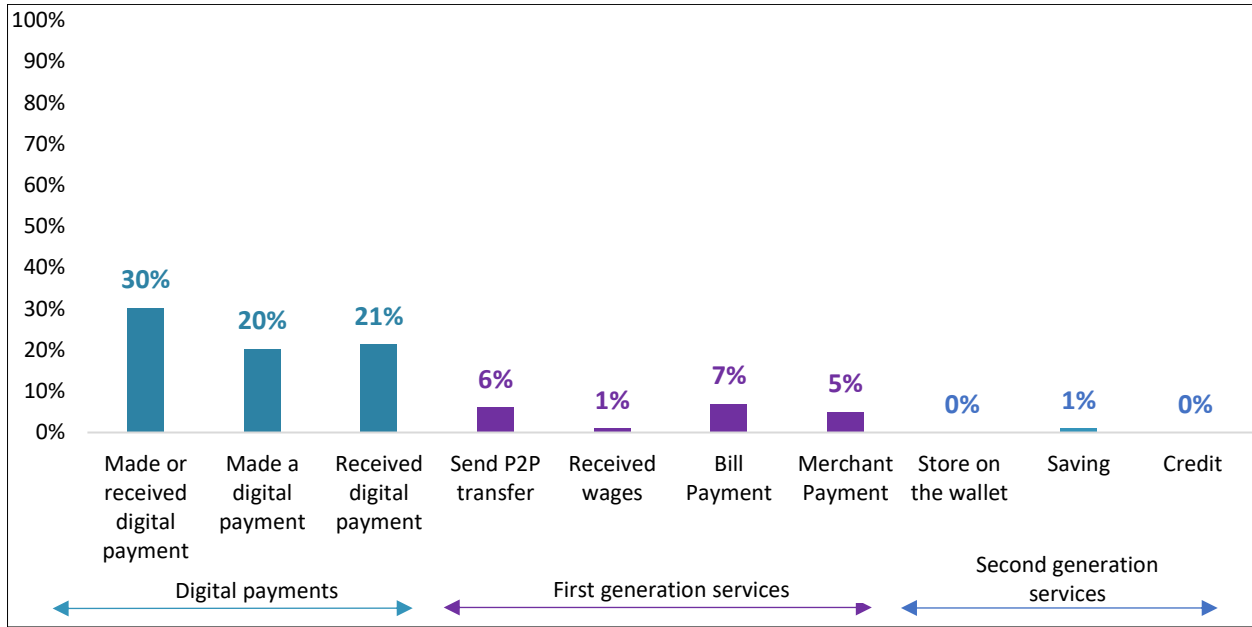


Sources: Based on Findex data (figure 12) and Bank Al-Maghrib (figure 13)

According to the latest Findex survey, 30% of Moroccan adults made or received a digital payment in 2021. This indicates that credit and debit cards are the primary drivers of digital payment usage in Morocco (see Figure 12).



**Figure 14 - Zoom on the Digital activity**

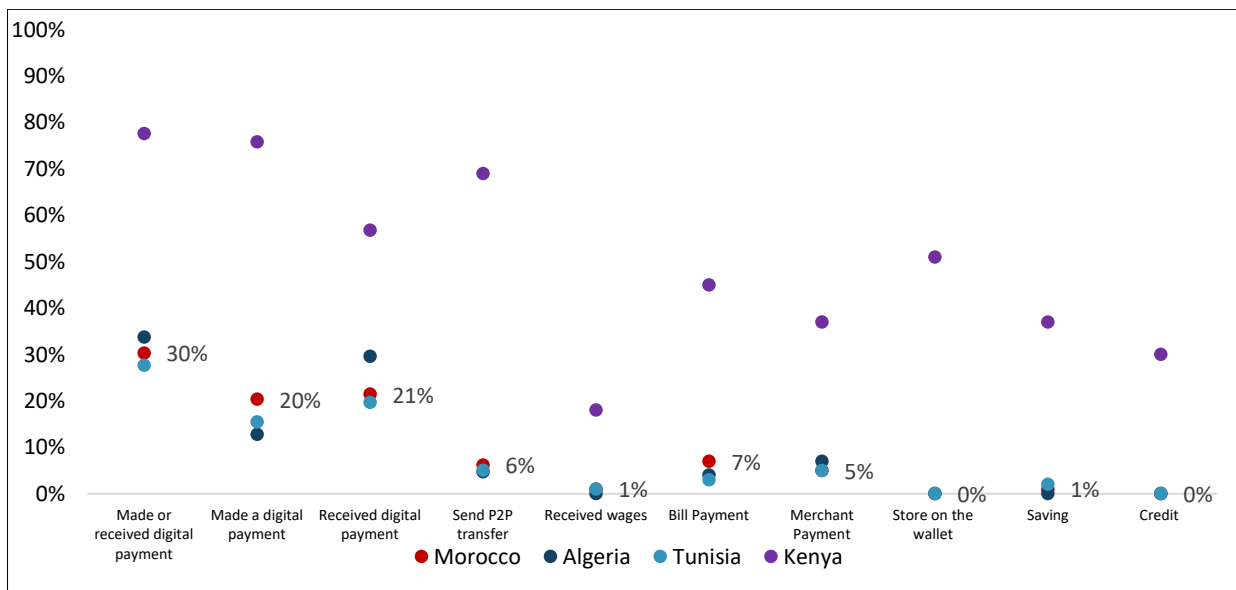


Source: based on the FINDEX data (2021)

As shown in Figure 14, Morocco's neighboring countries, Tunisia, and Algeria, also exhibit similar trends in digital payment usage:

- Less than a third of the population makes or receives digital payments
- The first generation of mobile money services has not been widely adopted
- Pure digital financial services are only slightly developed.

**Figure 15 – Benchmark of Morocco’s digital transactions**



Source: based on the FINDEX data (2021)

Mobile money usage in Morocco remains a challenge. According to a report by Bank Al-Maghrib, in 2020 there were 2.44 million accounts, but only 1.4 million operations were reported, indicating an activity rate considerably below 57% (as one customer might have initiated multiple operations in 2021).

# Inhibitors

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## Supply-Side Issues

In Morocco, individuals are able to access e-wallet services and conduct cash transactions at agents. However, these agents do not offer agency banking products, meaning that it is not possible to credit or debit a banking account or open a savings product at an agent network. This is due to the stringent regulations surrounding the recruitment of banking agents, as compared to the ease of recruiting payment agents. At present, there is no fully dematerialized second generation services (such as savings, credit, or insurance) available, despite the need for accessible and affordable financial services among the general population. Collaborations between financial institutions and other players are also rare on these services and more generally. Some fintechs and newcomers face unclear regulatory constraints on their ability to offer such services, as well as challenges in having access external data through APIs.

## Demand-Side Issues

E-wallet clients who are not identified are limited to holding no more than the equivalent of USD20 in their e-wallets. As a result, 44% of mobile money clients can only use their e-wallets for small transactions, limiting the impact on their daily lives. Additionally, thresholds are not calibrated to accommodate government-to-person payments above USD20. This low threshold also prevents the development of automated credit, as the low value would be of little interest to both the client and the provider.

Another obstacle hindering the adoption of digital financial services is the mistrust of the population towards innovative mechanisms and the government's role in them. Different players insisted that it was necessary to shift the behaviors of users at the population level, and above all, to tackle the defiance of potential agents towards the government. Many small grocers and merchants, for example, do not declare all of their revenues to avoid paying high taxes and fear that mobile money solutions may reveal their non-declared revenues.

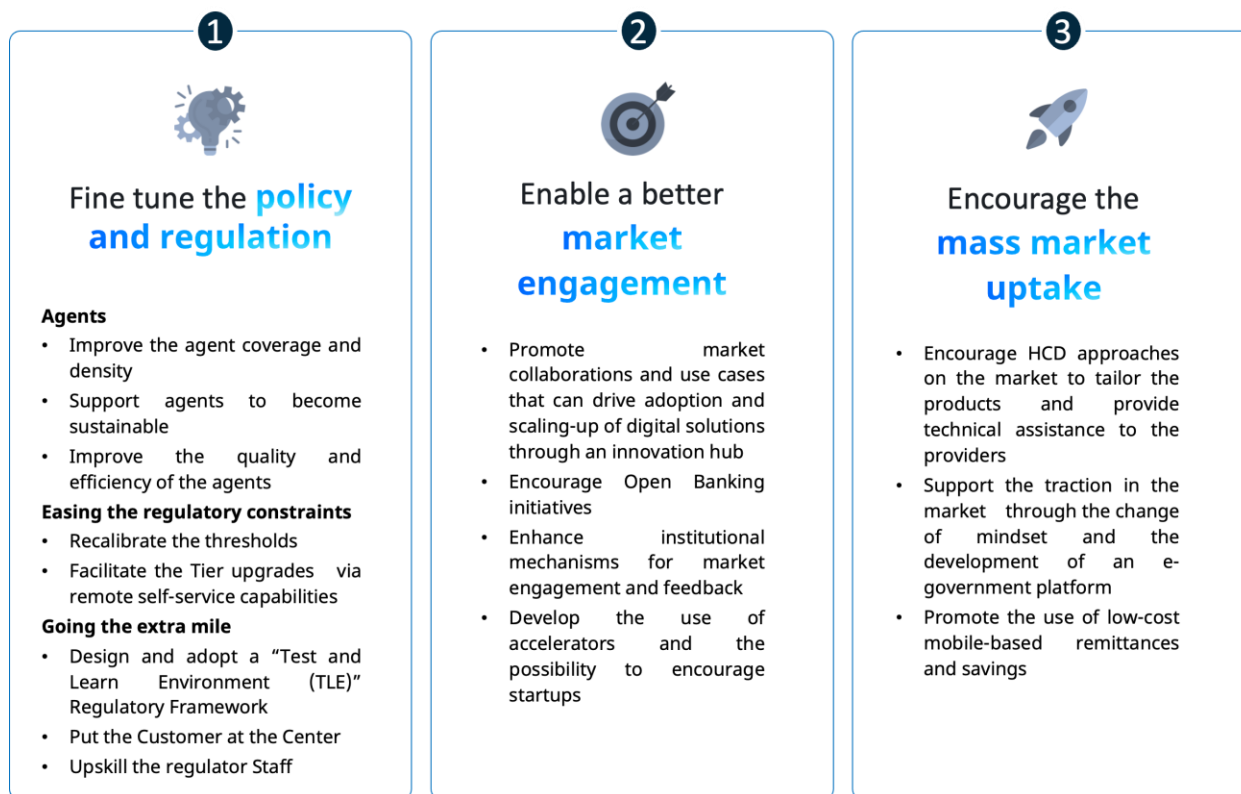
# Section 3. Recommendations

## Introduction

Based on the results from the assessment in the previous section, there is a massive potential for digital Finance in Morocco. To reach this potential, a series of some catalytic initiatives that could have significant impacts are detailed below. They will need to be driven by several actors (public and private) – with due consideration given to the possibility of including private actors in the initiative from the outset.

While Morocco already has good foundations in place, there is still room for improvement in terms of inclusivity and fostering a conducive environment for market players. To enhance the digital finance ecosystem, it is suggested that attention be directed towards three main areas of focus.

