Mobile money crosses borders:
New remittance models in West Africa

CLAIRE SCHARWATT AND CHRIS WILLIAMSON

MARCH 2015

Mobile Money for the Unbanked

The GSMA's Mobile Money for the Unbanked (MMU) programme works to accelerate the growth of commercially viable mobile money services to achieve greater financial inclusion.

For more information visit www.gsma.com/mmu

THE MMU PROGRAMME IS SUPPORTED BY THE BILL & MELINDA GATES FOUNDATION, THE MASTERCARD FOUNDATION, AND OMIDYAR NETWORK

BILL & MELINDA GATES foundation

The MasterCard Foundation

OMIDYAR NETWORK™

CONTENTS

Executive Summary

A promising new model is emerging for cross-border remittances with mobile money as both the sending and the receiving channel. This paper draws commercial insights from two early examples in the West African Economic Monetary Union (WAEMU), where member states are socio-economically integrated and adoption of mobile money has been rapid in recent years. These factors make the region a natural starting point for this model.

- **Orange Money International Transfer, which links up Côte d'Ivoire, Mali and Senegal.** This is the first example of mobile money transfers between three markets, enabling six distinct remittance corridors, including one of the largest flows in Sub-Saharan Africa: Côte d'Ivoire to Mali. It is also an example of 'intra-group', in-house implementation. A year and a half after launch, we look at the adoption of the service to better understand the use cases driving transaction volumes.

- **MTN Mobile Money in Côte d'Ivoire to Airtel Money in Burkina Faso.** This was the first case of two operators from separate groups agreeing to interoperate their mobile money services to facilitate cross-border transfers. With a growing number of operators considering a similar model, the MTN-Airtel cross-border service highlights both the opportunities and challenges of the partnership approach. It is also an example of a more complex implementation involving an intermediary hub.

TABLE 1

OVERVIEW OF TWO WEST AFRICAN CROSS-BORDER TRANSFER INITIATIVES

	ORANGE MONEY CÔTE D'IVOIRE, MALI, AND SENEGAL	MTN MOBILE MONEY CÔTE D'IVOIRE & AIRTEL MONEY BURKINA FASO
Operators involved	Single group	Multiple groups
Markets included	3	2
Central bank	Single central bank (BCEAO)	
Forex requirements	Single currency (CFA franc)	
Interoperability model	Direct bilateral agreements	Indirect settlement hub (HomeSend[1])
Revenue share model	'Bill and keep'	Shared sending fees
Core value proposition	Convenience	Affordability

1. HomeSend is a joint venture between MasterCard, eServGlobal, and BICS. Learn more: www.homesend.com.

This paper explores the implementation of the commercial and technical models above, and the process, rationale, and decision-making behind each of these initiatives.

The success of both initiatives indicates the readiness of consumers in mature mobile money markets to send and receive cross-border transfers using their mobile money account. Adoption has been remarkably fast, and Orange, MTN, and Airtel are now moving a significant share of remittances through their own corridors. A range of use cases is driving uptake, including regular and seasonal remittances from diaspora populations, as well as cross-border trade.

What is the story behind these successful new partnership models? Understanding the strategic, collaborative, and operational dynamics of these initiatives not only sheds light on the potential opportunity for cross-border mobile money transfers, it also provides deeper insights into the commercial and technical considerations involved in implementation.

Outside the WAEMU zone, established mobile money operators that secure the permission of their central banks could carry a significant share of remittance flows between developing countries within a short period of time. While this would be a blow to traditional remittance channels, underserved consumers would stand to benefit from much more affordable, convenient, and secure money transfer services.

Mobile money cross-border transfers in context

The international remittance opportunity

International remittances are a major and stable source of income for people in many developing markets. One in seven Africans (120 million) receives remittances from friends and family abroad, representing USD 60 billion and as much as a third of total GDP[2] in some African markets. Although 'North-South' remittance flows are the largest, one in three remittances are sent from within Africa.

However, Africans pay the highest transaction fees in the world: the cost of sending money to Africa reaches 12.4% of the face value of the transaction on average—much higher than the global average of 8.6%. Transaction fees can even reach 20% for remittances sent within Africa. The World Bank has found that the 10 most expensive remittance corridors in the world are all intra-African,[3] and estimates that if remittance fees across Africa were brought down to 5% (the average rate for G8 countries), USD 4 billion could be put back into the hands of Africans.[4]

These high fees have contributed to the rise of informal transfer solutions, particularly for regional and domestic remittances. There is evidence that the majority of remittances in many Sub-Saharan African countries are processed through informal channels, such as transport companies and Hawala systems. For example, surveys in Burkina Faso and Senegal[5] revealed that over 60% of receiving households use informal channels for cross-border remittances. While informal channels are more affordable, users face substantial security risks, complex and lengthy transaction processes, and non-transparent price structures.

The emergence of mobile money international remittances

Mobile network operators (MNOs) that were already providing domestic P2P remittances through their mobile money services quickly recognised an opportunity to leverage their transactional platforms and distribution networks for international remittances. These remittances could drive a significant increase in mobile money transactions and provide a new channel for loading mobile money accounts. Receivers would then have the choice of either cashing out or using their balance for other digital transactions.

2. "In all of Western Africa...70 per cent of payments are handled by one money transfer operator", IFAD, available at: http://www.ifad.org/remittances/maps/africa.htm
3. The World Bank, "Send Money Africa", July 2014, available at: https://sendmoneyafrica.worldbank.org/sites/default/files/SMA_Report_Jul2014.pdf
4. The World Bank, "African Migrants Could Save US$ 4 Billion Annually On Remittance Fees, Finds World Bank", 28 January 2013, available at: http://www.worldbank.org/en/news/press-release/2013/01/28/african-migrants-could-save-US4-billion-annually-remittance-fees-finds-world-bank
5. The World Bank, "Remittance markets in Africa", 2011, available at: http://siteresources.worldbank.org/EXTDECPROSPECTS/Resources/476882-1157133580628/RMA_FullReport.pdf

To date, operators interested in international remittances have developed mobile money primarily as a channel for receiving remittances from developed countries, or 'North-South' flows. There are now more than 60 examples of partnerships between mobile money operators (MMOs) and money transfer organisations (MTOs) working with global players (e.g., Western Union, MoneyGram, and WorldRemit), as well as more national and regionally-focused MTOs. Most of these partnerships have worked through physical agents in the sending market, although a growing number are using online sending channels.

So far, these initiatives have struggled to generate large transaction volumes in most markets. Being removed from senders, who generally choose which channel to use, makes it difficult for operators in developing markets to drive adoption and negotiate commercial terms with MTOs. The GSMA estimates that in December 2014, only 164,000[6] cash-to-wallet and web-to-wallet international transfers were received in mobile money accounts globally.

