



CONNECTED WOMEN

Case Study



MTN MoMo Pay Merchant Payments: Expanding Women’s Mobile Money Use in Ghana

Introduction

Access to financial services can be a critical driver of economic growth and opportunity. In Ghana, mobile money has opened access to financial services for millions of people for the first time, strengthening the payment ecosystem and deepening financial inclusion.¹ Despite its capacity to widen access to financial services, mobile money has not proven to be equally accessible for women in Ghana. According to the

World Bank’s Global Findex 2017,² women in Ghana are 23 per cent less likely than men to have a mobile money account.

Mobile money is particularly relevant for women in Ghana given the prominent role they play in commerce. As both merchants and customers, women dominate the open markets that drive trade and business in many towns and cities across the country.³ To encourage the digitisation of merchant payments in these markets — the economic lifeblood of the country — MTN Ghana launched a merchant payment

service in January 2017 called MoMo Pay. While MTN Mobile Money could already be used informally by customers to make payments to vendors, MoMo Pay simplifies and streamlines the process and offers reduced customer transaction fees.

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1 Manfred, 2017, 'Effects of Mobile Money Services on Financial Development In Ghana'
2 World Bank, Global Findex 2017: <https://globalfindex.worldbank.org/>
3 Scheiterle and Birner, 2018, 'Gender, knowledge and power: A case study of Market Queens in Ghana'

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There is evidence that MTN MoMo Pay is providing two important and distinct benefits to women in Ghana, particularly those who work as vendors in the open markets. First, MoMo Pay empowers female microentrepreneurs in markets through the digitisation of their transactions, thus deepening

their financial inclusion. Second, it drives greater mobile money use and engagement among female customers. This study found that, after adopting MoMo Pay, customers increased both the frequency and value of transactions and became more likely to remain active users, especially women. MoMo

Pay addresses barriers to using mobile money when paying market merchants, including cost and lack of convenience, and has commercial benefits for merchants that offer the service and actively promote it to their customers.

Research scope: Evaluating the impact of MoMo Pay

This case study assesses the impact of MoMo Pay on female merchants and customers in Ghana. It also includes key takeaways relevant for other mobile money providers interested in using a merchant payment service to expand women's mobile money uptake and use, and to reduce churn. The results of this study are drawn from a mixed methods approach, including a quantitative telephone survey, qualitative research in markets with MoMo Pay merchants, users and non-users, as well as analysis of MTN Mobile Money transactional data combined with feedback from MTN Ghana staff. Fieldwork and data analysis for this report

was conducted in January and February 2019, and may not reflect subsequent changes to the market or the MoMo Pay service.

This case study considers MoMo Pay as a service overall, but where possible, focuses on the uptake and use of MoMo Pay in open markets specifically. It is in this market context that we discovered the greatest impacts on women, but our research also revealed several factors that limit the uptake of MoMo Pay within this context, and, therefore, its impact on women. Findings therefore may not fully reflect all aspects and relevant considerations for merchant payment services.

Additionally, in some cases survey responses and data relating to MoMo Pay could not be fully distinguished from those relating to peer-to-peer (P2P) transactions with vendors, so some quantitative and qualitative findings for MoMo Pay may include some element of P2P.

Throughout this report, “MoMo Pay users” or “MoMo Pay customers” refer to MTN Mobile Money customers that have completed at least one transaction with the MoMo Pay service, while “MoMo Pay merchants” refers to vendors that have registered a MoMo Pay account and have received at least one MoMo Pay payment from a customer.





Key findings from the research

1. MoMo Pay has shown considerable early success in driving digitisation of payments in Ghana's cash-dominated economy. 53 per cent of merchants now accepting MoMo Pay only accepted cash from customers before adopting the service.
2. Merchants are critical to driving consumer awareness and uptake of MoMo Pay. In Ghana's female-dominated open markets, where 56 per cent of merchants who have adopted MoMo Pay are women, these merchants are driving uptake and use of the service among female customers.
3. MoMo Pay is popular with both male and female users, who find it reduces many of the barriers that have prevented them from paying merchants using mobile money, and they perceive it as simpler, safer, cheaper and clearer to use than peer-to-peer (P2P) transfers.
4. Adoption of MoMo Pay by customers increases use of MTN Mobile Money overall, particularly for women. Female MoMo Pay users have on average registered a 17 per cent increase in transaction volumes, 29 per cent increase in transaction values and a 10 per cent increase in subscriber retention in the six months after they adopted the service. MoMo Pay is generally adopted by existing MTN Mobile Money customers, and has not been a major driver of initial adoption of the service.
5. Limited awareness and understanding MoMo Pay amongst customers and merchants have prevented wider uptake of the service. This could potentially be addressed by more clearly advocating the features and benefits of the service, as well as considering female-specific requirements - particularly in a context where women's real or perceived digital literacy is lower than men's.
6. The example of MoMo Pay suggests that merchant payments can be a use case for increasing women's mobile money use when deployed in female-dominated retail channels where there is more opportunity to reach female merchants and customers.