Those three streams are **intertwined** and need to be addressed as a whole to have a significant impact.



# Recommendations overview

	Stream 1: Policy and Regulation	Stream 2: Market Engagement	Stream 3: Massive Market Uptake
Identified gap in the market	<ul style="list-style-type: none"> <li>- The current high standards that agents are required to meet are making it difficult to recruit agents in remote areas, particularly banking agents.</li> <li>- Mobile money uptake is hindered by a mismatch between set transaction limits and potential use cases for underserved segments.</li> </ul>	<ul style="list-style-type: none"> <li>- Current players and innovators (startups, FinTechs) are innovating less than in neighboring countries and there are only few collaborations between different market actors</li> <li>- There is an absence of live second-generation products, such as online credit, savings, or insurance, in the country.</li> </ul>	<ul style="list-style-type: none"> <li>- A lack of tailored products for certain segments, particularly women is leading to a lack of use of digital financial services at their full potential.</li> <li>- There is a limited financial access and underdeveloped digital finance infrastructure in certain regions.</li> </ul>
Recommended approach	<p><b>Strengthening the agent infrastructures</b></p> <hr/> <ul style="list-style-type: none"> <li>- One way to improve the agent coverage and density in Morocco's digital finance market, would be by making a clearer distinction (and introduce a different regulatory treatments)</li> </ul>	<ul style="list-style-type: none"> <li>- To drive adoption and scaling of digital solutions in Morocco's digital finance market, it is recommended to promote market collaborations and use cases through the establishment of an Innovation Office. This could involve setting up a</li> </ul>	<ul style="list-style-type: none"> <li>- Encourage the use of Human-Centered Design (HCD) approaches to design a new breed of products that serve the underserved segments in the most effective ways. This could involve studying their unmet needs and sharing</li> </ul>

	<p>between a Payment Agent and a Banking Agent.</p> <ul style="list-style-type: none"> <li>- Additionally, encouraging the use of alternative agent network models (ANMs) could allow new actors such as startups, fintechs, and developer communities reduce friction in the recruitment and monitoring of agents.</li> <li>- To support agents in reaching viability, extra incentives could be granted to those working in rural areas, and the government could be encouraged to further disburse and collect electronic payments. To improve the quality and efficiency of agents, it is recommended to enhance the level of training and quality provided, as well as to monitor and communicate activity rates, with a focus on sex-</li> </ul>	<p>working group to stimulate innovation and launching the Innovation Office itself.</p> <ul style="list-style-type: none"> <li>- To encourage open banking initiatives and build awareness of data sharing among industry players, it is suggested to encourage the sharing of data between providers and build awareness among the industry.</li> <li>- To enhance institutional mechanisms for market engagement and feedback, the Innovation Office could be leveraged to promote collaboration, and a secretariat could be defined to initiate outreach and establish membership, organizing the first convening and creating a portal/website with key metrics on digital financial inclusion progress.</li> <li>- To further support the</li> </ul>	<p>them with the industry, as well as providing technical assistance and guidance to providers.</p> <ul style="list-style-type: none"> <li>- Support efforts to increase the traction of digital finance in the market, such as by supporting the development of an e-government platform that eases the process of registering for digital solutions.</li> <li>- Promote the use of low-cost mobile-based remittances that boost rural development, as well as micro-saving products, to help drive adoption and scaling of digital financial solutions.</li> </ul>
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	<p>disaggregated data.</p> <p><b>Easing the regulatory constraints</b></p> <hr/> <ul style="list-style-type: none"> <li>- Recalibrate the thresholds</li> <li>- Facilitate the Tier upgrades via remote self-service capabilities</li> </ul> <p><b>Going the extra mile</b></p> <hr/> <ul style="list-style-type: none"> <li>- Design and adopt a “Test and Learn Environment (TLE)” Regulatory Framework</li> <li>- Put the Customer at the Center</li> <li>- Upskill the regulator staff</li> </ul>	<p>development of startups, the use of accelerators could be encouraged, including the creation of new incubators and accelerators, as well as capacity building with existing accelerators in Morocco.</p> <ul style="list-style-type: none"> <li>- To support the development of a new breed of SDG-aligned digital finance companies in Morocco, we advise to advocate for incentives for investors and startups, as well as for funding of these companies. This could help to encourage growth and innovation in the digital finance sector.</li> </ul>	
Key Outputs	<ul style="list-style-type: none"> <li>- The expansion and evolution of agent networks leads to increased financial inclusion for underserved populations, as an effective strategy for increasing</li> </ul>	<ul style="list-style-type: none"> <li>- The local market benefits from the entry and innovation of new players, as well as increased collaboration between different actors, aligning</li> </ul>	<ul style="list-style-type: none"> <li>- Digital financial solutions are designed to meet the needs and preferences of underserved segments, increasing their uptake and usage and contributing to</li> </ul>

	<p>access to financial services in underserved areas contributing to the achievement of SDG 1 (No Poverty) and SDG 10 (Reduced Inequalities).</p> <ul style="list-style-type: none"> <li>- New wallet limits are enabling Moroccans to conduct more day-to-day transactions online.</li> <li>- Consumers have access to a wider range of digital financial services due to the adjustment of transaction limits and the introduction of innovative products and services supporting the achievement of SDG 8 (Decent Work and Economic Growth) and SDG 9 (Industry, Innovation and Infrastructure).</li> </ul>	<p>with the importance of partnerships and collaborations in driving the success and sustainability of financial inclusion initiatives. supporting the achievement of SDG 17 (Partnerships for the Goals)</p> <ul style="list-style-type: none"> <li>- Second-generation products, such as online credit and saving products for MSMES and people with low-incomes, become available in the market, supporting economic empowerment and the achievement of the SDGs.</li> </ul>	<p>the achievement of SDG 1 (No Poverty) and SDG 10 (Reduced Inequalities).</p> <ul style="list-style-type: none"> <li>- The government is proactively enabling the growth and development of the digital finance sector, leading to increased adoption and success in the market and contributing to the achievement of SDG 8 (Decent Work and Economic Growth) and SDG 9 (Industry, Innovation and Infrastructure).</li> </ul>
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# Detailed recommendations

## Stream # 1: Policy and regulation

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It has been identified through our local research and analysis of successful Mobile Money models globally that there are two main policy and regulatory barriers hindering the widespread adoption of Mobile Money in Morocco. These include:

1. Limited agent networks and difficulties in maintaining their sustainability
2. A discrepancy between transaction limits and the potential use cases for under-served segments.

To address these issues and drive positive change in the ecosystem, we recommend targeting action in two key areas:

- 1.1. Strengthening Agents Infrastructure
- 1.2. Easing certain regulatory requirements

By addressing these bottlenecks, we can pave the way for greater financial inclusion and improved access to digital financial services in Morocco.

### **1.1. Strengthen Agents Infrastructure**

#### **1.1.1. Improve Agent Coverage And Density**

It is essential to ensure that agents are as widely available as possible, so that once a client has cashed in or received a transfer, he can make local purchases or pay for goods and services. Otherwise, the client may end up cashing out all of their received amount at once, fearing that he won't be able to use the money. Successful digital solutions (mobile money and correspondent banking) rely on widespread agent networks. GSMA estimates that most countries in the world do not require prerequisites to operate as an agent [27]. To improve the coverage and density of agents in Morocco, we propose to classify them based on their activities rather than their nature. This will result in two levels of agents: Level 1 agents, who could handle basic transactions such as e-wallet enrollment, deposit, withdrawals, bill payment and merchant payments, and Level 2 agents, who would have the capability to enroll clients, deposit and withdraw cash from bank accounts, and originate loans.

Given that Level 1 and Level 2 agents would have distinct risk profiles, we suggest tailoring approvals, supervision, and oversight accordingly. Specifically, Level 1 agents, who deal with lower transaction amounts compared to Level 2 agents, could be required to provide online reporting and could be subject to remote supervision. In contrast, Level 2 agents, as representatives of financial institutions, would need to be exclusive and comply with stricter anti-money laundering and counter-terrorist financing regulations, as well as undergo regular onsite and offsite performance reviews.

In Morocco, Main Agents are acting as **Agent Network Managers (ANMs)**. ANMs are important because they can support the identification and recruitment of agents, monitor their activity, and provide support, particularly in rural areas. Fintech companies and the role that they can play in increasing the uptake of payment agents is very much underutilized. ANMs aim to reduce the cost of recruiting and monitoring agents for payment providers and banks, while maintaining a high level of service quality.

There are four distinguishable advantages that ANMs have as compared to banks in the areas of the management life cycle. These include acquisition, set-up, daily management, and financing of agents. ANM staff are better trained for recruiting agents, and are often from the Fast Moving Consumer Goods sector. When fintechs act as ANMs they sometimes acquire agents online, which is faster and more intuitive. For example, ride hailing fintechs recruit drivers online, and drivers need only a smartphone to download the appropriate application to register. By comparison, banks usually require agents to register through branch staff, which means staff must be sent out to recruit and onboard agents – a time consuming and costly endeavor that necessitates proper training. In terms of set-up costs, there are significant differences in the cost of equipment currently used by fintechs (smartphones, which are less expensive) and banks (EDC terminals, etc.). For ongoing management, providers must have well-trained field staff, conduct marketing activities, and have the systems in place to monitor agent transactions and activity. Branch staff used for monitoring agent networks generally have a limited reach and limited marketing experience in this context. Typically, they are also not sufficiently trained to monitor, and the IT systems banks have in place generally do not support the level of monitoring agent activity requires. By enabling fintech to monitor agent activity through online, digital systems complemented with

field visits as required, the cost of running the agent network would decrease while agent performance would increase. For example, issues around liquidity management would be better anticipated through online tracking and monitoring of agent activity, enabling timely distribution of electronic cash or effective app-based redirection of customers to agent locations with available physical cash.

## Recommendations



### ***i. Make a clearer distinction between Payment Agents and Banking Agents***

- Define simple criteria for becoming a level 1 (payment) agent, including flexible requirements for business registration and proof of business depending on location (e.g., urban vs. rural areas).
- Refine criteria for becoming a level 2 (banking) agent, but avoid basing these requirements on the current requirements for main agents. For example, consider alternative options to requiring a dedicated outlet and security guard, which may be too burdensome in rural areas.
- Implement an exclusivity period (no longer than 2 years) to ensure that the return on investment is attractive for level 2 agents.

### ***ii. Encourage ANM models that would allow new actors (start-ups, fintechs, developer communities, etc.) to smoothen the recruitment and monitoring of level 1 and level 2 agents.***

### **1.1.2. Support Agents To Become Sustainable**

There are several ways that the Moroccan government could channel its flows through Mobile Money in order to support the sustainability and profitability of agents in rural areas:

- Encourage the use of Mobile Money for social welfare payments, such as pensions and subsidies. This would ensure that beneficiaries have easy access to their funds and can use them for various purposes, including paying for goods and services at local businesses.
- Promote the use of Mobile Money for tax collection and other government revenues. This would not only provide an additional source of revenue for agents, but also make it easier for citizens to pay their taxes and fees.
- Support the development of value-added services that can be offered through Mobile Money, such as insurance, loans, and other financial products. This

would give agents the opportunity to generate additional income by providing these services to their customers.

