

# KiWi eKiosk: pioneering integrated cards and mobile payments for micro-merchants in Morocco

## 1. DEVELOPMENT RELEVANCE

### Economic and poverty context

Having performed well in 2015, the Moroccan economy slowed down in 2016. Growth was down to 1.4% in the second quarter as a result of a 12.1% contraction in agricultural output, while expansion outside the agriculture sector remained sluggish at around 2.5%. Inflation has remained muted at under 2%<sup>iii</sup>.

Morocco's respectable per-capita income growth in recent years has contributed to reducing poverty, although disparities persist and employment remains low. While the poverty rate declined from 8.9% in 2007 to 4.2% in 2014, nearly 19% of the rural population are still living in poverty or are vulnerable.

In the medium term, Morocco should be able to accelerate economic growth while maintaining macro-economic stability.

Governance indicators chart<sup>iv</sup> (Morocco 2000-2015)

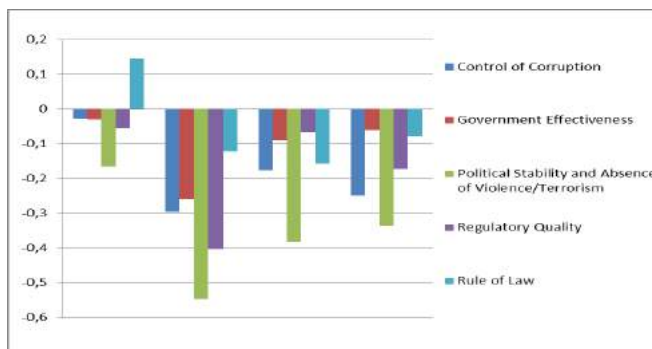
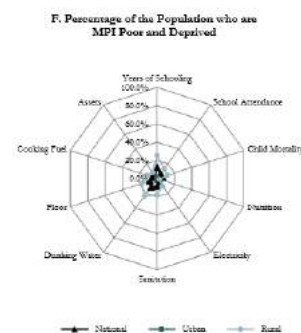


Table 1<sup>i</sup>: Population and economic indicators

Population in million (2015)	34.37
GDP growth (2015)	4.5%
Inflation (2015)	1.55%
Trade balance (% of GDP) (2015)	-7.79%
Foreign direct investment (net) (% of GDP) (2015)	3.23%
Net ODA received (% of GNI) (2014)	2.09%
Remittances received (% of GDP) (2015)	6.86%
Econ. Freedom Index <sup>ii</sup> (Rank among 186 countries) (2017)	86
<b>Poverty indicators</b>	
GDP per capita (USD) (2015)	2878
Gini Index (0= equality 100= inequality) (2006)	40.72
International poverty rate (2006; at 1.90 USD/day)	3.12%
National poverty rate (2007)	8.9%
National rural poverty headcount rate (2007)	14.4%

Multidimensional poverty index chart<sup>v</sup> (Morocco 2016)



### Financial sector context

Some 41% of Moroccan adults use a formal financial product or service<sup>vi</sup>. This places Morocco well above the average level of financial inclusion in the MENA (Middle East and Northern Africa) region. However, bank accounts are used actively by only 28% of the adult population, 21% of women, and only 10% of low-income citizens. Microfinance reaches only 5% of the adult population, although 68% report familiarity with it.

In 2014, 63% of the total population had a bank account<sup>vii</sup>, compared to 43% in 2008, and the number of SMEs (small and medium-sized enterprises) with access to bank credit has doubled since 2007. The transformation of the postal financial service into a commercial bank, and the development of banking products for low-income families, have increased household access. The microfinance sector has been strengthened by a combination of reforms to governance, risk management, financial infrastructures and supervision.

The government is making an effort to extend accessibility and affordability to the bottom of the income pyramid. New banking legislation provides a framework for new non-bank payment service providers to expand the use of transaction accounts and achieve universal financial access. However, entry to the market for new digital payment providers is hampered by the monopoly of the *Centre Monétique Interbancaire (CMI)*, as the only licensed acquirer in Morocco. The Moroccan central bank decided as long ago as 2014 to open the acquiring industry to competition, with projects such as separating CMI into two entities (an acquirer on one side, and a payment gateway on the other) and opening up acquiring licenses to new players, such as the

postal bank Al Barid Bank. Despite efforts to introduce competition, as of today CMI remains the only acquirer in Morocco.