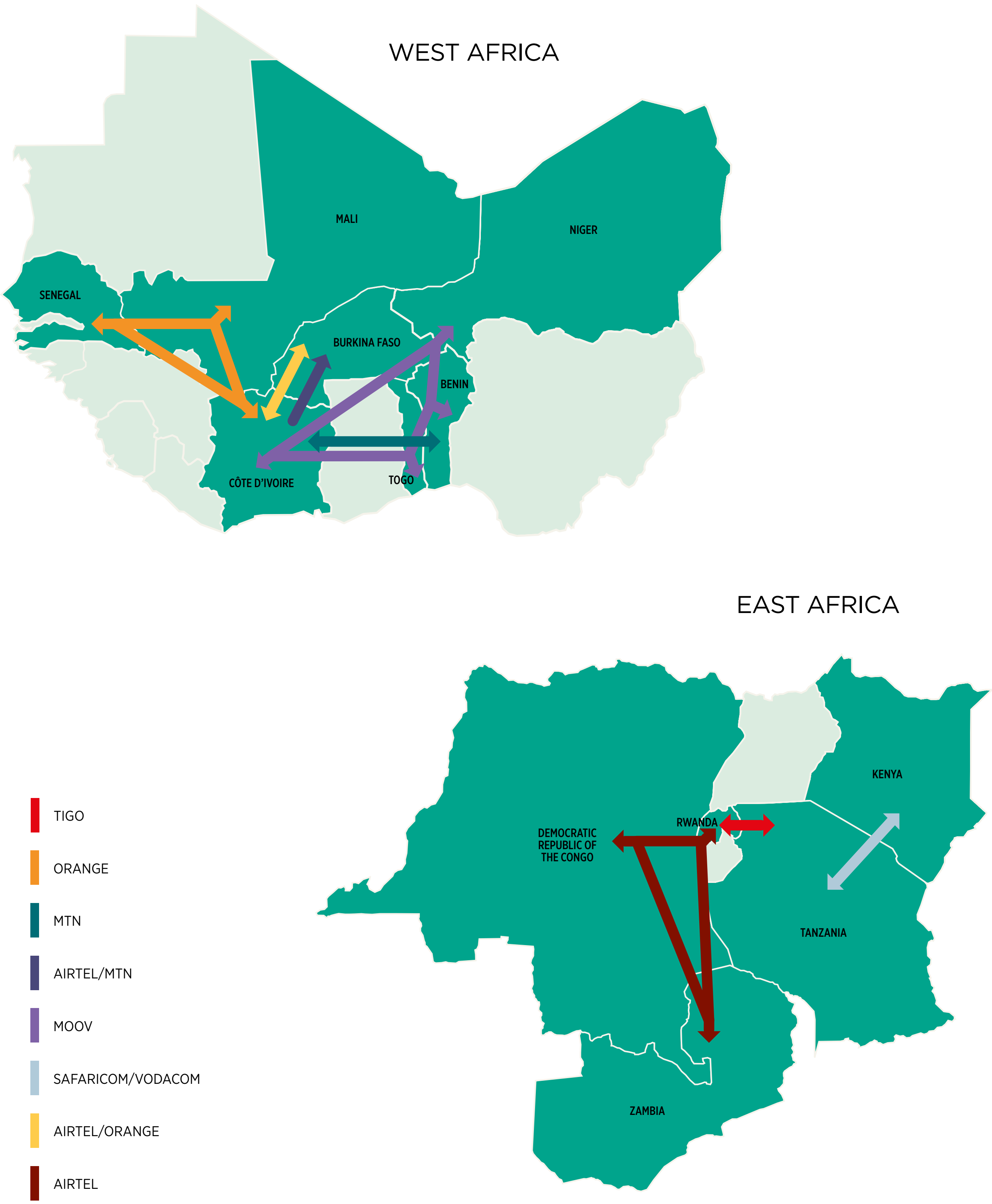
Recently, the industry has been experimenting with a new model that uses mobile money as both a sending and receiving channel, allowing operators to target key intra-regional corridors for cross-border remittances. The GSMA is aware of eight examples of this model, five of which are based in West Africa:

- Tigo Tanzania and Tigo Rwanda
- Orange Côte d'Ivoire, Orange Mali, and Orange Senegal
- Orange Côte d'Ivoire and Airtel Burkina Faso
- MTN Côte d'Ivoire and MTN Benin
- MTN Côte d'Ivoire and Airtel Burkina Faso
- Moov Côte d'Ivoire, Moov Benin, Moov Niger and Moov Togo
- Safaricom Kenya and Vodacom Tanzania
- Airtel Zambia, Airtel Rwanda, and Airtel DRC

6. Analysis based on the GSMA 2014 Mobile Money Adoption Survey.

FIGURE 1

INTRA-REGIONAL CORRIDORS FOR CROSS-BORDER MOBILE MONEY REMITTANCES



TEXT BOX 1

REGIONAL BACKGROUND

Burkina Faso, Côte d'Ivoire, Mali, and Senegal are all members of the West African Economic and Monetary Union (WAEMU), which also includes four other member states. These Francophone markets are highly cohesive, with a common currency and central bank, the BCEAO (Banque Centrale des Etats de l'Afrique de l'Ouest), and liberalised cross-border migration and trade.

Within the WAEMU region, Côte d'Ivoire has the largest and most urbanised population, as well as the strongest economy, making it a destination for regional migrant workers and a key sending market for intra-regional remittances. The majority of migrant workers come from the WAEMU region, primarily Burkina Faso and Mali, which are among the world's poorest countries. According to the World Bank, the remittance corridor between Côte d'Ivoire and Burkina Faso is the largest in Sub-Saharan Africa[1]

TABLE 2

SOCIO-ECONOMIC DATA ON BURKINA FASO, CÔTE D'IVOIRE, MALI, AND SENEGAL

	BURKINA FASO	CÔTE D'IVOIRE	MALI	SENEGAL
Population (2014)	17.4m	20.8m	15.8m	14.5m
Urban population (2014)	29%	53%	39%	43%
GDP per capita (2014)	USD 684	USD 1,529	USD 715	USD 1,047

SOURCE: THE WORLD BANK

Mobile money services are available in all four markets, and some have gained significant traction over the past few months. Côte d'Ivoire, the leading mobile money market, had five deployments and close to 6.2 million registered mobile money accounts in Q4 2013,[2] 34% of which were active. In Mali, Orange Money has seen strong growth in its active customer base, with mobile money transactions reaching almost 20% of Mali's reported 2014 GDP.[3] While mobile money has not yet reached the same scale in Burkina Faso and Senegal, adoption is growing quickly.

1. "Remittance markets in Africa" (2011), The World Bank. Available at: http://siteresources.worldbank.org/EXTDECPROSPECTS/Resources/476882-1157133580628/RMA_FullReport.pdf
2. IFC and The MasterCard Foundation, "Overview of Côte d'Ivoire: Mobile Financial Services Market Data", 2013, available at: http://www.ifc.org/wps/wcm/connect/60efa900461a20518634bf9916182e35/ifc_emoney_english.pdf?MOD=AJPERES
3. Le Figaro, "Les actifs Africains d'Orange valorisés à 10 milliards", 14 October 2014, available at: http://www.lefigaro.fr/secteur/high-tech/2014/10/13/01007-20141013ARTFIG00338-les-actifs-africains-d-orange-valorises-a-10milliards.php

Orange Money West Africa: Cross-border remittances within an operator group

Orange set out to develop and test a new model for remittances in West Africa that would disrupt traditional formal and informal cash-based offerings. As its deployments in the region matured and scaled up, Orange saw an opportunity to channel substantial cross-border remittance flows with mobile money alone. In addition to increasing transaction volumes and account balances, Orange hoped receiving customers would be encouraged to make other digital transactions, which would help it to capture new mobile money users.