- Encourage the use of Mobile Money for government procurement, including the payment of suppliers and contractors. This would increase the volume of transactions processed by agents and contribute to their profitability.

These solutions would increase the volume of transactions that agents can handle and improve their chances of becoming profitable. Additionally, this would ensure that all Moroccans, regardless of their location, have access to government services. This aligns with the goal of leaving no one behind and promoting financial inclusion.

## Recommendations



### ***i. Grant extra incentives to agents working in rural areas.***

These incentives will recognize the important role that these agents play in promoting financial inclusion among low-income clients and compensate for the additional coaching and awareness that is often required when serving mobile money clients in rural areas.

### ***ii. Encourage the government to further disburse and collect electronic payments***

Mapping out all flows of government to person (G2P) payments (e.g. salaries, pensions) and person to government (P2G) payments (e.g. taxes, school fees, business licenses, fines). Develop an action plan that gives beneficiaries the option to collect their payments through this channel and reserves over-the-counter (OTC) transfers as a last resort. Define clear incentives, such as the ability to access pensions or salaries a day earlier or extended deadlines for electronic payments, to encourage the uptake of digital financial services. Communicate these options to clients and develop programs to coach beneficiaries on how to use the service. Build a community of merchants and agents that are closely coached and able to support beneficiaries effectively. Assess the impact of these services and generate knowledge about their effectiveness.

## Use Cases - Focus on the G2P Approach

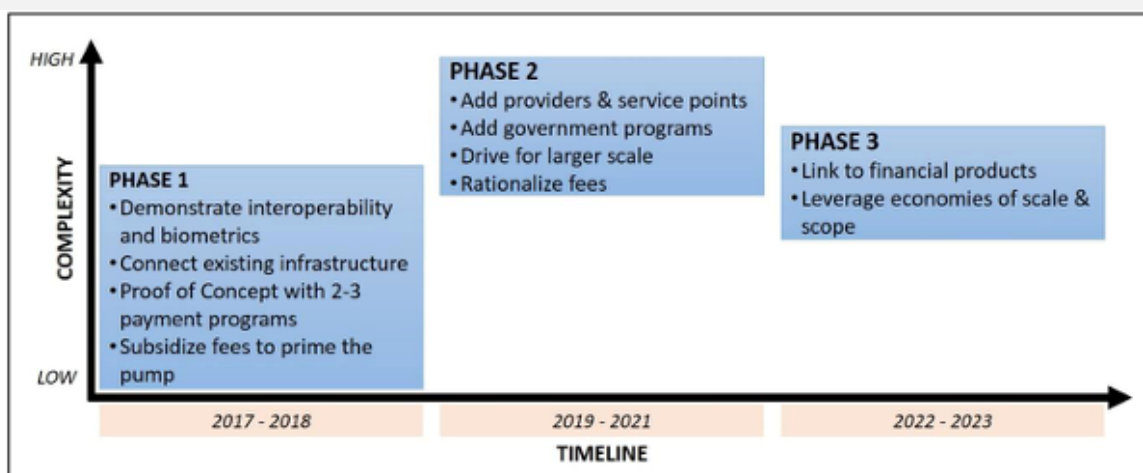
Bangladesh is one of the countries where the population is the densest. With nearly 165M of habitants, 29% of the population has a Mobile Money account and 53% of the population is financially included (Findex Data 2021). At of end of 2021, Bangladesh had 13 Live Mobile Money solutions (GSMA Intelligence, 2021).

While this country has more than 100 governmental social safety nets, the government has shown an increased interest in modernizing the payments. In 2007, a cross government agency named Access To Information (A2I) was created to improve the government service. The goal of this platform was to reinvent both P2G and G2P payments. With support from the Bill & Melinda Gates Foundation, CGAP, and the Better than Cash Alliance (BTCA), A2i engaged a team from Price Waterhouse Coopers (PWC) to assist in an intensive design effort. The design of this platform was done upon four key choices:

Choices	Rationale
A2i would focus only on servicing payments, not G2P program management	The platform only focuses on the payment aspect
Long-term view to promote interoperability	The platform first design to be linked to the NPSB (the local switch) but ultimately was connected to an aggregator (BETFN) that connects 40 of the 58 banks in Bangladesh.
Leverage existing nid database and ease authentication	The platform allows to use biometric accounts. This makes particular sense in a country where only 25% of the population has access to Internet (ITU,2022).
Oay hefty fees for payments delivery to incentivize providers	A focus was established to create incentives to the providers.

The roadmap of this A2i platform is to be able in phase 3 to link the G2P payments directly to financial services. This has the potential to become a game-changer in terms of financial inclusion.

**Figure 16** – Bangladesh roadmap towards an integrated G2P approach



By early 2018, two G2P programs from the Ministry of Social Services and one program from the Ministry of Women’s Affairs agreed to participate in the pilot. By early 2019, the pilots had made payments to over 100,000 individuals across three programs. Phases 2 and 3 are being piloted now.

In the case of Morocco, this approach highlights that linking G2P with financial products

could be an interesting way to go beyond the G2P flows (OTC/ *Mise à disposition* approach).

### 1.1.3. Improve The Quality And Efficiency Of The Agents

As previously mentioned, agents play a cornerstone role in the success of digital solutions. They serve as the representatives of the payment provider or bank and must provide a high level of quality service that meets industry standards.

#### Recommendations



##### ***i. Enhance the level of quality provided by the agents***

- The Central Bank may request that providers deliver their agents with regular training (specific requirements to be defined).
- Providers may consider terminating commercial agreements with inactive agents, as this can damage the reputation of the whole industry.

##### ***ii. Communicate activity rates in the Central Bank's annual publications and during specific events***

- Monitor the active use of the services by clients (defined as at least one transaction in the last 30-90 days) and agents.
- Monitor and communicate the activity rates to measure the Mobile Money uptake along with Sex Disaggregated Data (SDD).
- Communicate activity rates in the Central Bank's annual publications and during specific events (as described in stream 2, activity 2.1.2).

### 1.2. Easing The Regulatory Constraints

The characteristics of a digital solution directly impact its potential use. Products are constrained by the low regulatory limits, struggling to gain widespread adoption. In Morocco, most of the Mobile Money clients do not go through the process of upgrading to a tier 2 account, which requires providing KYC documents. This is often due to a lack of knowledge about the process and because some clients do not possess valid KYC documents. Hence, our findings suggest that a balance needs to be struck between necessary anti-money laundering and counter-financing of terrorism measures and enforced limits in Morocco.

The goal of this activity is to allow potential customers without valid ID cards to perform basic, but important, transactions. It could be argued that tier 1 e-wallet clients (44% of e-wallet clients) are not truly financially included as they are only able to hold up to the equivalent of USD20 on their e-wallet. According to GSMA, most Tier 2 Mobile Money holders already have access to a bank account globally. This highlights the need to focus on Tier 1 clients.

Increasing the tier limits can also help change the mindset of clients, as they may be more likely to keep some money on their mobile money account and not withdraw all funds from a transfer at once if the limits are higher. Ultimately, raising the limits will allow for government-to-person (G2P) payments to be made directly through a mobile money solution, rather than requiring an over-the-counter transfer (as mentioned in recommendation 1.1.2).

Given the paramount importance of this activity, we suggest conducting a trial period of threshold recalibration to evaluate its effects and fine-tune it at the conclusion of the trial period.

## Recommendations



### ***i. Recalibrate the thresholds (raise Tier 1, Tier 2)***

- Significantly raise the Tier 1 threshold to the international industry standards as well as the Tier 2 threshold
- Conduct a pilot of this threshold recalibration, evaluate its impact and adjust it accordingly before implementing it on a larger scale.

### ***ii. Facilitate the Tier upgrades via remote self-service capabilities***

- Allow for upgrades from Tier 2 to Tier 3 to be done remotely (without the need for a client to go physically to an agent).

## Use Cases – Focus on the Tiered Approach

### **Nigeria**

The report “KYC Innovations, Financial, Inclusion and Integrity in Selected AFI Member countries” published by AFI in March 2019”, highlights the case of Nigeria which established tiered KYC in 2013.

This report identifies two main challenges:

- Low-income consumers are likely to be locked into low-value tier 1 accounts
- Proof of address continues to be requested to the detriment of rural populations (from tier 2 and 3 accounts).

AFI emphasizes that Tiered KYC is important for Financial Inclusion and that it produced an array of positive outcomes for implementing countries.

### WAEMU

In 2015, the BCEAO Central Bank (regulating the operations in Benin, Burkina Faso, Côte d’Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo) increased the monthly number of transactions that an unidentified customer could conduct from XOF 100,000 to XOF 200,000 (around USD298) as the monthly limit was seen as a factor hindering financial inclusion.

CGAP estimated in 2018 that the XOF 200,000 limit was still a significant barrier to numerous potential clients. Even so, the Mobile Money account ownership rose from an average of 7% in 2014 to 32% in 2021 in the region.

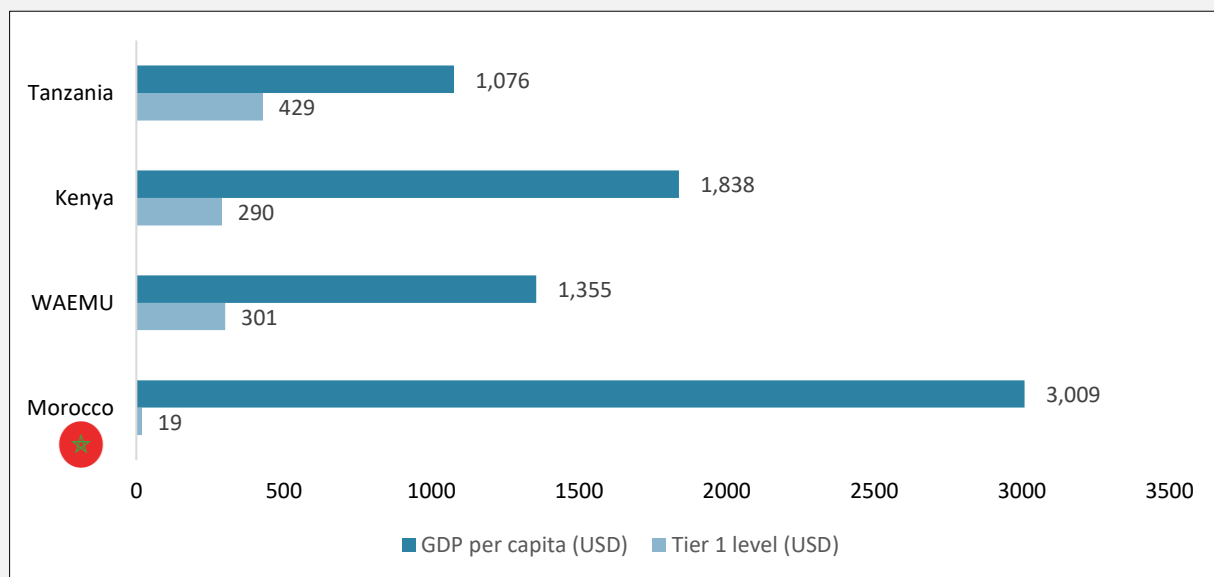
### Eastern Africa

In Eastern Africa, the thresholds for unidentified clients goes up to KSH 350,000 (USD290) in Kenya and even TZS 1,000,000 (USD429) in Tanzania.