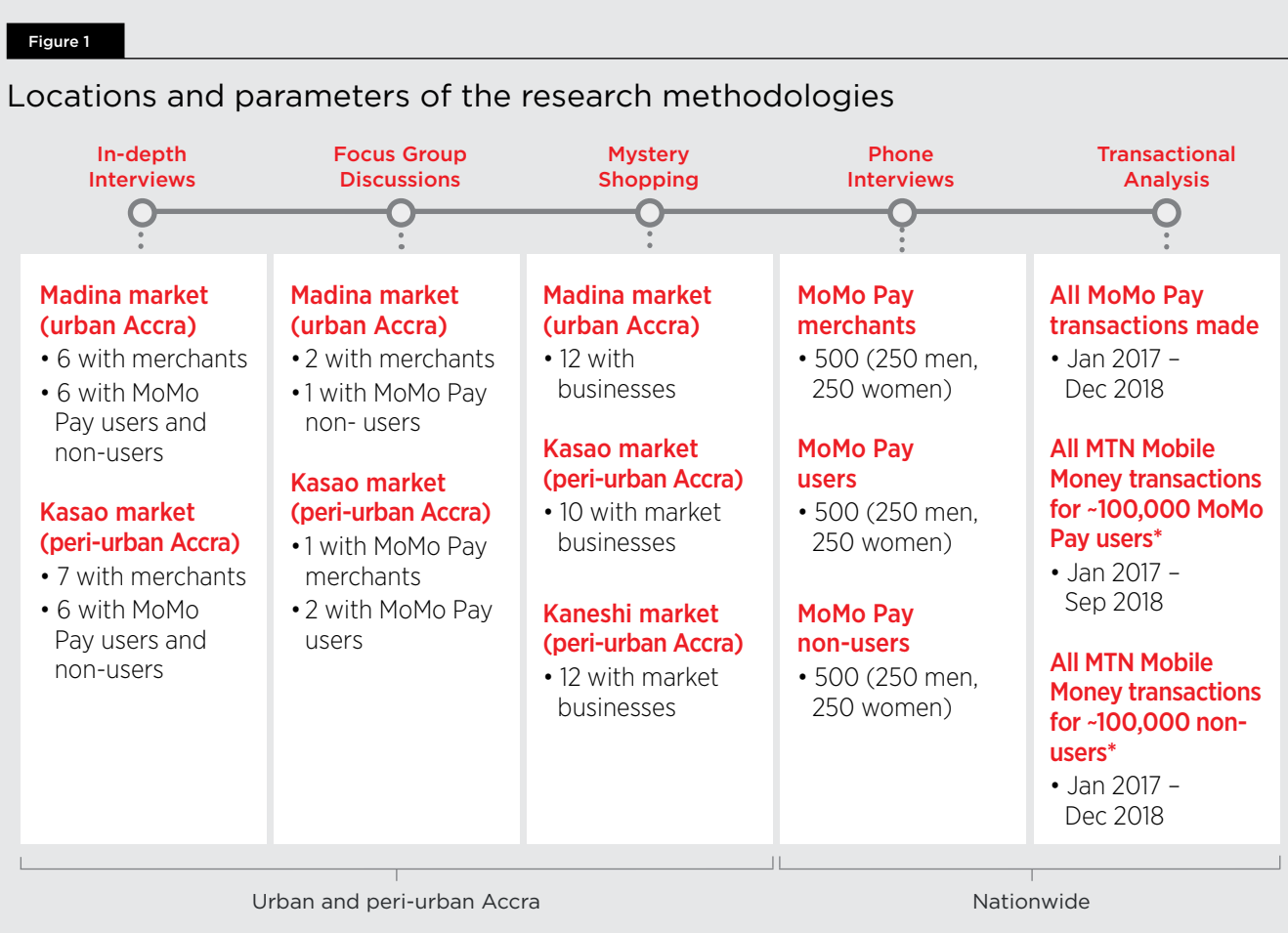
Box 1: Research methodology

To evaluate the appeal, growth and early impact of MoMo Pay, three methodologies were used to gather data and other information from merchants and end users of the service.

Qualitative research, including in-depth interviews (IDIs) and focus group discussions (FGDs) with MoMo Pay users and non-users, and merchants who did and did not offer MoMo Pay, as well as mystery shopping in several open markets across Accra. These methods were used to map the user journey for mobile money and MoMo Pay, and to evaluate the impact of MoMo Pay on mobile money use more generally.

Quantitative research (telephone survey) to determine the profile, gender and other demographics of the mobile money customer base, as well as barriers and triggers to the uptake and use of mobile money and MoMo Pay among a random sample of the user base.

Transactional data analysis of MTN Mobile Money use by MoMo Pay users and non-users to understand the effect of MoMo Pay uptake on wider Mobile Money use, as well as the overall commercial impact of the service.



The qualitative research in this study focused in and around Accra, as this is where most MoMo Pay users, both merchants and customers, are located. However, results from the telephone survey and transactional analysis are representative of MTN’s customer base across Ghana.

Fieldwork was conducted in February 2019.