Orange identified Côte d'Ivoire, Senegal, and Mali as the launch markets for cross-border mobile money transfers as part of its Orange Money International Transfer initiative. These three markets were chosen for a number of reasons:

- **Maturity of Orange Money:** Orange Money is sufficiently mature in these three markets to enable strong distribution, consumer adoption and trust.
- **Remittance flows:** There are strong remittance corridors between these markets due to migration and trade, especially between Côte d'Ivoire and Mali.
- **Single currency:** Since all three markets share the West African CFA franc, there is no need for foreign exchange (forex), which simplifies in-house implementation.
- **Common central bank:** These markets also share a common central bank (the Banque Centrale des Etats de l'Afrique de l'Ouest, BCEAO), which has taken an enabling position on mobile money-based remittances (described below).
- **Common partner bank:** The same partner bank holds Orange Money customer deposits in all three markets, which facilitates the settlement process.
- **Common mobile money platform:** The three Orange Money deployments in these markets all use the same platform provider, which simplifies the integration process.

Launching in these three markets provided attractive network effects (there are six corridors between three markets versus two corridors between two markets), but a manageable level of cost and complexity.

Smooth implementation

Implementation was relatively straightforward; the service went live in July 2013, within six months of Orange deciding to launch. Its selection of launch markets simplified the regulatory approval process and technical implementation. Orange requested approvals from the BCEAO via its partner bank and conducted the integration in-house, avoiding the need to share value with a third party.

Orange Group had to create a revenue-sharing model that would distribute the benefits fairly between the operating companies, and allow each to control its own tariffs and fees. It settled on a 'bill and keep' model with the following features:

- The sender is charged a transfer fee, as described in the following section. The sending operator keeps the entire fee to cover the cash-in commission that the sending operator pays the agent, overheads (e.g., marketing), and a profit margin.

- As with a domestic P2P transfer, the receiver is not charged for receiving the remittance; they are only charged when they cash out (which may be the next step, or following other mobile money transactions). The receiving operator keeps the cash-out fee, which covers the commission it must pay the agent, overheads, and profit margin.

The three operating companies happily agreed to this simple model, since their net margins would be similar for any given transaction. Furthermore, the actual remittance flows between each pair of markets turned out to be more similar than expected (see below), helping to even out any difference in the benefits of sending versus receiving.

There is a signed contract between the three subsidiaries that defines their roles and obligations; each manages the electronic money versus cash money in its country with a daily reconciliation process, and bank settlements are performed periodically depending on transaction volumes. In this case, since all three operators are subsidiaries of the same group, it was agreed that the receiving deployment should assume settlement risk. Usually the bearer of counter-party risk would want to be paid for this, or prefunded wallets would be used to minimise this risk.

Operationally, the service has not created any significant new challenges for Orange. The additional liquidity demands have been manageable. Cross-border remittances still represent a minority of overall Orange Money transactions, and while the remittance flows have some strong seasonal peaks, these coincide with existing peaks for domestic P2P transfers.

A convenient and easy-to-use service for the diaspora

Orange Money launched the service with a focus on convenience and ease of use: "Faster, Simpler, Accessible Everywhere".[7] Like a domestic P2P transfer, users can send and receive funds in real time and do not have to travel far to cash out (mobile operators have far more extensive agent networks in a market than MTOs do).[8]

However, economies of scope for the core domestic mobile money business also enabled Orange to compete strongly on pricing against the MTOs. The sender pays a single transfer fee, while the receiver pays only the regular cash-out fee (if they decide to cash-out the transfer). Transfer fees are based on a simple three-tier structure with a fixed transfer fee within each tier. These fees represent 4%, 2.4%, and 1.6% of the central value respectively; on average, customers pay around 2% of the transaction value. This is substantially lower than the

7. Translated from French: "Plus rapide, plus simple, accessible partout"
8. Western Union currently has 570+ agents in Côte d'Ivoire (Source: http://www.westernunion.ci/WUCOMWEB/staticMid.do?method=load&countryCode=CI&languageCode=en&pagename=HomePage), compared to 12,093 mobile money agents in Q4 2013 (Source: http://www.ifc.org/wps/wcm/connect/60efa900461a20518634bf9916182e35/ifc_emoney_english.pdf?MOD=AJPERES)

fees charged by formal MTOs or informal remittance providers in these markets, which typically exceed 5%. In Côte d'Ivoire, Western Union responded by immediately reducing its prices,[9] but this has not prevented Orange Money from taking a substantial share of the market.

Orange has conducted ATL marketing in each market to raise awareness of the service, and has targeted diaspora communities with SMS campaigns based on cross-border calling patterns, advertising at bus stations, as well as some TV and radio promotion. Since the sender's experience is very similar to making a domestic P2P transfer, Orange has not had to focus on deeper BTL activity, although it has recruited some of the Malian and Senegalese diaspora in Côte d'Ivoire to promote the service in their communities.