### Putting the thresholds in perspective

In the case of Morocco, the Central Bank chose to enforce a threshold equivalent to USD19 which is relatively low compared to the country’s GDP per capita.

**Figure 17** - Mobile Money Tier 1 and GDP per capita overview



Source: World Bank (GDP) and research

**Table 7** – Comparison of the thresholds / GDP per capital

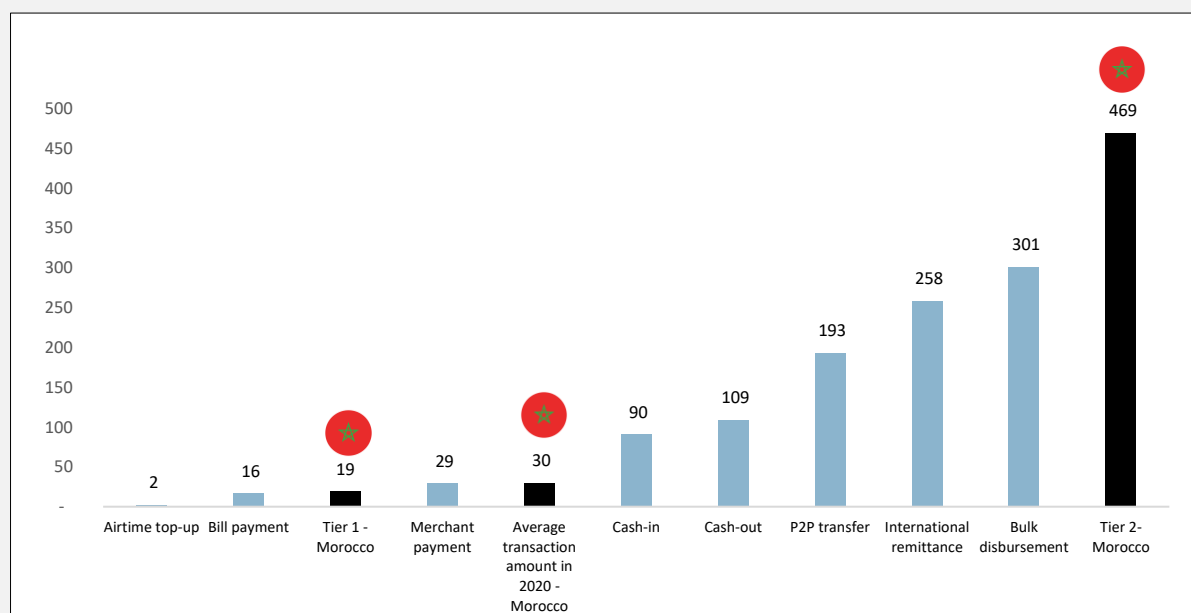


Country	Tier 1 level threshold / GDP per capita
Tanzania	40%
Kenya	16%
WAEMU	22%
Morocco	<1%

Source : based on World Bank figures (2021)

Additionally, as presented in the figure 18, the tier 1 limit is not suitable to the Mobile Money usage in the region. The average P2P transfer in the MENA region is USD193 [28].

**Figure 18** - Average value per transaction by region (USD), December 2021



Source: GSMA MM metrics, Rapport annuel de la supervision Bancaire, 2021

### 1.3. Going The Extra Mile

The fintech and Mobile Money industries are rapidly evolving, and it is important for regulators and supervisors to keep up with the pace of innovation.

We have identified three main areas that the Central Bank could consider: establishing a "Test and Learn Environment," enhancing customer protection, and improving collaboration with international key stakeholders.

## Recommendations



**i. Design and adopt a “Test and Learn Environment (TLE)” Regulatory Framework**

- Develop a Test and Learn Environment approach specifically for the Moroccan context, with a focus on RegTech and SupTech.
- Identify new, locally-grown innovative financial services, along with international benchmarks.
- Curate learning that feeds into policy design for a more responsive financial services landscape.
- Analyze the potential to use TechSprints (TechSprints are events that bring together people from diverse backgrounds across and outside of financial services to develop technology-based ideas or proof of concepts to address specific industry challenges over a short period of time).
- Strengthen the role of the national Innovation office.

**ii. Put the Customer at the Center**

- Mitigate the risk to consumers through an open dialogue and the early identification of potential risks.
- Harmonize the consumer protection, data privacy/protection and market competition into guidelines for the supervision of fintechs and digital finance players.

**iii. Upskill the Regulator Staff**

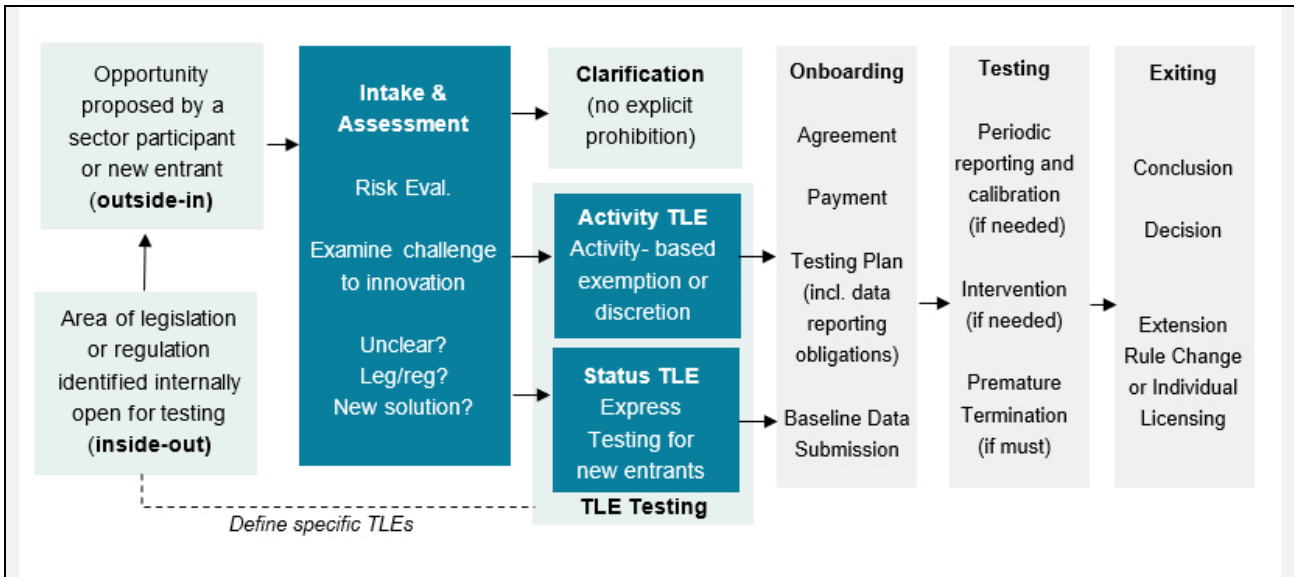
- Collaborate with regulatory counterparts at the international level.
- Engage in peer learning with other international regulators.
- Nurture international knowledge partnership.

**Use Cases – Test and Learn Environment (TLE) approach**

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An Innovation Office was launched in 2020 in Canada to act as Financial Services Regulatory Authority of Ontario’s (FSRA) dedicated champions of innovation thinking and innovation initiatives. FSRA uses its innovation process to promote intake of innovation opportunities and assesses and evaluates risks associated with any innovation opportunity proposed by Market Participants [28].

**Figure 19** - Overview of a Test and Learn Environment (TLE)



When an innovation opportunity is filed, FSRA processes it and notifies applicants regarding how it will be handled based on different regulatory considerations and legal issues, risk assessment results, and other relevant factors. Not all innovation opportunities result in entry to a TLE; a TLE is one of several tools FSRA may use to support an innovation opportunity depending on context and the nature of the opportunity. To conduct such activities, FSRA is structured in a way that it is piloted within the FSRA but interacts with consumer and regulated sectors.

**Figure 20 - Innovation office’s missions and priorities**

FSRA’s mission is to support the industry by giving the actors they required guidance to transform an idea into a project.

New market entrants seeking to pursue an innovation opportunity come to the Innovation Office as their point of entry to collaborating with FSRA unless they have decided to become licensed or registered as a regulated entity to facilitate their innovation.

## Stream # 2: Market Engagement

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Innovation is driving the market and allows to fast-track the fight against poverty and the access to finance.

The struggle to innovate in the digital finance sector has been previously noted, due to uncertainty regarding the regulatory framework and a lack of encouragement for players and innovators. There is a perception among some that they are operating in a regulatory gray area. To address this issue, it would be beneficial to send a clear signal promoting the development of digital and innovative finance in Morocco.

To foster a more inclusive digital finance ecosystem, the Central Bank could encourage the growth of both non-disruptive services offered by existing financial institutions (such as loan repayments, loan disbursements, and loan applications) and more innovative, second-generation services (such as digital savings and credit).


### **2.1.1. Promote Market Collaborations And Use Cases That Can Drive Adoption And Scaling-Up Of Digital Solutions Through An Innovation Office**

A recommended next step is to establish an Innovation Office focused on innovative business models in the areas of digital lending, agent networks, and e-commerce solutions. This Innovation Office could be set up directly or in partnership with international organizations such as UNDP, the Bill and Melinda Gates Foundation, or AFI. It should be sponsored by Bank Al-Maghrib and could be operated by an external entity in its first year. It should also include Moroccan players, including the GP2M. The Innovation Office could encourage and promote innovation and partnerships in the following areas, which may evolve and expand over time:

- Digital lending for consumers and MSMEs.

- Rollout of Mobile Money services through third-party Agent Network Managers.
- Wider adoption of e-commerce through Mobile Money.
- Provision of new effective remittance services (both international and domestic).

The innovation office is meant to provide guidance, technical support and grants matchmaking that nurture an SDG-aligned ecosystem whilst intensifying collaboration between market players and demonstrating the potential of use cases that can drive uptake. It will also help to understand the current limitations (such as business model, operational constraints, economic incentives, and interpretations of regulations) that prevent market players from offering digital lending products. It will consider whether existing market perceptions or regulations (if any) need to be changed, and address any new issues that arise, particularly around data privacy and consumer protection. It will also explore whether access to e-commerce products can drive Mobile Money growth and digital financial services uptake, and whether e-commerce can support better business cases for agents and Agent Network Managers.

Recommendations 	
<i>i.</i>	<b><i>Set-up a working group (including UNDP and potential Innovation Office participants) to stimulate innovation</i></b>
<i>ii.</i>	<b><i>Launch the Innovation Office and monitoring of its uptake</i></b>

### 2.1.2. Encourage Open Banking Initiatives

Open Banking represents a significant advancement in the financial industry. By making data from traditional banks and other financial institutions accessible, it opens up opportunities for new players such as fintechs and innovators to create innovative products and services that are more beneficial to end-users. This can lead to the development of new initiatives that analyze available data and offer relevant financial services such as credit and savings. The more data that is available (such as utilities, telecom, bills, and financial patterns), the more personalized and effective the services will be. This has the potential to greatly benefit the lower-income segment of the population.