**Note that the results of transactional data analysis that are presented in this report are based on data for a smaller subsample of MTN customers whose gender could be independently verified, totalling 9,500 MoMo Pay users, and 500 non-users. However, analysis of the wider sample indicated that results from this subsample were in-line with those observed in the overall base.*

Ghana's market context: Mobile money and merchants

Mobile money has grown quickly in Ghana, but access for women remains lower

Mobile money was first launched in Ghana in 2009 by MTN. Uptake has increased quickly since then, and today Ghana is one of the most mature mobile money markets outside East Africa. In 2012 there were only 345,000 active mobile money accounts in Ghana, and by March 2019 this had grown to 12.7 million,⁴ – a rapid pace of growth. However,

some research suggests that access to mobile money in Ghana has not necessarily been equally distributed: according to Findex, in 2017, women were 23 per cent less likely than men to have a mobile money account⁵ – although a phone survey of MTN Mobile Money customers conducted for this study found a more equal gender balance.

Given evidence of the potential socio-economic benefits of financial inclusion and mobile money use,⁶ women's exclusion from Ghana's formal financial system is of particular concern.

4. [Bank of Ghana, Payment System Statistics 1st Quarter 2019](#)
5. World Bank, Global Findex 2017, <https://globalfindex.worldbank.org/>
6. See, for example, Suri and Jack, 2016 'The long-run poverty and gender impacts of mobile money'

Women play a crucial role in commerce in Ghana

Women tend to dominate commerce in Ghana's open markets, making up the majority of both customers and merchants. In an economy where 80 per cent of the workforce is employed in the informal sector,⁷ these markets play a vital role in driving commerce and economic activity.

Most markets currently operate almost exclusively in cash, while mobile money transactions are typically used for either non-commercial purposes or high-value transactions. This is perhaps unsurprising given the fast-paced, informal nature of market transactions. In 2016, an estimated

99 per cent of all transactions in Ghana were made in cash.⁸

Women's prominent role in market commerce in Ghana, combined with low mobile money uptake for vendor payments, signalled an opportunity for MTN to promote a new mobile money use case while also driving mobile money use among this underserved group by launching a dedicated merchant payment service – "MoMo Pay".

7. Osei-Boateng and Ampratwum, 2011, 'The Informal Sector in Ghana'
8. Amoah, Bansal, Kasebele and Plaitakis, 2017, 'Building an Inclusive Digital Payments Ecosystem: The Way Forward'



Box 2: Types of retailers in Ghana

Marketplaces in Ghana are spatially categorised by commodity.



Within a marketplace, there are two types of settings selling foodstuff and non-food items such as fabric, hair products, shoes etc.

- Stalls: typically a plywood tabletop; mostly informal
- Shops: typically made of concrete walls; more formal



Outside of marketplaces, there are two main types of retailers:

- Brick and mortar street businesses: supermarkets, petrol stations, pharmacies, grocery stores
- Street vendors and hawkers, who are unlikely to be users of MoMo pay



MoMo Pay: A payment service designed to drive digitisation of commerce

MoMo Pay was launched in January 2017 and has registered steady growth among both merchants and customers. By January 2019, over 100,000 merchants were using the service. MoMo Pay is a merchant payment service that encourages customers to digitise transactions with sellers, paying for products and services through MTN Mobile Money rather than cash (see Box 3).

Before the launch of MoMo Pay, many people were already using mobile money to pay vendors through peer-

to-peer (P2P) transfers. In fact, 86 per cent of MoMo Pay users in this study had used mobile money to pay vendors before adopting MoMo Pay, which is consistent with global trends (see Box 4). However, the introduction of MoMo Pay simplified, clarified and bolstered the security of merchant payments. It also made it significantly cheaper for customers to transact using MTN Mobile Money as transaction fees dropped from one per cent of transaction value for P2P, down to 0.2 per cent for MoMo Pay.



Box 3: MoMo Pay's key features

- Recruitment of merchants to the service, who are provided with a converted or dedicated merchant SIM card, with an associated separate merchant account
- Receiving payments from customers is free for merchants, while customers pay a 0.2% transaction fee (vs. 1% for standard P2P)
- Merchants are not charged to transfer money from their merchant account to their bank account. from which they can cash out for free, although normal MoMo transaction charges apply if they cash out from the merchant account at an agent outlet
- Merchants have a 5 or 6 digit code that customers can use to pay in place of a mobile number



With MoMo Pay, MTN intended to encourage merchants to receive payments via MTN Mobile Money for their products and services, thereby preventing the need to handle cash and ensuring more money would circulate on MTN's platform. There was also an expectation that merchants and their customers would be driven to use a wider range of MTN Mobile Money services, including bill payments and savings. This research aimed to evaluate the extent to which these objectives were being met.

Another question this study aimed to answer was whether the availability of MoMo Pay helped drive women's adoption and use of MTN Mobile Money more broadly — that is, whether having a relevant use case for women would encourage uptake of the service among this disproportionately underserved group and provide an incentive to continue using it after registration.