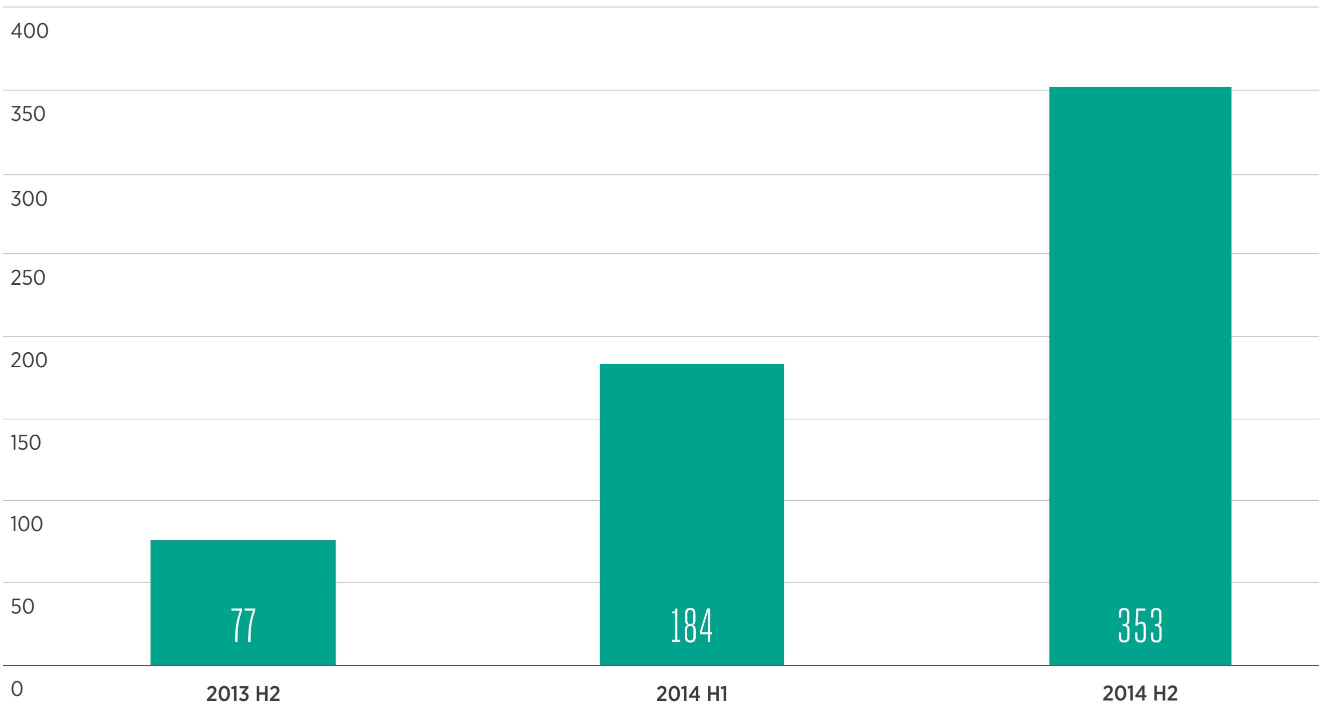
Rapid adoption and a wide range of use cases

The rapid adoption of the service has surprised even Orange; transaction volumes and values have been roughly doubling every six months, contributing to a total outbound remittance value of USD 51.9m over the last 18 months. Average transfer values have held close to USD 86 since Orange launched the service—roughly twice a typical domestic P2P transfer.

By the second half of 2014, the value of cross-border remittances on Orange Money accounted for an impressive 24.7% of all remittances reported by the World Bank between these three markets.

FIGURE 2

VOLUME OF OUTGOING TRANSFERS (THOUSANDS)



9. See http://www.leral.net/Western-Union-lance-une-nouvelle-offre-dans-la-region-UEMOA-pour-aider-ses-clients-a-optimiser-leurs-transferts-d-argent_a86974.html

FIGURE 3

VALUE OF OUTGOING TRANSFERS (USD MILLIONS)

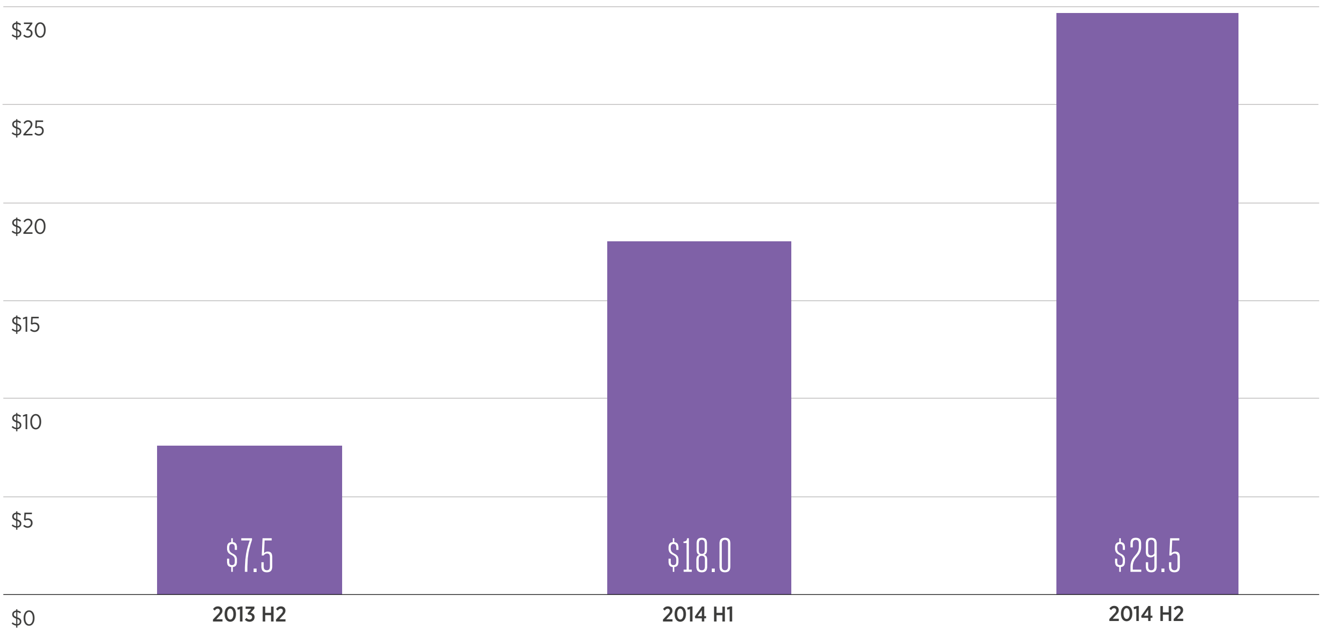
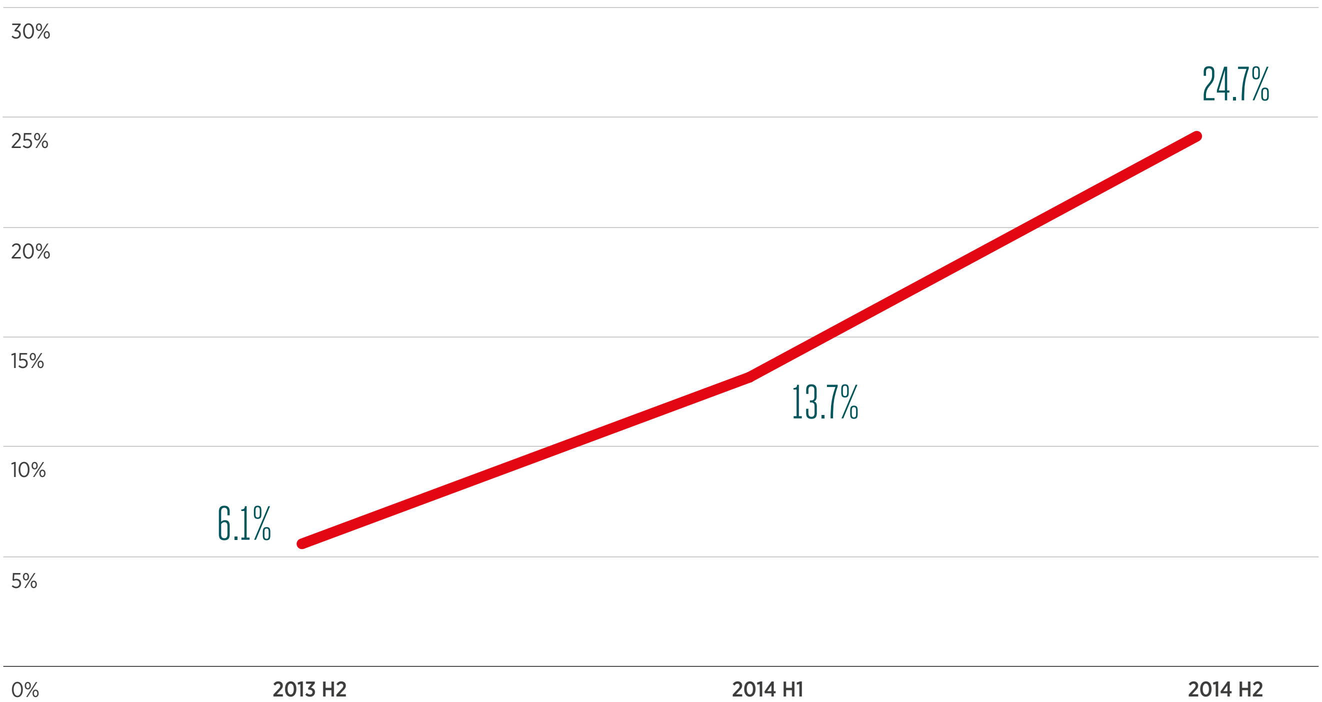