CGAP estimates that five key components are critical for expanding financial services to the poor through Open Banking:

- Defining who is required to share data and who can access the data.
- Determining what types of data are shared.
- Specifying which industries are covered (e.g., banking only or utilities and telecoms).
- Determining whether payment initiation is enabled in the regime.
- Defining who bears the cost of the regime (ultimately, and this is also the case for interoperability, we do not want the poor client to be the one paying more for a service).

While enforcing overly restrictive regulations in the short term may not be appropriate, it is important to encourage and support Open Banking initiatives. This will create a favorable environment for the growth and evolution of the digital finance sector, promoting its potential to drive financial inclusion and economic development.

## Recommendations



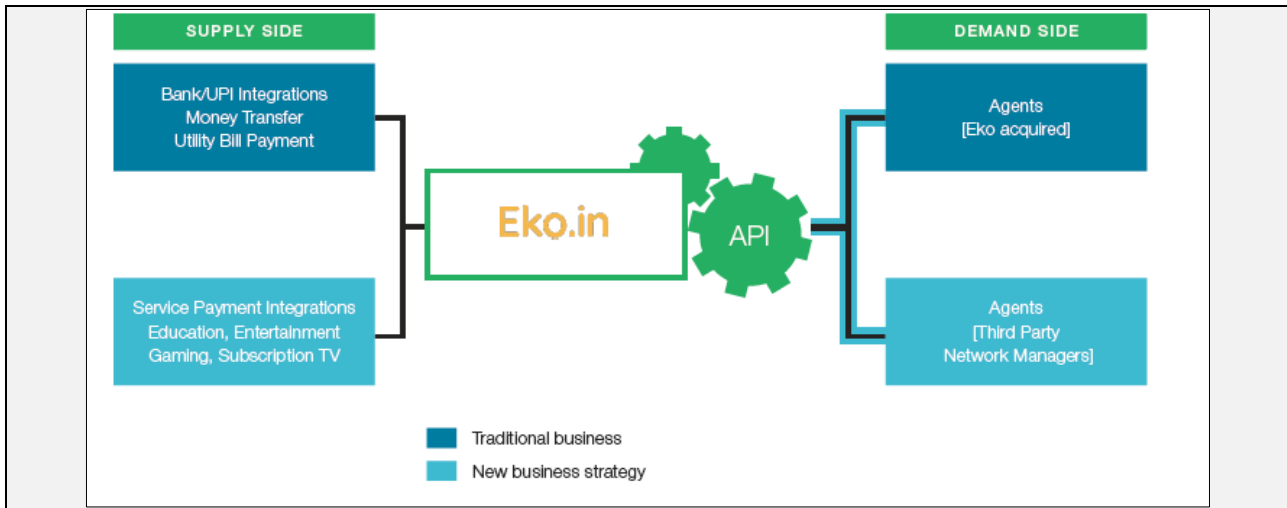
- i. Encourage the sharing of data between the providers through awareness*
- ii. Build awareness amongst the industry*

## Use Cases - Eko (India)

Eko is an Indian fintech company founded in 2007 that initially operated as a traditional transfer company. By 2017, Eko had established a network of 15,000 agents. However, in the following 36 months, Eko experienced impressive growth and expanded its network to 150,000 agents by the end of 2020.

The key factor behind this remarkable growth can be attributed to Eko's decision to open its API in 2015, which allowed for the integration of Eko's services (primarily remittances and transfers) into a variety of third-party services. This made the Eko platform more appealing to providers offering additional services, both financial and non-financial, such as education and entertainment. By the end of 2020, Eko had over 300 service providers attached to its platform.

**Figure 21** - EKO platform services: connecting money transfers, bill payments and other payments



Source: CGAP, 2020

Based on the experience of Eko, CGAP highlights three main key lessons that could benefit Moroccan Mobile Money players:

1. Offer a variety of integration options for different consumer segments, such as white label solutions, API widgets, and APIs.
2. Facilitate easy integration for third parties by providing self-service features that allow them to integrate their systems with the Eko Platform Service independently.
3. Encourage and incentivize the development of a community of developers.

### 2.1.3. Enhance Institutional Mechanisms For Market Engagement And Feedback Through The Innovation Office

The launch of the Innovation Office and the sandbox cohorts provides an opportunity to engage with key market players, clarify Bank Al-Maghrib's intentions, and communicate its vision. We recommend organizing a convening to launch the Innovation Office, which will:

- Communicate Bank Al-Maghrib's strategic vision for DFS development and the key role that the Innovation Office/sandbox will play in operationalizing that vision and feeding back into policy review processes.
- Present dashboards showing progress on digital finance (including the number of transactions at agents, data disaggregated by gender and region, etc.).
- Outline the market potential and possible trajectories for different stakeholders.

- Invite key stakeholders to present successes and failures from other markets (best practices relevant to Morocco).
- Encourage stakeholders to cooperate and innovate.
- Address any specific concerns that may arise from market players.

This convening will set the tone and establish a blueprint for how Bank Al-Maghrib engages with the market and maintains an open feedback loop.

In the mid to long term, we recommend:

- Establishing a regular dialogue with the industry on a quarterly basis to discuss major issues and challenges. This Industry Leadership Forum would review progress made by the Innovation Office and trigger broader industry-wide discussions. It would also serve as a regulatory feedback loop for Bank Al-Maghrib to consider. The Secretariat would be managed by a separate entity, under the sponsorship of Bank Al-Maghrib.
- Promoting inter-agency dialogue and coordination around specific issues that can affect DFS development. These convenings should happen on a quarterly basis and be answerable to the Prime Minister's office.

## Recommendations



- i. Leverage on the Innovation Office to promote collaboration*
- ii. Define the secretariat and initiate the outreach process to establish membership and organize first convening*
- iii. Create and update a portal/website with the key metrics highlighting the digital financial inclusion progress (with a focus on women)*

### 2.1.4. Spur An Enabling And Effective Environment For Digital Finance Startups

As a Central Bank, it may be advisable to consider establishing two types of accelerators/Innovation Offices. The first type could be a general accelerator that operates at the forefront of the local digital finance ecosystem, providing seed funding for small scale testing that can inform future regulatory developments. The second type of accelerator could be specifically focused on the Sustainable Development Goals (SDGs), with a particular emphasis on SDG 5 (gender equality). This accelerator could support fintechs that are working to promote financial inclusion among women.



Tech sprints can be an effective tool for Central Banks to bring together tech developers, fintechs, and data scientists to design innovative digital finance services that align with the SDGs. By fostering collaboration and creativity in this way, Central Banks can help drive the development of financial solutions that can have a positive impact on society.

## Recommendations



- i. Support the creation of new type of incubators and accelerators*
- ii. Develop capacity building with the existing accelerators present in Morocco*
- iii. Advocate for incentives for investors/start-ups and funding of new breed of SDG-aligned Digital finance players.*

## Stream # 3: Massive Market Uptake

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There is a wide range of relevant digital services in the region, including cash in/out, transfers, merchant payments, bill payments, and links with financial institutions. While the COVID-19 pandemic has served as a catalyst for growth in the number of digital clients, the activity rates and usage of these services has not lived up to expectations. To better serve underserved populations, we propose a focus in the coming years on encouraging human-centered design (HCD) approaches to tailor products to specific segments and drive market traction through government campaigns.

### **3.1. Encourage HCD Approaches In The Market To Tailor The Products**

#### **3.1.1. Support HCD Approaches And Tap Into Novel Sources Of Data And Share User Research Data And Insights With To The Industry**

To support this effort, it may be helpful to gather and share input from various sources on financial inclusion in Morocco. For example, the latest global FINDEX data shows that women lag behind men in terms of financial inclusion (-23 points). Information is also available on underserved segments such as the poor, low-income

individuals, rural populations, urban populations, and youth. According to GSMA estimates, closing the gender gap between 2019 and 2023 represents a USD140bn revenue opportunity for the mobile industry. In addition to this financial incentive, increasing the number of women in financial inclusion would also create a more reliable ecosystem for providers by including more agents and merchants.

In addition to gathering input from various sources on financial inclusion in Morocco, the Central Bank can also consider tapping into novel sources of data to better understand the needs and preferences of underserved populations. This could include leveraging digital platforms and tools to gather real-time data on financial behavior and needs, as well as conducting user research and focus groups to gather in-depth insights into the challenges and opportunities faced by these populations.

By sharing user research data and insights with the industry, the Central Bank can help inform the development of more tailored and effective financial products and services. This could involve hosting workshops or events to share findings and engage with stakeholders, as well as publishing research reports or other resources that can be accessed by the industry. By sharing this information, the Central Bank can help create a more informed and user-centered ecosystem, enabling providers to better meet the needs of underserved populations.

## Recommendations



- i. Create an Intelligence unit continuously depicting the context of digital inclusion/exclusion for underserved segments*
- ii. Train and incentivize the Ecosystem on SDG-alignment*
- iii. Tap Into Novel Sources Of Data And Share User Research Data And Insights With To The Industry*

### **3.1.2. Provide Technical Assistance And Guidance To Providers To Support Them Reaching Underserved Segments**

Mobile Money and other Payment providers do not intentionally leave a client behind, but as they enter the market, they usually do not have the time nor the budget to tailor the products to the underserved segments. It requires considerable effort to understand the needs and barriers of such underserved segments, which often make it necessary to co-create a product based on the respective segment's needs and limits.

Of the 18 funders sourced by CGAP that support financial inclusion, 17 of them have programs targeting underserved segments (CGAP, funder survey, 2020). To support providers in reaching these populations, the Central Bank can consider offering technical assistance and guidance to help them navigate the unique challenges and opportunities presented by these segments. This could include providing resources and expertise to help providers understand the needs and preferences of underserved populations, as well as assisting with the development and implementation of tailored products and services. By providing this kind of support, the Central Bank can play a crucial role in enabling providers to better serve the needs of underserved populations and advance financial inclusion in Morocco.

To advance financial inclusion in Morocco, it is crucial to focus on serving underserved populations by implementing targeted programs aimed at these segments. To mobilize resources and support for these efforts, Morocco could host a symposium with the funding community to emphasize the importance of focusing on these populations and encourage the development of customized products and services. Additionally, women can play a crucial role in driving financial inclusion as Mobile Money agents. Research from the GSMA has shown that women agents tend to offer a wider range of services than their male counterparts. To further support women agents and promote gender-inclusive financial inclusion, it may be beneficial to consider initiatives that specifically target and empower women in this role.

## Recommendations

### *i. Mobilize the community*

- Inventory and collect the needs from the industry (digital actors) to tailor their products and processes to better target underserved segments.
- Hold a Symposium in Morocco with the funding community to secure financing.

### *ii. Provide Technical Assistance to the industry*

- Identify the Technical Assistance providers that could support the Moroccan Mobile Money player.
- Roll out the technical assistance.