Box 4: The global context: Merchant payments are still dwarfed by P2P

Merchant payments is one of the more complex mobile money use cases. Although mobile money offers convenience for customers, they are not the primary beneficiaries of a merchant payment. Therefore, adoption also relies on a strong value proposition for micro, small and medium enterprises (MSMEs) and offering them benefits that cash does not currently provide.

The growth and scale of P2P is still eclipsing the healthy growth of merchant payments. Additionally, businesses are driving much of this, conducting transactions using P2P instead of a dedicated merchant payment platform. The GSMA estimates that a substantial proportion of P2P transfers are made by small businesses and micro-entrepreneurs. GSMA research in two Sub-Saharan African countries showed that 80 per cent of MSMEs already owned a mobile money account, 83 per cent of which were using personal mobile money accounts for business needs.⁹ There is a similar tendency in other mobile money markets for businesses to use P2P rather than merchant payments, driven by a confluence of factors: the

informality of the MSME sector and low levels of ownership of necessary documentation, frictions in the user experience for merchants and customers, and the lack of a compelling value proposition.

However, leading mobile money providers have taken big steps to address some of these challenges to growing merchant payments as a use case. For instance, 74 per cent of respondents to GSMA's 2019 Global Adoption Survey stated that they offered additional tools that help MSMEs with the day-to-day management of a business, such as customer analytics, inventory management and accounting. In addition, 29 per cent of respondents offered credit lines to their agents and 19 per cent loaned to their merchants.

9. Pesti, F. and Nautiyal, A. (2019). [Addressing the financial services needs of MSMEs in Sub-Saharan Africa](#). GSMA.

Profiles of MoMo Pay users and merchants

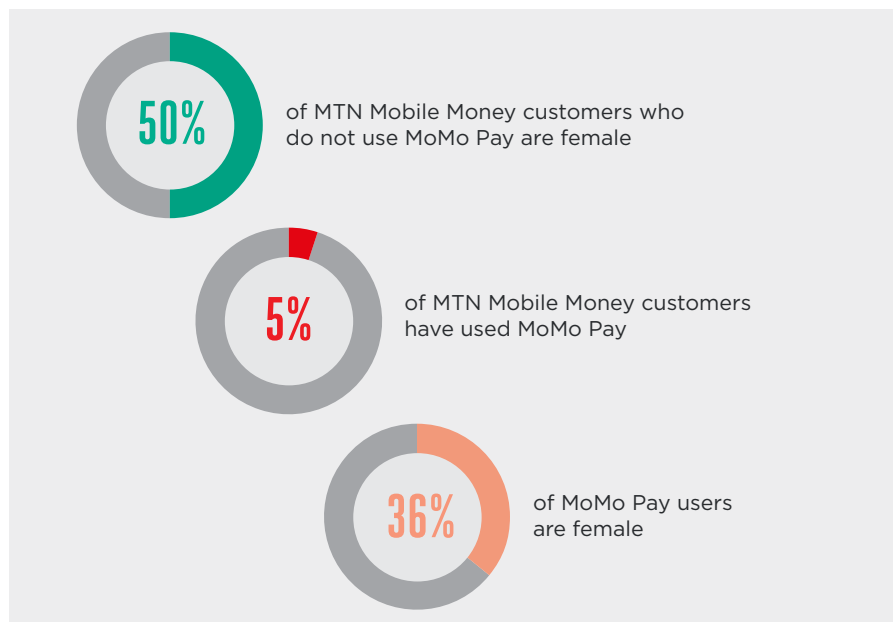
Although national-level survey data from the 2017 Global Findex suggests there is a substantial gender gap in mobile money use in Ghana, the telephone survey of MTN customers conducted as part of this research

found that MTN Ghana’s overall mobile money customer base was in fact split relatively evenly by gender. Overall, half of MTN Mobile Money customers that had not used MoMo Pay were identified as female, while the phone

survey of MoMo Pay customers found that only 36 per cent of users were female. These customers made up five per cent of MTN’s overall customer base (see Figure 2).

Figure 2

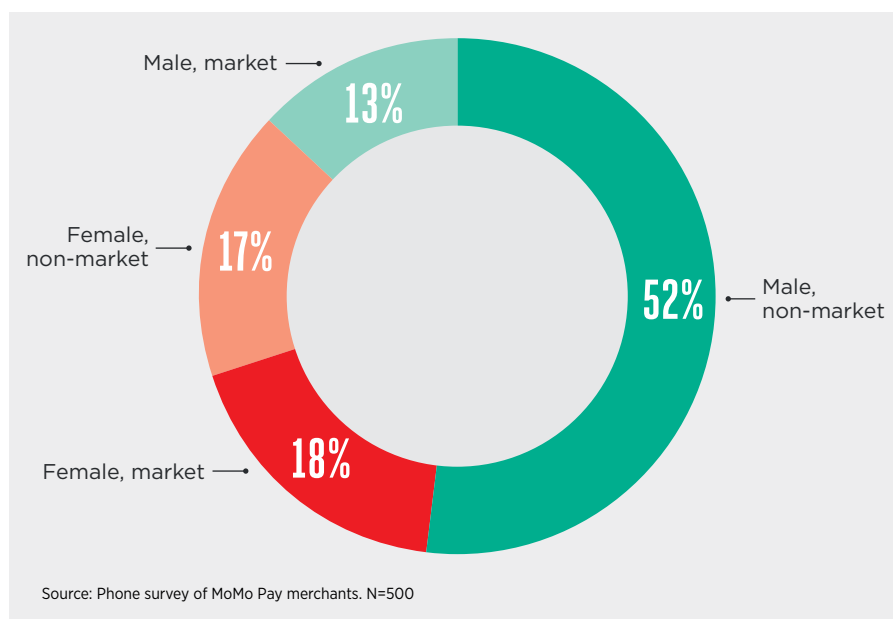
Profile of MTN Mobile Money customers and merchants