### Partner financial institutions

**eBOP SA** ('KiWi') is a Swiss start-up created in December 2013, with the mission of providing a mobile financial platform to micro-merchants in emerging markets. This then gives them better access to savings, payment systems, loans, insurance, and money management solutions in general. The objective is to reach one million micro-merchants by 2021 with operations in eight countries. There are three FTEs working at eBOP SA, focusing on IT and product development.

eBOP SA created a subsidiary in Morocco – KiWi Morocco – to run KiWi operations from a local base. During its initial phase it approached distribution partners and financial partners, three of them being:

1) Al Amana, one of the largest microfinance institutions in the MENA region, contacted by KiWi to push the solution to its network of micro-merchants. Al Amana helped KiWi during the feasibility study, allowing KiWi to test prototypes with its micro-merchants. The idea was to push KiWi to Al Amana's customers once the e-payment platform was in place.

2) Al Barid Bank (ABB), the postal bank of Morocco, was initially intended to be the acquiring bank for KiWi card payments. The partnership was particularly interesting as ABB also pushes a mobile wallet to its customers and KiWi could integrate it within its own app.

3) The Centre Monétique Interbancaire (CMI), the only formal acquirer and payment gateway in Morocco, which entered the project at a later stage to replace ABB.

## 2. INTERVENTION APPROACH

### Capacity-building needs

Support from SCBF intervention was required for KiWi to deploy its mobile solution (app) in Morocco. The app has three key features:

- 1) Cash register – a 100% KiWi feature that micro-merchants use to register their sales, give receipts to their customers, calculate change and more generally manage their businesses, reviewing daily sales and keeping track of their money and products.
- 2) Card acceptance – a card reader and KiWi app that allows merchants to accept cards (mainly Visa and Mastercard) directly via their phones, with a very small hardware investment. KiWi needs an acquiring partner for this feature. The project initially started in partnership with ABB, but owing to delays in acquiring the licence enabling ABB to accept payments on behalf of micro-merchants, KiWi decided to continue with CMI instead.
- 3) Mobile wallet (mWallet) feature – this integrates a third-party wallet (ABB) into KiWi's app, so that mWallets can be accepted at KiWi merchants' locations as a means of payment.

### Main activity areas (goals, targets, resources and time frame), and outputs

SCBF's support was intended to reinforce KiWi's role as an interoperable channel for financial services. Merchants gain an adapted e-payment solution, which enables them to both receive payments from customers and make payments to their own suppliers.

The main focus of this project was to adapt e-payment technology and distribution to the specific needs and habits of Moroccan micro-merchants, in close collaboration with local partners. KiWi targeted 3000+ micro-merchants by the end of the project, in December 2017. Upon project completion, KiWi Morocco aimed to be in a position to scale up a fully tested solution.

The objective of this project was also to maximise the impact of the KiWi solution on micro-merchants' financial management and literacy, bearing in mind that a digital approach could become a strong and efficient channel by which to scale up financial education at low cost.

The main activity areas were:

- two new modules for the app (e-payments and airtime topups)
- a financial education toolkit attached to the product
- a user experience gap analysis
- a KiWi app that is well understood, used and appreciated by micro-merchants.

Upon project completion, KiWi Morocco would have a coherent digital and physical financial education framework, which it would be able to spread to all its micro-merchants, wherever they are located.

### 3. RESULTS ACHIEVED AND NOT ACHIEVED

The project started in June 2014 and was estimated to run until December 2017. However, owing to long delays related to obtaining an acquiring license for ABB, KiWi instead partnered with CMI, the only licensed acquirer operating in Morocco. This strategic move invalidated the integration of mWallet, as this part of the project was fully tailored to the ABB solution. Since discussions with CMI started well, KiWi negotiated and signed a contract with a mobile POS provider and set up a Moroccan subsidiary. However, technical, pricing and operational negotiations with CMI proved to be extremely slow. As a start-up, KiWi up was not able to endure such a delay to its go-live in Morocco. For these external reasons, the project was put on hold from Q4 2015, and was terminated prematurely in February 2017. It nonetheless achieved tangible progress on financial inclusion.