## Use Case - Promoting a Gender-Sensitive Approach to Financial Inclusion in

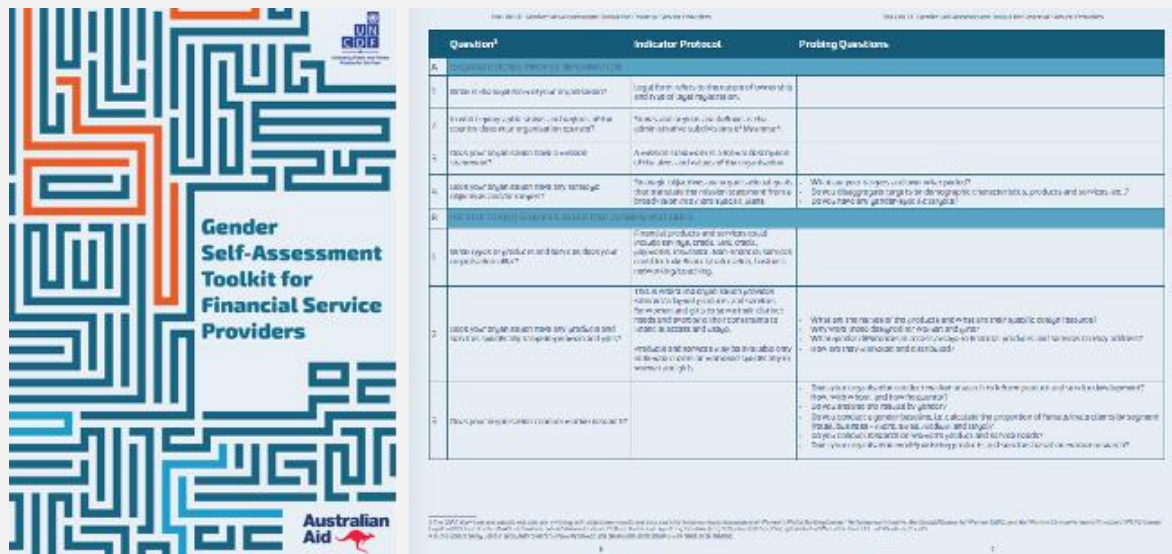
# Myanmar

United Nations Capital Development Fund (UNCDF) Shaping Inclusive Finance Transformations (SHIFT) program in ASEAN is designed to holistically shift financial markets through both demand-side and supply-side activities. The program invests in innovations to achieve financial inclusion for women and provides capacity building and technical assistance to financial service providers (FSPs) to adopt a gender-sensitive approach to product and service delivery.

In Myanmar, UNCDF has collaborated with the Australian Government's Gender Equality Fund, the Myanmar Expanding Financial Access program, and the Women's Economic and Financial Inclusion program to conduct gender capacity building activities with FSPs, such as institutional gender self-assessments, gender-sensitive product development workshops, and trainings on institutionalizing gender policies.

UNCDF has also developed the institutional gender self-assessment tool (GSAT), which was launched in 2019 along with a standardized process and facilitator guides to support FSPs in reviewing and evaluating their gender approach. This tool aims to enhance FSPs' policies, practices, and performance, increasing targeted outreach to women clients through gender-sensitive products and services, and promoting gender diversity in management and leadership.

**Figure 22 - Snapshot of the GSAT toolkit**



UNCDF facilitated trainings and workshops to ensure that institutions were equipped with the necessary knowledge and skills to effectively utilize the GSAT toolkit. Additionally, UNCDF provided support to two of the largest microfinance institutions in the country, helping them to further advance their efforts by developing and customizing their

## **3.2. Support Market Uptake**

### **3.2.1. Innovation And SDG-Alignment Acculturation**

The Central Bank has taken steps to educate clients on the use of mobile money services by developing informative guides and leaflets in both French and Arabic. The Maroc Pay brand is also raising awareness through promotional spots available on YouTube. Private actors are also contributing to these efforts by launching both above-the-line and below-the-line marketing campaigns to increase awareness and adoption of mobile payments.

Findings suggest that the major challenge, mostly in rural areas, is a lack of financial education. Actors are struggling to raise awareness on their own, and we believe that to deepen financial inclusion, we need public and private actors to work together. We therefore recommend building a "community" of public and private actors that focuses on addressing mobile money barriers, including:

- Habits and relevance (preference for cash, available alternatives, presence of mobile money providers in the region, network availability, lack of money)
- Knowledge barriers (lack of understanding on how to use, difficulty using a handset, literacy)
- Other structural elements: lack of KYC documents for Tier 2, safety, etc.

In addition to awareness, it is important to ensure that an ecosystem is built to enable trained and coached clients to use such services with an available ecosystem (agents, merchants, salary and bulk disbursement, G2P). Otherwise, newly trained and coached users may lose interest and knowledge over time. Our experience shows that to have a significant impact, these initiatives need to be done on a large scale and we recommend focusing on one region at a time (raising awareness and building an ecosystem requires significant effort). Based on the Moroccan context, we suggest (further analysis and validation from partners is needed) starting this initiative in the two regions with the lowest banking density in Morocco: Marrakesh -

Safi (1 access point for 15,795 adults in rural areas) and then Fes – Meknes (1 access point for 9,160 adults in rural areas)."

## Recommendations



- i. Nurture Private Public Partnerships with all the key stakeholders (G2PM, Bank Al-Maghrib, ministries, technical and funding partners)*
- ii. Target a number of experimental regions and support the Digital uptake by acting on main levers.*
  - o Raise awareness (issuance side): training, coaching, specific events, financial education, mobile awareness, BTL and ATL marketing, registration to Mobile Money solutions.
  - o Build the ecosystem (acceptance side): support the players to recruit the agents, give the agents some extra-incentives to be part of the ecosystem, develop partnerships with financial institutions to support agents with the liquidity management, regular support to the agents, encourage the salary disbursements of the private sector, develop G2P payments, salary disbursement of the civil servants...

### 3.2.2. Development Of An E-Government Platform to Ease Up The Process To Register for Digital Solutions

Know Your Customer (KYC) requirements and enrollment are often complicated, and one can have difficulties to register for a digital solution. As the Moroccan government is working on developing an e-platform, it would be logical for those registering on the platform to have the option of utilizing APIs to seamlessly link their registration to a Mobile Money solution.

Based on the available ID documents on the platform, the creation of the Mobile Money account could be a Tier 2 subscription as easy and streamlined as possible.

## Recommendations



- i. E-Government Digital platform*
  - Government could develop a platform enabling Moroccan to register to a digital solution by using this national platform

# Overview of key recommendations

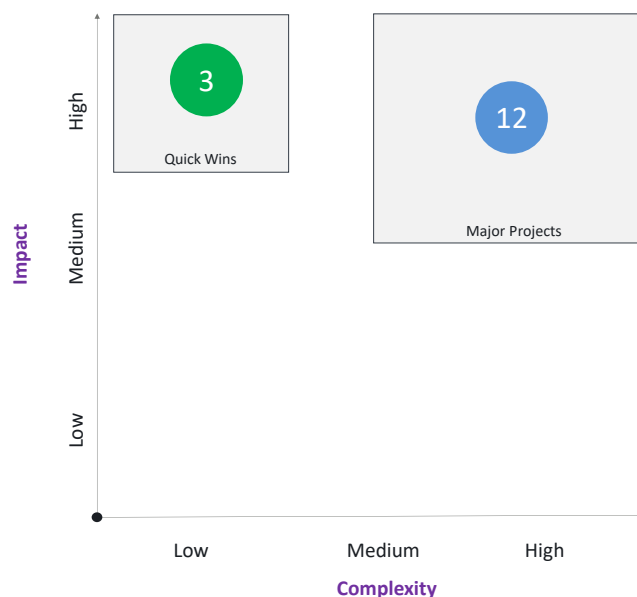
We identified 3 main activities that could have a high impact while being relatively easy to implement: **quick wins**:

- Stream 1 : Policy and regulation
  - Monitor and communicate the activity rates to measure the Mobile Money uptake along with Sex Disaggregated Data (SDD)
- Stream 2 : Market engagement
  - Set up a working group to stimulate innovation
  - Leverage on the Innovation Office to promote collaboration

Other identified **major projects**:

- Stream 1 : Policy and regulation
  - Make a clearer distinction between a payment agent and a Banking Agent
  - Encourage ANM models that would allow new actors (start-ups, fintechs, developer communities, etc.) to smoothen the recruitment and monitoring of level 1 and level 2 agents .
  - Enhance the level of quality provided by the agents
  - Recalibrate the thresholds
  - Facilitate the Tier upgrades via remote self-service capabilities
  - Design and adopt a “Test and Learn Environment (TLE)” Regulatory Framework
- Stream 2 : Market engagement
  - Launch the Innovation Office
  - Encourage the sharing of data between the providers through awareness and digitalization of the government services
  - Support the creation of new incubators and accelerators
- Stream 3 : Mass market uptake
  - Provide Technical Assistance and guidance to providers to support them reaching underserved segments
  - Change the mindsets and build awareness
  - Development of an e-government platform easing up the process to register to digital solutions

**Figure 23** – identified quick wins and major projects



# Detailed matrix

#	Proposed actions	Description	Who		Level of effort			Expected impact	Timeline		
			<i>Champion</i>	<i>Implementer</i>	<i>Complexity</i>	<i>Already in plan</i>	<i>Cost</i>		Short term (<1 year)	Mid Term (1-3 years)	Long term (>3 years)
Stream 1: Policy and Regulation											
1.1.1	Improve the agent coverage and density	Make a clearer distinction between a payment agent and a Banking Agent	Bank Al-Maghrib	Bank Al-Maghrib	Medium	No	Low	High	✓		
		Encourage ANM models that would allow new actors (start-ups, fintechs, developer communities, etc.) to smoothen the recruitment and monitoring of level 1 and level 2 agents.	Bank Al-Maghrib	Bank Al-Maghrib	Medium	No	Low	Medium	✓	✓	



1.1.2	Support agents to reach sustainability	Grant extra incentives to agents working in rural areas	Bank Al-Maghrib	Government	Low	No	Medium	Medium		✓	✓
		Encourage the government to further disburse and collect electronic payments	Bank Al-Maghrib	Government	Low	Yes	Low	Medium	✓	✓	✓
1.1.3	Improve the quality and efficiency of the agents	Enhance the level of quality provided by the agents	Bank Al-Maghrib	Bank Al-Maghrib	Medium	No	Low	Medium	✓	✓	✓
		Communicate activity rates in the Central Bank's annual publications and during specific events	Bank Al-Maghrib	Bank Al-Maghrib	Low	No	Low	High	✓	✓	✓
1.2.1	Lift the regulatory constraints	Recalibrate the thresholds in a pilot	Bank Al-Maghrib	Bank Al-Maghrib	Medium	No	Low	High	✓		
		Facilitate the Tier upgrades via remote self-service capabilities	Bank Al-Maghrib	Bank Al-Maghrib	Medium	No	Medium	Medium	✓		
1.3.1	Going the Extra Mile	Design and adopt a "Test	Bank Al-Maghrib	Bank Al-Maghrib	Medium	No	Low	High	✓	✓	

		and Learn Environment (TLE)" Regulatory Framework										
		Put the Customer at the Center	Bank Al-Maghrib	Bank Al-Maghrib	Low	Yes	Low	Medium	✓	✓	✓	
		Upskill the Regulator Staff	Bank Al-Maghrib	Bank Al-Maghrib	Low	Yes	Low	Medium	✓	✓	✓	
Stream 2: Market Engagement												
2.1.1	Promote market collaborations and use cases that can drive adoption and scaling-up of digital solutions through an Innovation Office	Set up a working group to stimulate innovation	Bank Al-Maghrib	Bank Al-Maghrib	Low	No	Medium	High	✓			
		Launch the Innovation Office	Bank Al-Maghrib	External Partner	Medium	No	Medium	High	✓			
2.1.2	Encourage Open Banking initiatives	Encourage the sharing of data between the providers through awareness and digitalization of the government services	Bank Al-Maghrib	Government	Medium	No	Low	Medium	✓	✓	✓	
2.1.3	Enhance institutional mechanisms for market engagement and feedback	Leverage on the Innovation Office to promote collaboration	Bank Al-Maghrib	Bank Al-Maghrib	Low	No	Low	High	✓	✓	✓	