There was a similar gender split for merchants, with women accounting for 35 per cent of MoMo Pay merchants. Among registered MoMo Pay merchants who said they were located in an open market, over half were women, but only 30 per cent of all merchants registered for MoMo Pay were located in open markets.

Figure 3

Gender and location of MoMo Pay merchants



Evidence from our study therefore suggests there are a disproportionate number of women amongst those merchants in Ghana’s open markets that use MoMo Pay. However, overall uptake of MoMo Pay amongst open market is relatively low compared to uptake of the service by merchants who are not located in open markets. These non-market merchants tend to be predominantly male, meaning that the majority of MoMo Pay merchants overall are male. The reasons for this disparity will be discussed in more detail later in the report.

The path to MoMo Pay adoption for customers



Making payments to vendors with mobile money is still limited in Ghana

In Ghana, cash remains by far the most common way to pay vendors. The phone survey conducted for this research found that, among MTN Mobile Money customers that have not used MoMo Pay, only 24 per cent of men and 20 per cent of women reported ever having paid a vendor with mobile money – though this does suggest that, at the time of this research, P2P was more commonly used to pay vendors than MoMo Pay.

“Paying with cash is faster; it is instant. But with paying with mobile money, you have to go through some processes, unlike paying with cash.”

25 year-old male cash customer with a smartphone, Kasoa

The overall barriers to using mobile money to pay merchants in Ghana

There are several reasons why mobile money users tend to be reluctant to use mobile money to pay vendors – whether with P2P or with MoMo Pay – particularly in a market setting. As shown in Figure 4, key barriers are a

lack of trust and convenience. The barriers presented here are the barriers that customers identified to using mobile money with open market vendors in general – including with P2P – and are not specific to MoMo Pay.



Figure 4

Barriers to paying open market merchants with mobile money in Ghana

Based on results of qualitative research in open markets

Barriers to using mobile money to transact with merchants

Mobile money is perceived as inconvenient in open markets

In crowded, busy and noisy market spaces, paying in cash is often faster and less burdensome than mobile money.

A weak or sporadic network connection in markets can sometimes interrupt transactions.

Negative experiences using mobile money for payments or other applications deter some from trying again.

Many have either had issues in the past or heard of others who have had problems with sending money, becoming a victim of fraud or fearing fraudulent.

Too many types of fees

Multiple fees made people feel that paying with mobile money was complicated or costly, for example, cash-out fees, P2P fees and de facto cash-in fees (agents often informally charge people to cash in, even when the transaction is free).

Fees are perceived as too high, especially for smaller transactions which have a fixed minimum fee.

In addition to lack of trust and convenience, women face several other barriers that disproportionately prevent them from using mobile money to pay open market merchants. In general, women in this research study were found to be more cautious and somewhat sceptical of mobile money, and had a heightened awareness of the potential dangers associated with fraud.



Figure 5

Barriers disproportionately preventing women in Ghana from using mobile money to pay open market merchants

Based on results of qualitative research in open markets

Barriers disproportionately preventing women from using mobile money to transact in open markets

Lower digital skills and literacy

Among both male and female respondents, women were perceived to be less tech savvy, and were less trusted when using technology.

Consequently, men were more likely to seek to pay with mobile money than women.

Fear of fraud

Women were perceived to be victims of fraud more often than men and therefore had a heightened awareness of this threat. Men were perceived as being better at avoiding and preventing fraud.

Scepticism about mobile money in general

Levels of familiarity and comfort with mobile money in general were found to be lower for women than men; women were less likely to fully understand how to use it, and therefore preferred cash for transactions.

MoMo Pay helps address the barriers to mobile money use in open markets

MoMo Pay users identified several advantages of the service over alternative payment methods, especially P2P transfers. For those already using mobile money to pay vendors, these provided an incentive to shift to MoMo Pay, but users also

identified several important benefits to using MoMo Pay instead of cash.

These benefits helped MoMo Pay users overcome several barriers that otherwise prevented respondents from using mobile money to pay merchants.

In particular, MoMo Pay significantly reduces the concern that there are too many types of fees, especially disproportionately large fees for small-value transactions. It also helps make mobile money quicker to use, and therefore more convenient in markets.