#### Client level

The project could not go live without an acquiring bank partner ready to process card payments on behalf of micro-merchants. Instead it was decided to test the cash register feature while working on the card payments acceptance solution, since both could be undertaken without CMI.



*KiWi tested digital marketing as a channel, starting with Facebook.*

A total of 52 users tested the app. Half of them were independent registrations, prompted by an awareness campaign on Facebook. The other half came from field promotions. The following chart shows user origins:

*Digital efforts were complemented with field promotional materials*

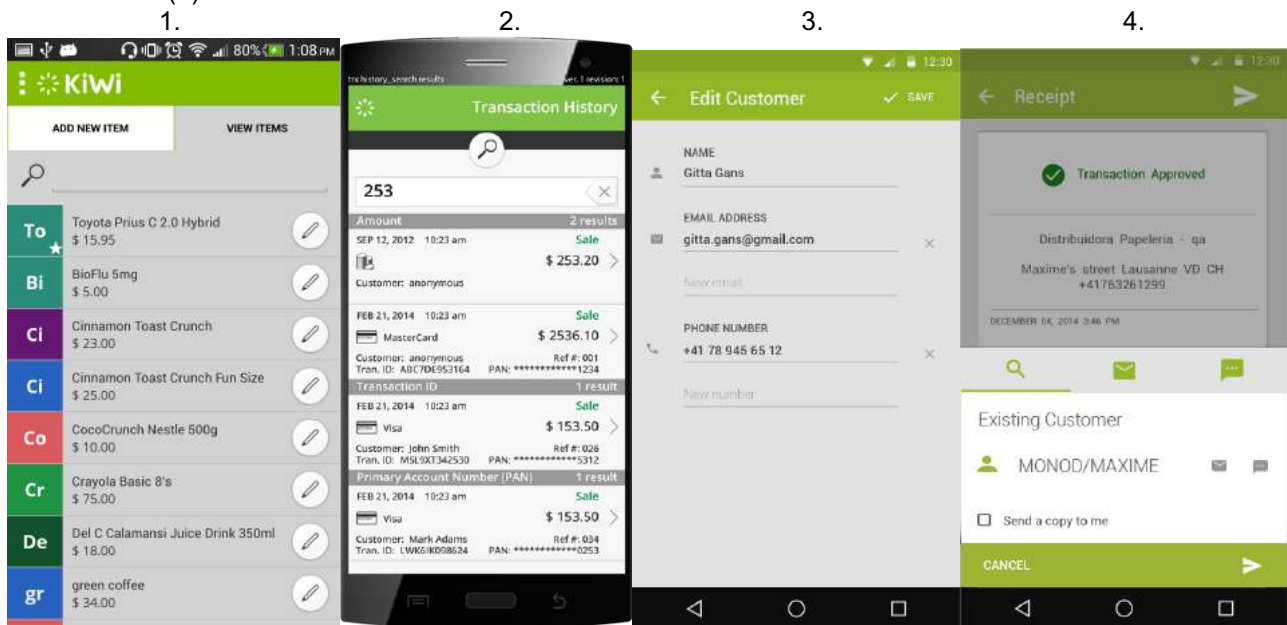
Region	Users	New Users	Sessions	Screen Views	Screens / Session	Avg. Session Duration
	52 % of Total: 0.86% (6,067)	53 % of Total: 0.87% (6,067)	261 % of Total: 0.24% (106,829)	1,317 % of Total: 0.31% (430,032)	5.05 Avg for View: 4.03 (25.35%)	00:02:32 Avg for View: 00:02:03 (23.69%)
1. Grand Casablanca	31 (51.67%)	29 (54.72%)	137 (52.49%)	693 (52.62%)	5.06	00:03:26
2. Doukkala-Abda	10 (16.67%)	8 (15.09%)	41 (15.71%)	155 (11.77%)	3.78	00:01:14
3. Souss-Massa-Draa	6 (10.00%)	5 (9.43%)	15 (5.75%)	88 (6.68%)	5.87	00:01:46
4. Marrakesh-Tensift-El Haouz	5 (8.33%)	4 (7.55%)	51 (19.54%)	241 (18.30%)	4.73	00:01:20
5. Rabat-Sale-Zemmour-Zaer	5 (8.33%)	4 (7.55%)	11 (4.21%)	73 (5.54%)	6.64	00:01:35
6. Meknes-Tafilalet	1 (1.67%)	1 (1.89%)	1 (0.38%)	4 (0.30%)	4.00	00:00:36
7. Oriental	1 (1.67%)	1 (1.89%)	1 (0.38%)	4 (0.30%)	4.00	00:00:25
8. Tangier-Tetouan	1 (1.67%)	1 (1.89%)	4 (1.53%)	59 (4.48%)	14.75	00:06:43