		Create and update a portal/website with the key metrics highlighting the digital financial inclusion progress	Bank Al-Maghrib	Bank Al-Maghrib	Low	No	Low	Medium	✓	✓	✓
2.1.4	Spur An Enabling And Effective Environment For Digital Finance Startups	Support the creation of new incubators and accelerators	Bank Al-Maghrib	Bank Al-Maghrib	Medium	Yes	Medium	High	✓	✓	
		Develop capacity building with the existing accelerators present in Morocco	Bank Al-Maghrib	Bank Al-Maghrib	Low	Yes	Medium	Medium		✓	✓
		Advocate for incentives for investors/start-ups and funding of new breed of SDG-aligned Digital finance players.	Bank Al-Maghrib	Bank Al-Maghrib	Low	No	Low	Low		✓	✓

### Stream 3: Mass Market Uptake

3.1.1	Encourage HCD approaches on the market to tailor the products	Gather inputs and share them with to the industry	Bank Al-Maghrib	Bank Al-Maghrib	Low	No	Low	Medium	✓		
		Provide Technical Assistance and guidance to providers to support them reaching underserved segments	Bank Al-Maghrib	Bank Al-Maghrib	Medium	No	Medium	High		✓	✓
3.1.2	Support the traction in the market	Change the mindsets and build awareness	Bank Al-Maghrib	Bank Al-Maghrib	High	Yes	High	High	✓	✓	✓
		Development of an e-government platform easing up the process to register to digital solutions	Bank Al-Maghrib	Government	Medium	No	Low	Medium		✓	✓



To prioritize, we assigned a weighted score as outlined below:

1/ Level of effort (40% of the score)			2/ Expected impact (60% of the score)
<i>Complexity</i>	<i>Already in plan</i>	<i>Cost</i>	
Low: 1 Medium: 3 High: 5	No: 1 Partially: 3 Yes: 5	Low: 5 Medium: 3 High: 1	Low: 1 Medium: 3 High: 5

## Detailed scores

#	Proposed actions	Description	Who		Timeline			Scores
			<i>Champion</i>	<i>Implementer</i>	Short term (<1 year)	Mid Term (1-3 years)	Long term (>3 years)	
Stream 1: Policy and Regulation								
1.1.1	Improve the agent coverage and density	Make a clearer distinction between a payment agent and a Banking Agent	Bank Al-Maghrib	Bank Al-Maghrib	✓			4,2
		Encourage ANM models that would allow new actors (start-ups, fintechs, developer communities, etc.) to smoothen the recruitment and monitoring of level 1 and level 2 agents.	Bank Al-Maghrib	Bank Al-Maghrib	✓	✓		3,0
1.1.2	Support agents to reach sustainability	Grant extra incentives to agents working in rural areas	Bank Al-Maghrib	Government		✓	✓	2,5
		Encourage the government to further disburse and collect electronic payments	Bank Al-Maghrib	Government	✓	✓	✓	3,3
1.1.3	Improve the quality and efficiency of the agents	Enhance the level of quality provided by the agents	Bank Al-Maghrib	Bank Al-Maghrib	✓	✓	✓	3,0
		Communicate activity rates in the Central Bank's annual publications and during specific events	Bank Al-Maghrib	Bank Al-Maghrib	✓	✓	✓	3,9
1.2.1	Lift the regulatory constraints	Recalibrate the thresholds in a pilot	Bank Al-Maghrib	Bank Al-Maghrib	✓			4,2

		Facilitate the Tier upgrades via remote self-service capabilities	Bank Al-Maghrib	Bank Al-Maghrib	✓			2,7
1.3.1	Going the Extra Mile	Design and adopt a “Test and Learn Environment (TLE)” Regulatory Framework	Bank Al-Maghrib	Bank Al-Maghrib	✓			4,2
		Put the Customer at the Center	Bank Al-Maghrib	Bank Al-Maghrib	✓			3,3
		Upskill the Regulator Staff	Bank Al-Maghrib	Bank Al-Maghrib	✓			3,3
<b>Stream 2: Market Engagement</b>								
2.1.1	Promote market collaborations and use cases that can drive adoption and scaling-up of digital solutions through an Innovation Office	Set up a working group to stimulate innovation	Bank Al-Maghrib	Bank Al-Maghrib	✓			3,7
		Launch the Innovation Office	Bank Al-Maghrib	External Partner	✓			2,7
2.1.2	Encourage Open Banking initiatives	Encourage the sharing of data between the providers through awareness and digitalization of the government services	Bank Al-Maghrib	Government	✓	✓	✓	3,0
2.1.3	Enhance institutional mechanisms for market engagement and feedback	Leverage on the Innovation Office to promote collaboration	Bank Al-Maghrib	Bank Al-Maghrib	✓	✓	✓	3,9
		Create and update a portal/website with the key metrics highlighting the digital financial inclusion progress	Bank Al-Maghrib	Bank Al-Maghrib	✓	✓	✓	2,7
2.1.4	Spur An Enabling And Effective Environment For Digital Finance Startups	Support the creation of new incubators and accelerators	Bank Al-Maghrib	Bank Al-Maghrib	✓	✓		4,5



		Develop capacity building with the existing accelerators present in Morocco	Bank Al-Maghrib	Bank Al-Maghrib		✓	✓	3,0
		Advocate for incentives for investors/start-ups and funding of new breed of SDG-aligned Digital finance players.	Bank Al-Maghrib	Bank Al-Maghrib		✓	✓	1,5
Stream 3: Mass Market Uptake								
3.1.1	Encourage HCD approaches on the market to tailor the products	Gather inputs and share them with to the industry	Bank Al-Maghrib	Bank Al-Maghrib	✓			2,7
		Provide Technical Assistance and guidance to providers to support them reaching underserved segments	Bank Al-Maghrib	Bank Al-Maghrib		✓	✓	3,9
3.1.2	Support the traction in the market	Change the mindsets and build awareness	Bank Al-Maghrib	Bank Al-Maghrib	✓	✓	✓	4,5
		Development of an e-government platform easing up the process to register to digital solutions	Bank Al-Maghrib	Government		✓	✓	3,0

## Digital Economy

## Policy and Regulation

## Govt. Agency Promotion of the Digital Econom Yes/No

Ministry of Finance (Transformative)	Yes
Central Bank (Transformative)	Yes
Telecommunications Regulatory Authority (Transformative)	No
Agence de Développement du Digital (Transformative) SUBSTITUTED FOR M	Yes
Competititon Regulatory Authority (Transformative)	Yes
Ministry of Science and Technology (or Innovation) (Transformative)	No
Office of President/Prime Minister (Transformative)	Yes
Ministry of Health (Additive)	No
Ministry of Energy (Additive)	No
Ministry of Agriculture (Additive)	Yes
Ministry of Education (Additive)	Yes

## Promotion of Legal &amp; Infrastructure Attributes Yes/No

Support interoperable infrastructure build-out	Yes
Apply investment friendly spectrum policy	Yes
Prefer test and learn (ex-post approaches)	No
Apply regulatory consistency throughout the ecosystem	Yes
Promote digital literacy	Yes
Encourage use of digital IDs	Yes
Support digital financial infrastructure (retail electronic payments)	Yes
Introduce and push digital government services	Yes
Cybersecurity framework in place	Yes
Promote Shared Economy	No
Support Digital Trade (E-commerce) Readiness	Yes
Policies and standards for sex-disaggregation of data	Yes
Existence of Digital Economy Strategy	Yes
Existence of National Financial Inclusion Strategy	Yes

## Regulations in Place Yes/No

Non-bank e-money licensing is permitted for stored value accounts	Yes
National Payment System adheres to interoperability & affordability	Yes
Tiered KYC for account/wallet opening is permitted	Yes
Use of Agent Network for CICO is permitted for all regulated institutions	Yes
Data Localisation/Residency law allows secure cloud based data services	Yes
Data protection framework addresses individual privacy & system security	Yes
Electronic signature is allowed	Yes
Cybersecurity framework exists	Yes
Market dominance or Anti-Trust laws exist	Yes
Consumer protection defines customer rights & provides responsibilities	Yes
Broadband Policy enables competition in telecoms networks	No
Rules ensure all providers can access bulk data/comms services fairly	No

## Infrastructure

## ID Infrastructure % / Yes/No

% of population are registered for a national ID	93%
National ID system that stakeholders access public & private sector services?	0%
Is there a digital ID system in place that can be used for transactions?	No

## Connectivity %

% of population covered by the mobile cellular phone network	100%
% of population covered by at least 3G data network	99%
Network performance index	53%
% population with access to electricity	100%
Electricity supply quality	88%

## ICT &amp; Ownership %

% of population using internet	84%
% of population owning a smartphone	99%
% of population with a SIM card	81%
Affordability of mobile services and devices	56%

## Digital Payment Ecosystem %

% of adult population with a registered digital finance account	17%
% of adult population with an active digital finance account (90 days)	30%
# of stakeholders with open systems	9%
# of stakeholders with interoperable payment systems	72%

## Innovation

## Development of Innovation Community # / %

Number of FinTech	14
E-Government Development Index	57%
Growth of innovative companies	44%
University/industry research collaboration	31%

## Skills in Innovation Community %

Skillset of graduates	41%
Ease of finding skilled employees	49%
Attitudes towards entrepreneurial risks	46%
Tertiary enrolment	41%
Reliance on professional management	58%

## Supporting Environment # / %

Number of innovation hubs	34
State of national cluster/innovation hub development	43%
Legal framework's adaptability to digital business models	42%
Multi-stakeholder collaboration	38%

## Financing %

Venture capital availability	33%
Financing of SMEs	50%
Domestic credit to private sector	67%

## Digital Economy

## Skills

## Basic Skills

	#
Mean years of schooling	5,6
Expected years of schooling	13,7

## Digital Literacy

	%/Yes/No
Existence of country-wide financial literacy campaigns or programmes	No
Digital skills among active population	48%
Proportion (%) of schools with internet access	88%
Stakeholders (#) offer digital literacy training to their customers	25%

