Mobile Money
for the Unbanked

eWallet Merchant Payments
GSMA Discussion Paper

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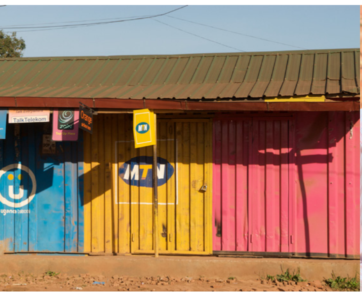

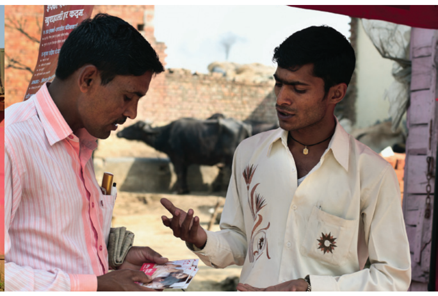
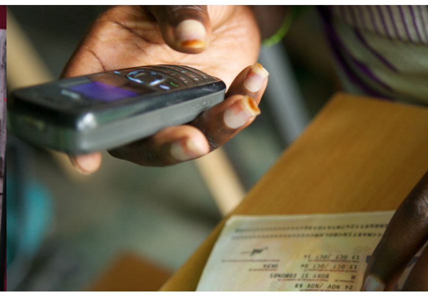
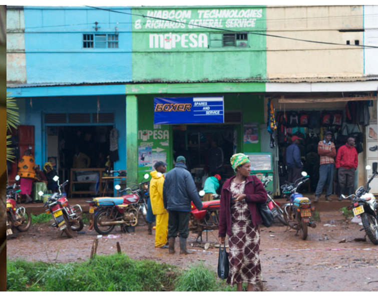

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Why merchant payments?

With P2P, bill pay and airtime top ups still representing the vast majority of mobile money transactions today, mobile money service providers are keen to broaden their product offering.[1] **Merchant payments, a proximate payment from a consumer to a business at the point of sale, is an eWallet product extension frequently discussed of late**. This product has caught the attention of mobile money service providers because of the sheer magnitude of retail payments in the market and the opportunity it represents to integrate the mobile wallet deeper into everyday life. This is not a trivial point for business models based on transaction volumes.

With 26 mobile money services having already launched merchant payments, there is industry debate whether there is a meaningful opportunity to use eWallets to pay for goods and services at shops or if this is a mobile money use case which will struggle to find customer traction.[2] Electronic currency is considered to have a comparative advantage over cash the greater the distance and the larger the amount. This underscores why P2P and bill pay have enjoyed strong customer uptake over other products – customers can get money to remote locations or pay bills to a remote party i.e. electricity company. But there are increasing numbers of mobile money service providers who want to trial mobile money as a payment method even when the distance is not great and the amount is small.

The mobile money industry has not established best practice for succeeding in merchant payments. However, the challenges faced by the pioneer deployments shed light on what might be required to make this product work. This paper attempts to outline what might be the necessary market conditions for eWallet merchant payments to thrive and the strategic choices facing mobile money service providers when launching this product.[3]

Necessary conditions for eWallet merchant payments

The opening question for eWallet merchant payments is **who wants this service and why**. Sounds like a simple or perhaps even rhetorical statement, but it is intended to be more profound. **Under what circumstances does a consumer pull out their mobile phone to digitally transfer money to someone standing in front of them?**

Local context will offer different ways to answer that question, but if you allow some licence for generalisations, we believe there are three elements which need to be in place for customer uptake of merchant payments:

1. **Customer demand will drive merchant payments** – Shop keepers stock their shelves and design their services to meet customer needs. Not the other way around. **Payment modalities are not any different: shops accept the payment method requested by the customer.**

A survey of 865 SMEs in Kenya undertaken by Kopo Kopo, a merchant aggregator in Kenya, and The Bill & Melinda Gates Foundation found that 67% had used M-PESA for business purposes. Of those business surveyed, 47% adopted mobile money because they were requested to do so by clients and 39% because they were requested to do so by suppliers.[4]

1 Neil Davidson and Claire Pénicaud, State of the industry: Results from the 2011 Global Mobile Money Adoption Survey.

2 Of the 53 mobile money services which have participated thus far in the 2012 GSMA Global Mobile Money Adoption Survey, 26 have reported having the merchant payments product on offer. The full survey results with the full list of participants will be released at Mobile World Congress 2013.

3 For the purpose of this white paper, the definition of eWallet merchant payments has been limited to those which can be done directly from the mobile money eWallet. The merchant payment model whereby eWallets are linked to plastic cards has not been addressed in this paper.