The project succeeded in that it was able to test parts of the app without resolving the e-payment issue. First tests led to the conclusion that the cash register feature was well understood by the targeted micro-merchants, who need to track their sales more effectively without losing so much time on end-of-day calculations (among other benefits). However, tests also showed that, without continual support from our field consultants, merchants would stop using KiWi after a while. This first version still needed some work to be as frictionless as possible and to require less assistance from KiWi.

It became clear that the lead feature would be e-payments, in terms of both usage (merchants) and revenues for KiWi (sustainable business). This means that the cash register itself would not be sufficient to ensure long-term usage by both merchants and KiWi.

### Partner financial institution level

KiWi Morocco has been set up, but as the project was halted it never reached real operational capacity. That said, interesting digital marketing and sales channels were tested and the app itself benefited from the project. The following screenshots are examples of improvements related to financial education activities: monitoring tool for money management: a simple way to capture inventory (1); and a simple way to track daily sales (2). The next two screenshots highlight improvements related to the second major project aim: an accounts receivable tool. The app also offered a simple way to manage an address book (3), and then to link payments to customers (4):



During the term of the project, eBOP SA received additional financial support from other sources: CHF 1,000,000 in equity from Business Angels (August 2014 and January 2017) and CHF 500,000 in debt financing from the *Fondation pour l'innovation technologique* (FIT) in July 2015. This shows how grant support can leverage further private money in building a fintech startup with great financial inclusion potential.

### Financial sector level

The entry of KiWi into the Moroccan market helped to demonstrate to the payment industry and local banks that mobile point of sale (mPOS) technology and KiWi's new business model could contribute to the spread of payment acceptance in the country. Discussions and negotiations certainly contributed to future projects by other local players in this area, including Al Barid Bank, Centre Monétique Interbancaire, M2M Group, and Al Amana.

## 4. LESSONS LEARNED

A fintech project like KiWi still relies greatly on local financial partners. Fintech still being quite new, partners and regulators are not very familiar with either fintech or startups. This can lead to long delays which startups are not financially prepared to absorb.

The lesson here is that a project should not be launched without being 100% sure that regulation will not be a barrier. The fixed costs linked to a waiting period are generally underestimated, and pivots (plan B) require much more energy than usually expected. Even if a plan B shows chances of success, the time previously

wasted also means that the available resources for plan B are usually much more restricted than was the case for plan A.

However, it is also clear that a fintech company is generally very mobile and agile, and can switch from one country to the other easily if required. This means that a project that starts in one country could be followed by implementation in another country. This flexibility reduces project risks, even if the impact will be a country other than the country of first choice. Therefore, KiWi will do all it can to ensure that the money invested will benefit as many micro-merchants as possible worldwide, and hopefully also in Morocco.

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<sup>i</sup> The World Bank Group (2006-2015). World Development Indicators database. Washington, DC. <http://data.worldbank.org>. Accessed (2017)

<sup>ii</sup> Heritage Foundation, (2017) Index of Economic Freedom, <http://www.heritage.org/index/ranking>. Accessed (2017)

<sup>iii</sup> The World Bank Group, <http://databank.worldbank.org>. Accessed (2017)

<sup>iv</sup> The World Bank Group (2000-2015). Worldwide Governance Indicators database. Washington, DC. <http://databank.worldbank.org>. Accessed (2017)

<sup>v</sup> Oxford Poverty and Human Development Initiative (2016). Global Multidimensional Poverty Index Databank. OPHI, University of Oxford.

[http://www.dataforall.org/dashboard/ophi/index.php/mpii/country\\_briefings](http://www.dataforall.org/dashboard/ophi/index.php/mpii/country_briefings). Accessed (2017)

<sup>vi</sup> The World Bank Group (2014), <http://www.worldbank.org>. Accessed (2017)

<sup>vii</sup> International Monetary Fund, February 2016, Morocco Financial System Stability Assessment. Accessed (2017)