FIGURE 4

ORANGE MONEY'S SHARE OF FORMAL REMITTANCES BETWEEN CÔTE D'IVOIRE, MALI, AND SENEGAL



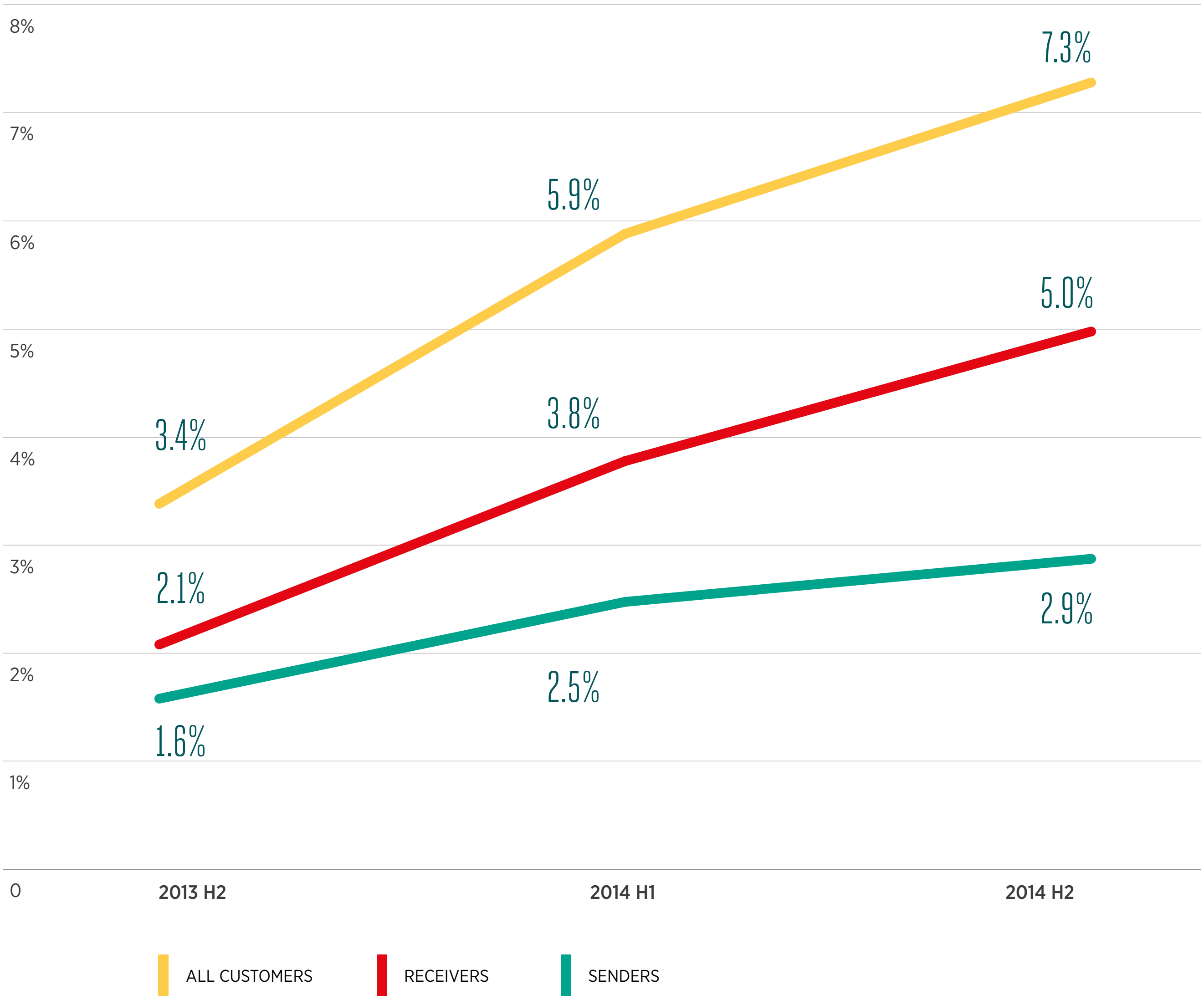
SOURCE: ORANGE, BASED ON WORLD BANK FORMAL REMITTANCE ESTIMATES

More than 7% of Orange Money's active customers in the region have now used the service to send or receive money, which represents a significant share of the addressable market that uses mobile money.[10] More customers have received money than sent it, indicating that most senders have used the service to send money to more than one recipient.

The adoption dynamics across the three markets reflect the overall demand for remittances, as well as the competitive landscape within each market. Not surprisingly, Mali has the highest adoption rate for remittance receivers in Orange Money's active customer base (over 14% in 2014 H2), making Mali an important receiving market for mobile money. Interestingly, while Côte d'Ivoire is the dominant sending market by transaction volume and value, Mali has the highest adoption rate for senders within its active customer base (over 4% in 2014 H2). Orange believes this is due to a relatively higher dependence on expensive and insecure informal remittances in Mali, which gives its service a distinct advantage. Senegal has significantly lower adoption rates, reflecting lower demand for remittances both to and from Côte d'Ivoire and Mali, and perhaps also lower mobile money adoption rates.

FIGURE 5

SHARE OF ORANGE MONEY ACTIVE CUSTOMERS USING THE SERVICE
(30 DAYS ACTIVE; ACROSS ALL 3 MARKETS)



10. The World Bank's "Remittance Markets in Africa" report indicates that in Senegal, for example, between 8% and 11% of households received regional remittances. See Annex 1.1 on page 51. Available at: http://siteresources.worldbank.org/EXTDECPROSPECTS/Resources/476882-1157133580628/RMA_FullReport.pdf

While Orange targeted the service to diaspora communities within each market from the outset, three more nuanced segments have since emerged, based on actual usage patterns. Beyond the “send money home” use case, Orange believes that cross-border traders, and even informal remittance providers, are using the service.