Figure 6

The advantages of MoMo Pay for customers

Compared to P2P transfers, the main perceived benefits of MoMo Pay are:

Speed: It takes fewer steps to transfer money to a merchant

Security: Transactions are perceived to be more secure, particularly due to the use of a merchant code rather than a phone number

Cost: Lower customer fees (0.2 per cent versus one per cent)

Clarity: Less misunderstanding over fees since a standardised fee is charged regardless of the transaction value

Compared to cash, MoMo Pay is perceived has having two main advantages:

Convenience: More convenient than carrying cash in certain situations

Safety: Can be safer than having to carry cash

Curiosity, and greater speed and convenience than P2P transfers, are key to initial uptake of MoMo Pay

It is important to distinguish between the main benefits MoMo Pay users derive once they start using the service, and why they decided to adopt the service in the first place. A quantitative survey with a random

sample of MoMo Pay users found that reasons for initial adoption differed in several key ways from the main benefits identified in the qualitative research. As Figure 7 shows, two of the three main reasons for adoption

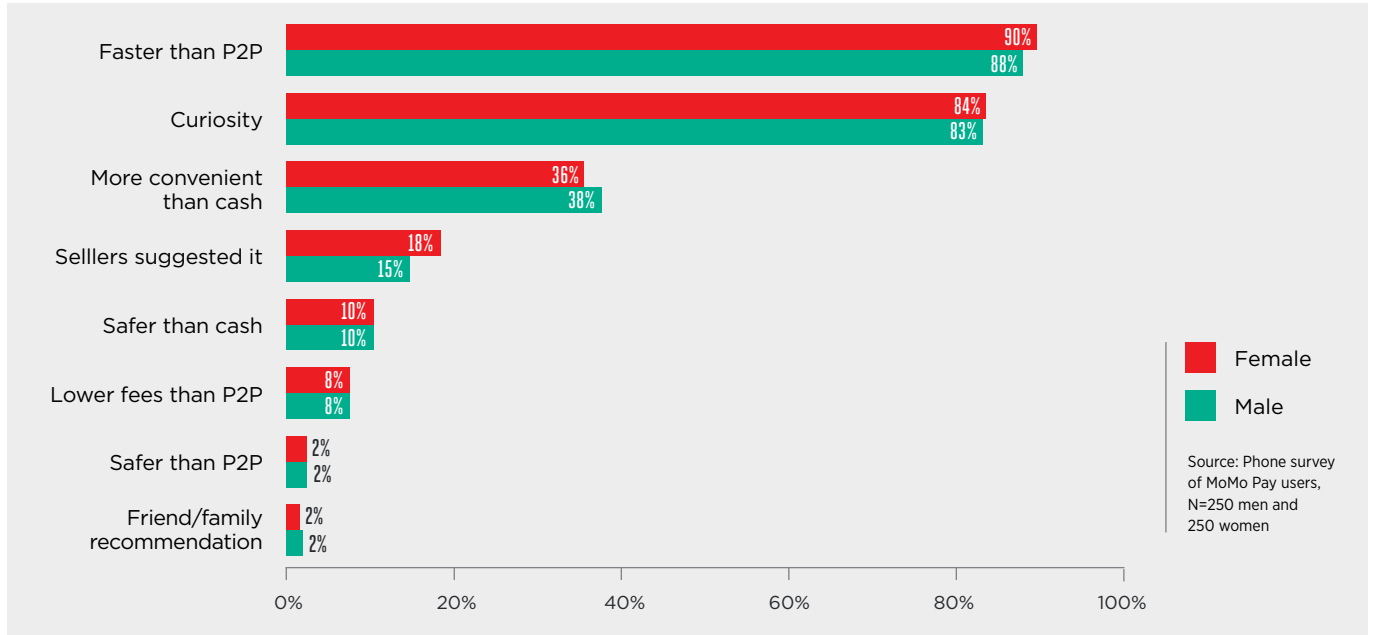
of MoMo Pay amongst consumers relate to speed and convenience. It is noteworthy that lower fees for MoMo Pay relative to P2P were identified less frequently as a reason for adopting MoMo Pay.



Figure 7

Reasons for adopting MoMo Pay

Percentage of MoMo Pay users, by gender



Overall, men and women began using MoMo Pay for similar reasons, although suggestions by sellers were slightly more important for women than men. While the influence of vendors was identified as just the fourth most important driver overall