4 Dylan Higgins, Jake Kendall and Ben Lyon. "Mobile Money Usage Patterns of Kenyan Small and Medium Enterprises." MIT innovations. 2012.

While it is true that eWallet merchant payments offer benefit to the merchant such as reduced cost and hassle of making change or security of less cash in the till, we do not expect these benefits alone to be adequate to drive full market adoption of merchant payments. Customer demand must also be present.

2. **Uptake of merchant payments will only occur when there is clear benefit in using the product** – Opening one's wallet and fishing out a few notes is not particularly difficult or painful. **There must be a compelling reason to pull out a handheld device rather than reach for cash**.

This benefit may naturally exist. Take for instance Zimbabwe – having turned to the US US Dollar as its currency in 2009, there are limited coins in circulation. Change for amounts less than one dollar is hard to come and an electronic payment could naturally be advantageous to both buyer and seller.[5] Security is another benefit which may naturally exist in certain markets; convenience of not having to carry large amounts of cash is another.

If the market does not offer a natural benefit, then mobile money services will need to build in benefits to the product. The credit card industry's incessant offers of points, miles, gifts, etc. are examples of rewarding desired behaviour. In the mobile payment space, the recent success of the Starbucks app is an example of driving usage through loyalty schemes.[6]

Customer Appeal of Starbucks Payments App

The Starbucks payment app saw 26 million transactions within its first year of operations. Launched in January 2011, the app is now estimated to be used for 1m transactions a week.

Most Starbucks outlets already accept cash credit cards, and debit cards, so what does the payment app offer the customer which they don't already have? Linked to the pre-paid Starbucks card, the product offers both information and benefits. Customers can view transaction history, check their balance, and top-up their account. And customers earn one star for every Starbucks retail purchase – 15 stars earn a free drink, 50 stars earn Gold status with ongoing benefits like extra shots of espresso.

It is not hard to envision a mobile money wallet offering bundled product offerings, discounted purchases, and/or loyalty schemes.

3. **Merchant payments will only be used by customers who already have stored value in the eWallet** – It is unreasonable to expect a consumer to walk into one shop, cash in money to their eWallet, and then walk to another shop to pay for goods with their e-money. **Merchant payments is a natural product line extension only for those who already keep value in the eWallet**. The stored value may have come from an incoming P2P, a G2P payment, or from salary being paid into the wallet, but stored value is a pre-condition.

5 Polgreen, Lydia. "Using U.S. Dollars, Zimbabwe Finds a Problem: No Change. NY Times." April 24, 2012.

6 Jopson, Barney and Maija Palmer. "Starbucks brings Square to the mainstream." Financial Times. 8 August 2012. / GSMA Mobile Money Live, "Starbucks payment app hits 26 m transactions in first year "/ My Starbucks Rewards UK

Strategic decisions for launching eWallet merchant payments

The introduction of merchant payments will have a number of strategic choices at launch. Perhaps of greatest importance is the approach to merchant acquisition which is intrinsically linked to customer segmentation, the business model and pricing strategy and the technology.

Segmenting and acquiring merchants

The first question for mobile money providers will be to **identify which merchants are the priority acquisition targets and what is the optimal approach to merchant enrolment. A priority customer segment should have been identified before launching this product and their payment needs should be the guide in selecting merchants**. Some additional considerations in segmenting the merchant landscape:

- **Merchant type** – Should payment acceptance points be formal merchants and branded restaurants, such as Pizza Hut or Nakumat supermarket, informal merchants like the corner store selling daily vegetables or something in between? **The type of merchants enrolled should reflect the shopping behaviours of the type of customers expected to use the product and the transaction sizes for which they will use their eWallet.**
- **Average transaction size** – Even in countries with widespread use of digital payments, cash remains the dominant payment modality for low value transactions.[7] Will eWallet merchant payments be targeted to merchants currently accepting low value cash payments or designed for merchants with higher value transactions?
- **Business turnover** – The relevant criteria for merchant selection for card acceptance has historically been monthly transaction volumes, given the cost of the POS and the timeline for return on investment. Thanks to the affordability of mPOS devices popularised by Square, this indicator's importance has been reduced, but may still be an important consideration for eWallet merchant enrolment.
- **Geography** – Another approach to merchant acquisition could be ensuring there are merchant payment points nearby to where core mobile money customers live and work.
- **"Till environment"** – There are certain types of payment experiences where speed of transaction is of the essence (i.e. boarding a bus) versus transactions where speed is less relevant (i.e. at the end of a meal in a restaurant). The payment context should be considered, whether the customer or merchant will be inconvenienced by the time it takes for a digital payment.