TEXT BOX 2
USE CASES FOR ORANGE MONEY CROSS-BORDER TRANSFERS:

- **Frequent “send money home” users:** This segment is made up primarily of the regional diaspora whose families still rely on them for financial support. These users remit similar values of money regularly each month, on average around USD 85.
- **Infrequent “send money home” users and gifts:** This segment transfers on average twice a year, with strong peaks around Ramadan and Christmas when it is customary to send money as gifts to family and friends. Transaction values tend to be lowest in this segment.
- **B2B payments:** This segment consists mainly of cross-border importers and exporters, as well as some informal remittance providers that seem to be aggregating transfers and using Orange Money as a wholesale payment tool. Transaction values in this segment can be very high.

Unlocking the wider opportunity

With strong demand for the service, Orange is pursuing opportunities to scale up this model, both within the Orange Group and inter-operably with other operators.

For cross-border remittances, the greatest challenge is securing the approval of many central banks with different positions and approval processes. Via its partner banks, Orange has already requested approvals from a number of central banks to extend the service, some of which do not even allow inbound remittances via mobile money at present.

Finally, in a unique development, Orange Money will launch wallet-to-wallet remittances in France in 2015 to target the mobile money-savvy West African diaspora. Announced by Orange’s president on 2 October 2014,[11] this is a strategically significant move for Orange Group, as France is the largest sending market for West Africa.

11. Hello Show Keynote, 39'20", 2 October 2014, available at: http://www.dailymotion.com/video/x26j1k0_le-replay-du-show-hello-2014_tech

MTN Côte d'Ivoire and Airtel Burkina Faso: Partnering for cross-border remittances

The beginning of a landmark collaboration

MTN Côte d'Ivoire launched its mobile money service in October 2009. Thanks to a strong distribution strategy—MTN has more than 6,000 mobile money agents in the country—and the development of innovative products, the service has managed to reach significant scale.[12] Given this success, MTN was keen to unlock the international remittance opportunity with Burkina Faso, the largest remittance corridor in the region. However, since MTN did not have a footprint in Burkina Faso, it had to look for a partner in this market.

At the same time, in Burkina Faso, Airtel was considering opening a remittance corridor with Côte d'Ivoire and entered into discussions with MTN. While the two operators shared similar objectives for cross-border remittances, the collaboration was not entirely straightforward. The two operators are in direct competition in other markets, including Ghana, Rwanda, Uganda, and Zambia.

At the beginning of April 2014, MTN and Airtel launched a landmark collaboration to allow MTN Mobile Money customers in Côte d'Ivoire to transfer money to Airtel Money customers in Burkina Faso. It was the first time two operators from different groups interconnected their mobile money services internationally to offer cross-border remittances.

Given their limited experience with international money transfers, MTN and Airtel were keen to work with an intermediary that would act as a hub between their two services. In June 2013, they engaged with HomeSend, which was the most established remittance hub at the time. HomeSend provided two main services to MTN and Airtel: a real-time money transfer messaging platform and interface, and the management of anti-money laundering activities. To keep all transactions in the local currency (CFA franc), MTN, Airtel, and HomeSend decided it would be easier for the two operators to settle funds directly between themselves. Technical integration was completed within four months (by November 2013).

12. Claire Pénicaud Scharwatt, "Mobile money in Côte d'Ivoire: A turnaround story", GSMA, February 2014, Available at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/05/MMU_Cote_dIvoire_Turnaround_Story.pdf

Negotiating the revenue share model

The next step for MTN, Airtel, and HomeSend was to agree on a commercial model that would be straightforward to implement and reward all parties fairly for their efforts. To keep the pricing simple and transparent for customers, MTN and Airtel agreed that the sender on MTN's side would pay a service-specific transfer fee, but Airtel's receiving customers would not pay to receive a cross-border transfer (the same as for domestic P2P transfers). The standard cash-out fee would apply to the receiver if they wanted to withdraw cash from their mobile money account.

To define an appropriate revenue share model, the three partners had to consider whether MTN and Airtel should keep their entire transfer and cash-out fees, or if there should be a compensation fee between the two operators to equalise their incentives. They also had to evaluate what share of revenues would best reflect the contribution of HomeSend to the success of the service and how to collect this.

Balancing these considerations, the three parties agreed that Airtel would keep the cash-out fee, while the sending fee would be shared between the three parties, with 72.5% going to MTN and the remaining 27.5% shared between Airtel and HomeSend.

Whereas the operators see cross-border mobile money remittances as a substantial strategic opportunity, their initial objective was not to maximise revenues, but rather to create a demonstration case for deciding whether or not to pursue new remittance corridors. Therefore, MTN and Airtel decided to compete strongly on pricing, with fees averaging only 2.4% of the face value of the transfer. In fact, low-value mobile money remittances from Côte d'Ivoire to Burkina Faso cost the same for MTN users as domestic transfers: FCFA 100 to send up to FCFA 5,000 to Burkina Faso using mobile money compared to FCFA 500 using a traditional MTO.[13]

13. Western Union tariffs for UEMOA, available at: http://www.sgbci.ci/annexes/Tarification_WU.pdf

TABLE 3

MTN MOBILE MONEY FEES IN CÔTE D'IVOIRE[14]

PAYMENT INTERVALS IN CFA FRANCS		MONEY TRANSFER TO: MTN Mobile Money subscriber	MONEY TRANSFER TO: Unregistered recipient in Côte d'Ivoire	MONEY TRANSFER TO: Airtel Money subscriber in Burkina Faso	CASH-OUT	CASH-IN	CHECK BALANCE	MINI STATEMENT
5	5,000	100	500	100	150	Free		
5,005	25,000	250	1,000	500	500			
25,005	50,000	500	2,000	1,000	1,000			
50,005	100,000	700	2,500	1,600	1,700			
100,005	200,000	1,250	5,000	2,600	3,500			
200,005	300,000	1,500	8,000	3,800	6,000			
300,005	400,000	2,000	9,000	5,000	7,000			
400,005	500,000	2,000	10,000	6,200	7,000			
500,005	1,000,000	2,000	18,000	8,000	10,000			
1,000,005	1,500,000	2,000	26,000	10,000	15,000			

Going to market

MTN and Airtel then began working with their partner banks (Société Générale and Ecobank respectively) to secure approval from the BCEAO to send and receive remittances using mobile money, which they obtained a few months later.

In both countries, MTN and Airtel had a '360 degree marketing' strategy that combined a strong above-the-line (ATL) campaign on TV and radio with below-the-line (BTL) actions on the ground. Focusing promotion on the sending market is key to the success of any remittance product, however, and MTN effectively carried most of the communication efforts. In the case of MTN, the customer experience was designed to be very similar to sending money domestically, and marketing materials closely mirrored those used to promote domestic transfers. Marketing materials were simple and focusing on just one use case—'Send money home'—and one competitive advantage: affordability.