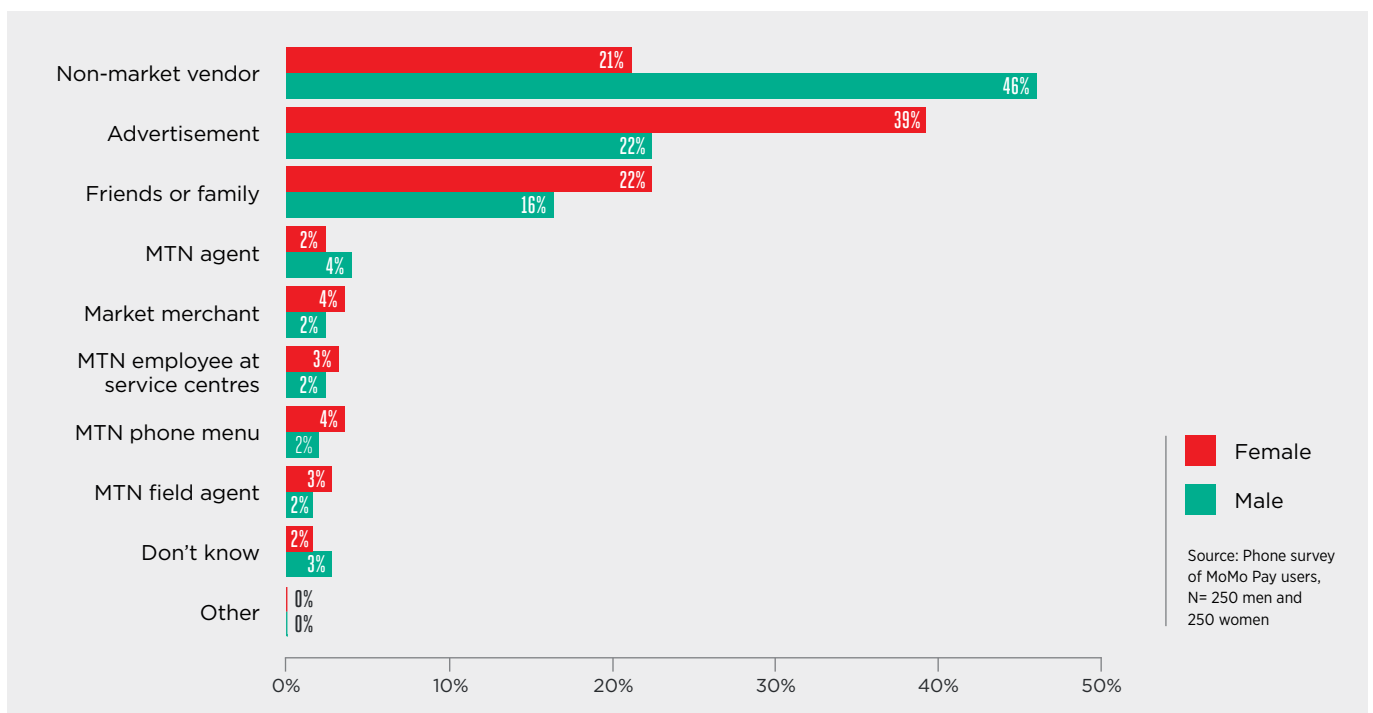
(see Figure 7), they are critical in driving initial awareness of the service. 40 per cent of MoMo Pay users found out about the service through a seller of some kind (see Figure 8), although not primarily market vendors. Therefore, vendors that use

and promote MoMo Pay are critical to driving uptake amongst consumers. This suggests that having more merchants showcasing and promoting a merchant payment service is crucial to raising customer awareness and increasing uptake of the service.

Figure 8

Where MoMo Pay customers first heard about the service

Percentage of MoMo Pay users, by gender



Customer barriers to MoMo pay adoption: Merchant support in markets is key

The influence of MoMo Pay merchants on service adoption becomes even more apparent when barriers to consumer adoption are considered. Our qualitative research found that

lack of support from open market merchants, either not promoting the service clearly or being reluctant to teach customers how to use it, is a major barrier to uptake. This

reinforces the crucial role merchants play in customers' initial awareness of MoMo Pay, as discussed in the previous section.

Figure 9

Barriers preventing customers from adopting MoMo Pay

Based on results of qualitative research in open markets

Barriers preventing MTN Mobile Money customers from adopting MoMo Pay

Low product awareness and understanding

Many thought it was insurance and could not necessarily distinguish it from MTN's Mobile Money service.
"Why did no one ever tell me this existed?!"

Merchants do not promote MoMo Pay to customers clearly

Many do not display their merchant ID, or do not understand its purpose. Merchants often do not understand how customers make transactions, so cannot provide support to new adopters of the service. The onus is on the customer to take the initiative and ask about it when unsure.

Merchants are reluctant to educate customers

They argue that it takes too much time and effort.
"People like what they are used to."

Limited number of merchants offering the service

Many users prefer to use MoMo Pay when it is available. However, they find it is often not offered by merchants they shop with.

“ I think anyone who wants your [merchant] ID wants to defraud you. ”

28 year-old female MoMo Pay merchant with a basic phone, Madina market

“ Yes, it is too much work, just one thing you have to explain and teach a lot of times, it's time wasting ”

25 year-old female MoMo Pay merchant with a feature phone, Madina market





Focus on MoMo Pay merchants

Merchants play a crucial role in driving customer adoption and use of MoMo Pay

Merchants have the opportunity to promote MoMo Pay to a large number of customers, and branding for the service in shops and market stalls is an important way to raise awareness amongst consumers.

However, this research found that the extent to which merchants were effective ambassadors for MoMo Pay varied greatly. Some merchants were significantly more effective at

driving consumer uptake and use of MoMo Pay than others. Typically, the most important determinants of a merchant's success were certain behaviours rather than characteristics and demographics, including gender. In general, the level of engagement, customer service and willingness to support customers in using the service were key factors that were associated with merchants being strong ambassadors for MoMo Pay.