Depending on the merchants selected, the product design will likely vary. Formal merchants with higher transaction volumes are likely to want their payment inflows linked directly to their bank account. They may also be keen for clear statements of transactions. Smaller merchants, on the other hand, are likely uninterested in transaction reports, but are likely to be more sensitive to fees. Ignacio Mas and Amolo Ng'weno have researched SMEs in Kenya and described the types of eWallet product modifications that need to be in place to make the product appeal to merchants.[8]

With the merchant segment selected, operators will have to decide their approach to merchant acquisition. The services launched to date have used in house GSM or mobile money distribution teams to acquire merchants. But outside of mobile money, this insourced approach is the exception to the rule. The card industry outsources merchant acquisition. These merchant acquirers are large scale impressive businesses in their own right, who dedicate resources to identify merchants, install the POS and undertake merchant training. Kopo Kopo in Kenya, who enrols merchants to accept Safaricom's M-PESA, is one such example of this model applied to mobile money.

7 There were around 21 billion consumer payments in cash in the UK in 2010; nearly 80% of those payments were below £10. The Way we Pay 2010. The UK's Payment Revolution. Payments Council.

8 Ignacio Mas and Amolo Ng'weno. "Why doesn't every Kenyan business have a mobile money account?" 2012. / Ignacio Mas. "Making mobile money work for business." 2012. MMU Blog

Business models and approach to pricing

Another strategic question facing mobile money service providers launching eWallet merchant payments is the business model and price structure of the service.

Card payments have a standard pricing model: The merchant pays. The merchant may try to pass the charges on to the consumer in the form of higher prices or a transactional fee, but it is ultimately the merchant who absorbs the cost of retail card payments. In the traditional 4-party scheme, the fees collected from the merchants are divided up amongst the players. The Interchange fee, the largest of the fees, is extracted by the card-issuing bank when the retailer submits a credit or debit transaction through the acquiring bank.

The pricing model for eWallets merchant payments has no standard as yet. **Some would argue that it will naturally follow the card model and merchants should be prepared to pay. Others suggest that merchants, especially small informal business with limited daily earnings, will refuse to absorb the fees for eWallet payments, and more creative pricing constructs will need to be employed.**

With few eWallet Merchant Payment products in market, it is too early to say what model will ultimately dominate. And to be clear, the GSMA does not recommend or endorse any particular pricing model. The following is a list of some of the pricing permeations which could be envisioned:

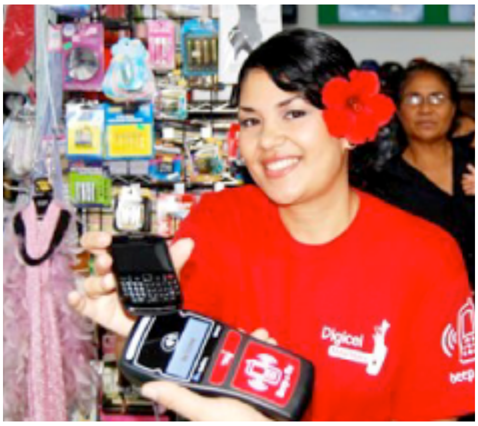
- **Merchant pays** – eWallet merchant payments may follow the historical precedents set by the card industry and see the merchants paying. Pricing for the merchants could be assessed as a fixed fee or percentage of each transaction, a fee when for cash out or transfers to a bank account, or a monthly fee.
- **Merchant and customer share the cost** – Typical pricing for P2P payments, whereby the sender pays a transaction fee according to the amount sent and the receiver pays a cash out fee, could be applied to merchant payments. This suggests the consumer would incur the cost of the "payment" to the merchant or transaction and the merchant would incur the cost of cashing out or transferring the money to his bank account. This structure seems less likely as the cost structure of P2P is likely too high for a retail payments and throws up a hurdle for both consumer and business to overcome.
- **Consumer pays but through bundling, not per use** – If merchant payments are for low value transactions, it seems unlikely consumers will tolerate fees for each payment. However, some mobile money customers have become habituated to paying one time fees for bill pay, because of the value they get in avoiding queues or travel to bill pay locations. Operators may perhaps bundle a certain number of payments, both bill pay and merchant payments, into a monthly payments package.
- **Customer pays in return for loyalty benefits** – While loyalty schemes are common features in travel products, credit cards, retail chains, etc. they have disappointingly not yet made an appearance in mobile money. Perhaps merchant payments makes a case for loyalty schemes, with customers willing to use their eWallet to transact for an upside benefit. It could be prize oriented i.e. a lottery at the end of each month, available only to the customers who have done a certain number of transactions or spent a certain amount of money at retail. Or one could be more guaranteed benefits such as customers are rewarded with airtime bonuses or other non-financial services in return for high number of merchant payments.