Focus groups targeting Burkinabé migrant workers in Côte d'Ivoire who send money back home have responded very positively to this marketing campaign. Following the launch campaign, MTN has continued to promote the service as part of its regular BTL activities, particularly in the western part of the country, where many Burkinabé migrants work as cocoa harvesters.

14. MTN Côte d'Ivoire website: http://www.mtn.ci/MTNCI/mobile_money-241-141.html

MTN CÔTE D'IVOIRE'S ADVERTISEMENT FOR INTERNATIONAL MOBILE MONEY TRANSFERS

MTN CÔTE D'IVOIRE'S ADVERTISEMENT FOR DOMESTIC MOBILE MONEY TRANSFERS

Promising results

The service was commercially launched in April 2014 and quickly gained traction, with transaction value growing tenfold from June 2014 to February 2015. During the first three months after launch, MTN Mobile Money customers in Côte d'Ivoire transferred USD 993,000 to Airtel Money users in Burkina Faso with an average value of USD 106; the next quarter, USD 4,192,000 of transfers were processed with an average value of USD 104; and for the final period from December to February, MTN recorded USD 9,095,000 of transfers with an average value of USD 141.

Some interesting trends emerged:

- **Cross-border transfers grew faster in the first nine months from launch than domestic P2P transfers after the launch of either operator.** The fact that people were already familiar with mobile money in these two markets was a key factor in MTN and Airtel achieving such high growth rates with cross-border transfers.

- **The majority of international transfers are performed by a small number of very active users who send money home on a regular basis.** A geographic analysis of the transactions revealed that most originate in the western part of Côte d'Ivoire and in Abidjan, the two areas where most migrant workers from Burkina Faso reside. This seems to confirm that the most common use case is sending money home.

- **The service has had particularly strong traction in rural Burkina Faso, where 60% of recipients live.** MTN and Airtel expected their service to be popular in urban areas where remittance flows are well documented, but they had not anticipated such success in rural areas, where formal money transfer channels have a limited footprint and people prefer informal options to send money. Interestingly, rural customers tend to receive money more regularly than their urban counterparts.

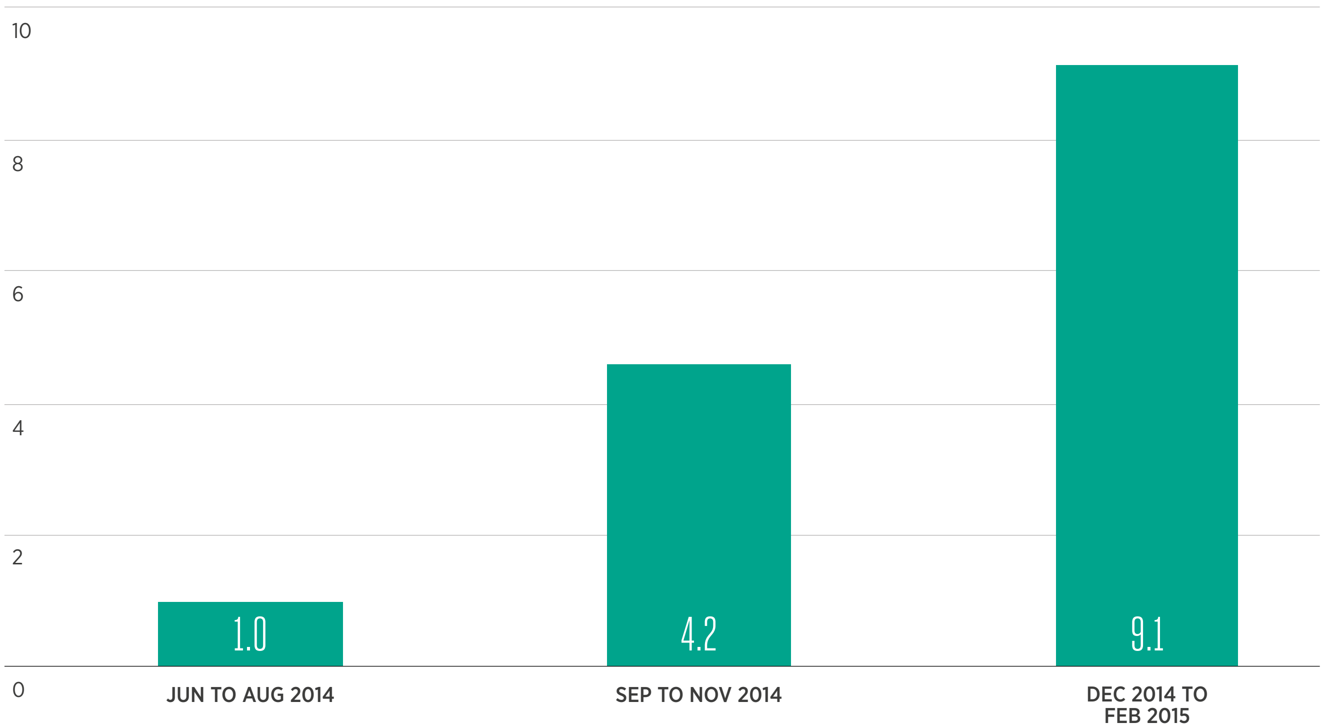
- **Transaction volumes tend to spike around religious holidays,** which is similar to the patterns commonly seen with domestic P2P transfers.

- **Finally, the average value of transactions has increased over time, signalling greater customer trust.** In the early days of the service, the average value of a transfer was between USD 65 and 85; but by the beginning of 2015, a typical transfer was worth USD 150 on average. This is now close to the average size of remittances sent from within Africa to Burkina Faso (about USD 160),[15] indicating that users have come to trust the service.

For both MTN and Airtel, the launch of the international remittance service was a way to increase brand loyalty. In addition, it helped them to recruit new customers who joined MTN Mobile Money Côte d'Ivoire and Airtel Money in Burkina Faso to send or receive international remittances.

FIGURE 6

VALUE OF TRANSFERS FROM MTN MOBILE MONEY IN CÔTE D'IVOIRE TO AIRTEL MONEY IN BURKINA FASO (USD MILLIONS)



15. The World Bank. "Remittance markets in Africa", 2011, available at: http://siteresources.worldbank.org/EXTDECPROSPECTS/Resources/476882-1157133580628/RMA_FullReport.pdf

Future plans

Overall, the service has been a success for both MTN and Airtel, and convinced the two operators to open new corridors for cross-border mobile money transfers. In December 2014, MTN opened a new corridor between MTN Côte d'Ivoire and MTN Benin. Owing to a strong value proposition, customer experience and communications strategy, the operator is seeing positive results, with a growth rate similar to that in the Côte d'Ivoire and Burkina Faso corridor. MTN is currently preparing to launch in other corridors, with a focus on his markets in Southern and East Africa, and has engaged the other telecommunication groups to deliver faster roll out of interoperable cross border transfers using a standard approach.