## Financial Literacy

	%/Yes/No
Existence of country-wide financial literacy campaigns or programmes	Yes
Appropriate curricula at primary, secondary or tertiary levels	No
% of the population that saved at a financial institution	11%
Stakeholders (#) offer financial literacy training to their customers	25%

## Digital Finance Ecosystem

## Size of FinTech Sector

	# / %
Number of FinTech	14
Volume of total transactions via traditional banking system (\$ Millions)	1392,5
Estimated overall revenue of the traditional banking sector (\$ Million)	649,1
Number of registered bank customers (# Millions)	26,52
Volume of total FinTech transactions (\$ Millions)	109,5
*FinTech Transactions compared to Bank Sector in %	8%
Estimated overall revenue of the FinTech sector (\$ Millions)	0
*Revenue of FinTech sector compared to bank sector in %	0%
Number of FinTech users (# Millions)	6,3
*Number of FinTech users compared to Bank Sector in %	24%
Aggregated Ratio of the above three to Regional Best	0

## Diversification of FinTech Sector

	# / %
Number of payment FinTechs	19
*Payment FinTechs to non-payment FinTechs of top 20 largest FinTechs	95%
Transaction volume of payment FinTechs (\$ Millions)	0
*Transaction volume of payment FinTechs to non-payment Fintechs	
Revenue of payment FinTechs (\$ Millions)	0,0
*Revenue of payment FinTechs to non-payment Fintechs	
Users of payment FinTechs (# Millions)	4,64
*Users of payment FinTechs to non-payment Fintechs	100%
Aggregated Ratio to Regional Best	0

## Access to Financing for FinTechs

	# / Yes/No
Access to Venture Capital (VC)	33%
Access to Angel Networks	Yes
Access to Credit for FinTech Startups (1-5 Score)	3
Funding through Government programmes (1-5 Score)	3
Access to Crowdfunding for financing start-ups (equity or loan financing)	Yes

## Enabling Initiatives

	Yes/No
Regulatory sandbox for any area relevant for FinTechs	No
Financial/non-financial incentives for development of FinTech sector	Yes
Incubator programmes for FinTechs	Yes
Accelerator programmes for FinTechs	Yes
FinTech-Government partnerships	Yes
FinTech Association	No
*FinTech Association facilitates courses, learnings & best practices	No
*FinTech Association provides info on environmental or social topics	No

## SDG-Alignment of Digital Finance

## SDG-Aligned Digital Finance Strategies

	Yes/No
Existence of a Digital Financing or FinTech-specific Sector strategy or plan	Yes
Existence of a Green FinTech strategy, taxonomy, plan or framework	No
Existence of a Financial Inclusion strategy with digital as an enabler	Yes
Digital finance ascribed role in the National Development Plan	Yes
Digital finance ascribed a role for reaching National Determined Contributions	No
Digital finance ascribed a role in other sustainable development strategies	No
Digital finance ascribed a role in catalyzing financing for any of the above	No
Sustainability considerations is part of digital economy strategies	No
Sustainability considerations is part of digital finance/FinTech strategies	Yes
Sustainability consideration is part of sector-specific digitalization plans	Yes

## Green FinTechs

	# / %
Number of Native Green FinTechs of top 20 largest FinTechs	0
Users of Native Green FinTechs	0
*Users of Native Green FinTechs to overall FinTechs	0%
Revenue of Native Green FinTechs (\$ Millions)	0
*Revenue of Native Green FinTechs to overall FinTechs	
Transaction volume of Native Green FinTechs (\$ Millions)	0
*Transaction volume of Native Green FinTechs to overall FinTechs	
Number of Non-Native Green FinTechs offering one or more green solutions	0
*Number of Non-Native Green FinTechs to all overall FinTechs of top 20	0%
Users of Non-Native Green FinTechs offering one or more green solutions	0
*Users of Non-Native Green FinTechs to overall FinTechs	0%

# Annex 1 – list of interviewees or participants to in-person consultations

<b>Interviewee</b>	<b>Organization</b>	<b>Stakeholder Category</b>
<b>Younes Benmoumen</b>	United Nations	Development Partner
<b>Hanae Bezad</b>	Douar Tech	Fintech / private sector
<b>Ihsane Himmi</b>	dLocal	Fintech / private sector
<b>Sanae Lahlou</b>	UNIDO	Development Partner
<b>Ahmed Tahiri</b>	Al Maali Consulting Group	Fintech / private sector
<b>Omar El Hyani</b>	Marco Numerique Fund	VC
<b>Imane Chariouri</b>	WorldRemit	Fintech / private sector
<b>Mohammed Benahmed</b>	Alliance Maroc Innovation et Emergence	Fintech / private sector
<b>Zouheir Lakhdissi</b>	Dial Technologies S.A	Fintech / private sector
<b>Abdelmounaim Dinia</b>	GCAM	Fintech / private sector
<b>Mehdi Khandid</b>	Inwi Money	Fintech / private sector
<b>Driss Jabri</b>	Inwi Money	Fintech / private sector
<b>Hamza Rkha Chaham</b>	SOWIT	Fintech / private sector
<b>Nawal Gharmili Sefrioui</b>	Orange Money	Fintech / private sector
<b>Lotfi Sekkat</b>	CIH	Fintech / private sector

We are grateful to the prominent participants to lively in-person consultations that were held in Rabat.

<b>Workshop Participant</b>	<b>Organization</b>	<b>Stakeholder Category</b>
<b>Zakaria El Manjahid</b>	ADD	Public sector
<b>Bouzekri Othmane</b>	ADD	Public sector
<b>Ismail Garbacg</b>	WAFR	Fintech / private sector
<b>El Fekkak Karim</b>	Kef Finance	Fintech / private sector
<b>El Alamy Hicham</b>	AMMC	Fintech / private sector
<b>Nadia Bouhouch</b>	AMMC	Fintech / private sector
<b>Driss Lemjaouri</b>	AMMC	Fintech / private sector
<b>Cherfi Sarrali</b>	UMGP/Startgate	Fintech / private sector
<b>Amine Fassi Fihiti</b>	Indatacore	Fintech / private sector
<b>Malik Belkeziz</b>	Agenz	Fintech / private sector

# References

- [1] United Nations , [Online]. Available: [https://sdgs.un.org/sites/default/files/publications/2655SDG\\_Compendum\\_Digital\\_Financial\\_Inclusion\\_September\\_2018.pdf](https://sdgs.un.org/sites/default/files/publications/2655SDG_Compendum_Digital_Financial_Inclusion_September_2018.pdf).
- [2] [Online]. Available: [https://www.gsma.com/sotir/wp-content/uploads/2022/03/GSMA\\_State\\_of\\_the\\_Industry\\_2022\\_English.pdf](https://www.gsma.com/sotir/wp-content/uploads/2022/03/GSMA_State_of_the_Industry_2022_English.pdf).
- [3] [Online]. Available: <https://www.oecd.org/competition/digital-disruption-in-banking-and-its-impact-on-competition-2020.pdf>.
- [4] [Online]. Available: <https://www.vodafone.com/sites/default/files/2022-10/digital-finance-platforms-to-empower-all.pdf>.
- [5] H.-T. T. G.-S. T. Lee-Ying Tay, "Digital financial inclusion: A gateway to sustainable development,," *Heliyon*, , vol. Volume 8, no. Issue 6, 2022.
- [6] [Online]. Available: <https://www.imf.org/en/News/Articles/2022/04/14/sp041422-curtain-raiser-sm2022>.
- [7] N. M. Dalma Sat, "Digital Money Transfer & Remittances research," *Juniper Research*, 2022.
- [8] [Online]. Available: <https://www.bis.org/publ/bppdf/bispap117.pdf>.
- [9] [Online]. Available: <http://www.bkam.ma/Inclusion-financiere/Rapport-sur-l-inclusion-financiere/Strategie-nationale-d-inclusion-financiere>.
- [10] [Online]. Available: <https://data.worldbank.org/?locations=MA-XN>.
- [11] World Bank, "The Little Data Book on Financial Inclusion," <http://hdl.handle.net/10986/38148>, 2022.
- [12] World Bank, 2022. [Online]. Available: <https://www.worldbank.org/en/publication/globalindex#sec4>.
- [13] World Bank, 2022. [Online]. Available: <https://www.worldbank.org/en/data/interactive/2022/10/21/govtech-maturity-index-gtmi-data-dashboard>.
- [14] [Online]. Available: <https://www.un.org/en/digital-financing-taskforce>.
- [15] UNDP-UNCDF, [Online]. Available: <https://sdgfinance.undp.org/digital-finance/sdg-aligned-digital-finance-ecosystems>.
- [16] Bank Al Maghrib, 2022.
- [17] World Bank Group, "Digital Financial Services in Morocco," 2022.
- [18] Fintech Futures, "Morocco: Mobile money adoption slows in cash-reliant market," 2022.
- [19] Statista, "Smartphone penetration in Morocco," 2022.
- [20] GSMA Intelligence, "Mobile Internet in Morocco," 2022.
- [21] " BKAM, Rapport annuel de la supervision Bancaire," 2021. [Online]. Available: <https://www.bkam.ma/content/download/765225/8597844/Rapport-DSB-2021.pdf>.
- [22] [Online]. Available: <https://www.dgssi.gov.ma/fr/content/loi-ndeg-0520-relative-la-cybersecurite.html>.
- [23] [Online]. Available: [https://www.dgssi.gov.ma/sites/default/files/attached\\_files/loi\\_09-08protection\\_donnees\\_personnelles.pdf](https://www.dgssi.gov.ma/sites/default/files/attached_files/loi_09-08protection_donnees_personnelles.pdf).

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- [24] [Online]. Available: <https://www.finances.gov.ma/Publication/dtfe/2022/rapport-strategie-nationale-if2020.pdf>.
- [25] "Policy Responses to COVID-19 - International Monetary Fund," [Online]. Available: <https://www.imf.org/~media/Files/Topics/COVID/2020-fas-covid-19-policy-response-tracker-smes-and-mobile-money-080320.ashx> .
- [26] World Bank Group, 2022. [Online]. Available: <https://www.worldbank.org/en/publication/globalindex>.
- [27] GSMA, [Online]. Available: [https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/03/GSMA\\_Indice-de-la-r%C3%A9glementation-de-largent-mobile.pdf](https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/03/GSMA_Indice-de-la-r%C3%A9glementation-de-largent-mobile.pdf) .
- [28] GSMA , "GSMA Mobile Money Metrics," [Online]. Available: <https://www.gsma.com/mobilemoneymetrics/#global>.
- [29] [Online]. Available: <https://www.fsrao.ca/about-fsra/innovation-office/test-and-learn-environments-tles-financial-services-innovation>.
- [30] B. A. Maghrib, 2022.
- [31] Bank Al Maghrib, 2022. [Online]. Available: [https://www.bkam.ma/content/download/753339/8515307/Communiqu%C3%A9%20de%20presse%20BKAM%20ANRT\\_FR.pdf](https://www.bkam.ma/content/download/753339/8515307/Communiqu%C3%A9%20de%20presse%20BKAM%20ANRT_FR.pdf) .