- **Free or freemium service** – Some services may look to make merchant payments a free use case for a short or indefinite period of time to drive greater usage of the eWallet. Or following the freemium business model, wallet providers could make a basic payment service free, but a more complete payment package available only for a fee. The challenge with any free merchant payment service will be in ensuring it doesn't cannibalize the P2P service.

Technology

The final decision facing operators is what technology will underlie merchant payments. Phone-to-phone transactions have the benefit of using hardware readily available in the market. A basic mobile phone can be used by the merchant, with a unique SIM for accepting payments and interacting with "pay-for-goods" menu option from the consumer's eWallet. This may be the technological choice for MNOs looking for low upfront investment and rapid product roll out.

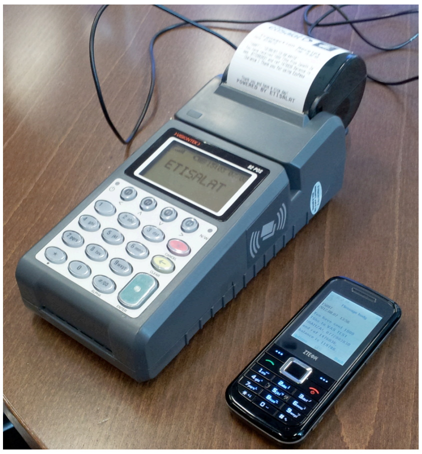
In the long run, however, a more formal POS, mPOS or NFC device is a more elegant solution and will aid in smooth and faster transactions. More sophisticated systems would also allow better functionality for charge-backs / refunds, enhanced reporting for merchants, and ability for merchants to easily cash out to a bank account.



Digicel has rolled out contactless payments in the Pacific, integrating Verifone mWallet's NFC POS enabled-payment solution with Digicel's mobile money wallets. Called Beep & Go, the contactless payment solution was launched in July 2012 and is now accepted at over 156 merchants in Tonga. Digicel says within 6 weeks of launching the service, over 50% of verified mobile money users were registered with an NFC tag and 25% of all tagged users had tried the service. Beep & Go has increased unique users of Digicel Mobile Money services by 30% and greatly exceed the company's expectations. The merchant pays a small transaction charge; **Digicel believes that user acceptance of the solution has driven merchant demand wanting to join the Beep & Go acceptance network**.

Etisalat has also launched NFC in Tanzania, Pakistan, Nigeria and Sri Lanka. Etisalat subsidiary Zantel in Tanzania rolled out a NFC payment solution in July 2011. Called Touch and Go, the Merchant Payment product built on the zPesa eWallet product features of P2P, bill pay, airtime top up, etc.

Essa Al Haddad, chief marketing officer at Etisalat Group said, "The secret for the success of this service is the simplicity of the process. A customer can use 'Touch and Go' with merchants to purchase goods, services, tickets or even mobile credit top-ups without needing to type any numbers or complicated commands. The customer just needs to bring device close to the merchant's point of sale terminal and validate the transaction with a password."



Etisalat partnered with Oberthur Technologies and MasterCard for the launch of the service. Speaking on the choice for NFC devices, Etisalat said "End-to-end transaction time of the process is much faster than traditional mobile financial service offerings or even credit or debit cards and the benefit for the merchant is immediate. With the availability of affordable POS devices, acceptance amongst merchants is expected to be high."

Conclusion

eWallet merchant payments is an intriguing new product for mobile money service providers. It represents an opportunity to significantly increase the volume of transactions on the mobile money platform while making the eWallet a more integral part of consumers' everyday life. However, there are significant challenges to getting this product right and crucial decisions at launch in indentifying the customer segment most likely to need this product, optimizing the approach to merchant acquisition, designing the right business model and choosing the right technology.

Annex 1: Sample list of merchant payment models in market today

	Pricing approach	Merchant Types	Merchant acquisition approach	Technology approach
Airtel Money Africa	Customer pays -- Variable up to a point and fixed fee thereafter	■ SMEs ■ Branded stores/restaurants	In house distribution team source merchants	Merchant uses PoS device which interacts with customer handset
Digicel Pacific	Merchant pays a small fee for each transaction	Everything from formal retail, gas stations, convenience stores, supermarkets, bars & restaurants, government	In house distribution teams source merchants	NFC
Etisalat	Merchant pays a small fee for each transaction	■ Micro / informal businesses ■ SMEs	In house distribution teams source merchants	NFC
Orange Madagascar	Merchant pays a small fee for each transaction	■ Micro / informal businesses ■ SMEs	In house distribution teams source merchants	Handset to handset (SMS)
Kopo Kopo in partnership with Safaricom	Merchant pays (1.5%)	SMEs	Third party acquirer (Kopo)	Handset to Handset (SMS)

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