Airtel, on the other hand, is planning to launch cross-border mobile money transfers with other mobile operator groups in the West Africa region, and has just integrated with Orange for the Côte d'Ivoire - Burkina Faso corridor. Airtel Group is also going to allow transfers between its customers in East Africa, linking Kenya, Rwanda, and Uganda.[16]

16. "Airtel to launch cross-border mobile money service for East Africans", October 2014, available at: http://www.ventures-africa.com/2014/10/airtel-to-launch-cross-border-mobile-money-service-for-east-africans/

Lessons learned and considerations for the future

In mature mobile money markets, customers are ready for cross-border, mobile money enabled remittances

The rate of customer adoption for cross-border remittances has been remarkably fast for Orange, MTN and Airtel. Thanks to strong pre-existing mobile money foundations, total transaction volumes and values are already high and continue to grow at a substantially faster rate than domestic P2P transfers have in these markets. Both services have gained the trust of a relatively small but very active group of customers, with average transaction values in excess of USD 75 and significant peaks in usage around festival seasons.

Given the benefits of mobile money compared to existing formal and informal offerings, this growth is perhaps not surprising. In both cases, consumers are being offered a significantly lower price than current market rates, and a far more convenient and secure channel than informal remittance options.

Unlocking the opportunity beyond WAEMU

The success of these services was only made possible because the right conditions were in place. Three critical enablers are required for mobile money operators to successfully launch cross-border remittances:

1. **Addressable remittance corridors.** Underlying demand for the service is the starting point. Tight socio-economic integration between WAEMU markets provided exceptionally strong remittance corridors, which makes WAEMU relatively unique, but there are large diaspora communities and cross-border remittances in many other developing markets as well. Orange Money's experience illustrates the importance of having a competitive landscape for remittances; in Mali, the competitive advantage of mobile money is reinforced by the predominance of informal remittances, which produce disproportionately large sending flows. Whereas Orange decided to focus on convenience, Airtel and MTN put affordability at the centre of their marketing efforts. Both approaches have been successful, which indicates there was strong demand for these services and both value propositions were attractive to customers.

2. **Strong mobile money foundations in both sending and receiving markets.** In both cases, hundreds of thousands, or even millions, of customers on each end of the remittance corridor were already educated about mobile money and made regular domestic P2P transfers, and broad, well managed, liquid agent networks were in place. Operators in these markets have therefore tried to mirror the user experience for making domestic transfers as much as possible. In the Airtel and MTN partnership, they also decided to price low-value international transfers at the same level as domestic transfers to stimulate demand.

3. **Regulatory approval for mobile money operators to send and receive remittances.** Two key success factors for Airtel, MTN and Orange were the support of the BCEAO and the existence of a common regulation in all of the markets involved. To date, relatively few central banks have permitted outbound and inbound remittances using mobile money, and the authorisation processes for operators is not well harmonised across markets. There are a number of regulatory issues that may need to be addressed in a particular market, including mitigating settlement risk, aligning KYC and AML/CFT processes, ensuring that transaction and balance limits are harmonised and appropriate, addressing consumer protection issues such as transparency and dispute resolution, and complying with applicable exchange control requirements. However, regulators in a number of markets have demonstrated that these issues are surmountable.[17]

Although West Africa has a favourable combination of regional remittance flows and mature mobile money services, this is not unique to this region. BCEAO's enabling regulatory stance has been one of the keys to unlocking cross-border mobile money transfers in the region.

Regulatory approval remains the greatest barrier in other developing regions, but there are positive signs in a number of markets, particularly in East Africa. For example, Safaricom has just received a licence to remit cross-border funds and a number of other operators are believed to be close to receiving full authorisation.

Replicable commercial models are emerging

There is no doubt that WAEMU is the 'low hanging fruit' region for mobile money-based remittances. However, these early implementations in West Africa provide some interesting technical, commercial, and operational insights that should be applicable to other markets in future:

- **Cross-border remittances require interoperability between mobile money schemes.** As with domestic mobile money interoperability, cross-border remittances depend on operators transacting across platforms and settling funds directly between each other.[18] This interoperability can be implemented directly through bilateral agreements or indirectly through a processor. Orange Money uses a bilateral model in West Africa, which is simplified by a common platform, currency, and partner bank for all three markets. MTN and Airtel have opted to interconnect through a processor or 'hub' (HomeSend). These two models have trade-offs on complexity, cost, scalability, and speed of implementation. There are also similarities with international voice and messaging roaming; bilaterals are commonly used for key roaming markets, whereas roaming hubs are used to capture the 'long tail' of interconnectivity. Operators have remarked that similar dynamics are likely to emerge here.

- **Compensation fees may not be necessary to align commercial incentives for senders and receivers.** The most common model emerging for domestic interoperability involves a 'compensation fee' paid by the receiving operator to the sending operator, which ensures a fair balance of profit and incentives on both sides.[19] However, since transaction fees charged by the sender can be considerably higher for cross-border remittances than for off-net domestic P2P transfers, the profitability before any compensation fees are charged is much more balanced. Orange therefore opted for a 'bill and keep' model with no compensation fee. The sending operator gets the transaction fee, less the cash-in commission cost, while the receiving operator gets the standard cash-out fee, less the cash-out commission cost. Since MTN and Airtel judged that the sender had the advantage here, they opted to create a modest compensation fee in the opposite direction, paid by the sending operator to the receiving operator. However, it is worth noting that as receivers increasingly use mobile money for digital transactions rather than cashing out immediately, benefits could increase for receiving operators in future.

17. See AFI Mobile Financial Services Working Group, "Mobile-Enabled Cross-Border Payments", August 2014, available at: http://www.afi-global.org/sites/default/files/publications/mfswg_guideline_note_no_14_en9-2.pdf
18. See Gunnar Camner & Dick Clark, "A2A Interoperability and Mobile Money", February 2014, available at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/03/A2A-interoperability_Online.pdf
19. For A2A, transfer fees charged to the sending customer are typically smaller relative to the cash-in commission they must pay to their agents; the compensation fee allows them to make a fair margin.

- **Operational costs are low for well-established mobile money operators.** Sending patterns for cross-border remittances appear to be very seasonal (with significant peaks during festive seasons), which could create challenging liquidity demands for agent networks in both markets. However, Orange, MTN, and Airtel have found these patterns to be in line with domestic P2P demand, creating strong synergies in liquidity management; if the existing distribution network is strong, the additional operational requirements are not onerous for operators. Indeed, these requirements have been relatively modest overall.

Both of these case studies highlight a potential opportunity for established mobile money operators to interconnect and digitise strong flows of cross-border remittances, with relatively modest investment—providing customers with a substantially cheaper, more convenient, and secure means of remitting money.

However, this will only be possible with an enabling regulatory environment, which is still lacking in the vast majority of mobile money markets. The GSMA is aware of several operator groups that have requested regulatory approvals, but are still awaiting a response from their respective central banks. This challenge is exacerbated by the differences in the approval processes and regulatory requirements of each central bank, which operators must manage carefully.

For further information please contact
mmu@gsma.com
GSMA London Office
T +44 (0) 20 7356 0600