The qualitative research identified several important behaviours:

- Being willing to assist customers with their first MoMo Pay transfer;
- Understanding MoMo Pay and being able to explain it to customers;
- Providing a high level of customer service and using MoMo Pay as an opportunity to strengthen customer loyalty with those customers that prefer to transact with MoMo Pay;
- Offering customers the chance to start using it, for instance, by conducting a low-value dummy transaction to illustrate how the service works; and
- Typically accepting high-value transactions (due to selling high-cost goods).



Merchants' characteristics and demographics were less inherently important than these behaviours

Several characteristics that might be expected to make a merchant an effective recruiter were found to be less important than the behaviours listed above, including:

- Type of merchandise for sale, although this can influence the average size of a transaction (which can be a determinant), and the gender of customers.
- Location of the shop – formal “brick and mortar” stores in the open market that offer MoMo Pay are often located in the central market area.
- Gender of the merchant is not in itself a factor, but men are more likely to be formal “brick and mortar” merchants, who tend to have higher average transaction values.

The gender of merchants was therefore not a key factor determining their effectiveness at recruiting customers to the service. More important was the level of support and customer service they provided.

Open market merchants are more likely to be women and interact with female customers

The quantitative survey found that 56 per cent of open market merchants were women, and 71 per cent of customers they interacted with were also women (see Figure 10). Open market merchants are therefore an important access channel to female customers. Given the influence of merchants on customer adoption of MoMo Pay, they are also key to driving women’s uptake of the service.

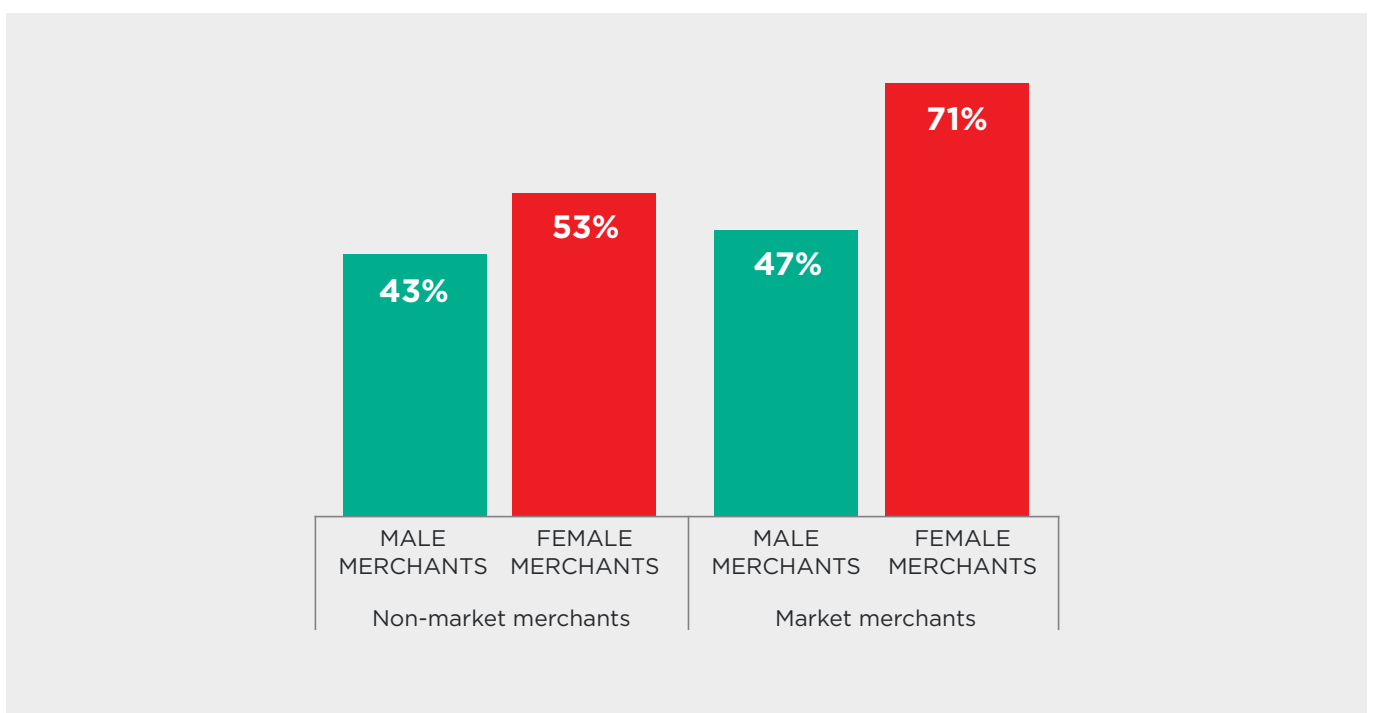
Recruitment of engaged female open market merchants is an important way to promote MoMo Pay and expand women’s use of MTN Mobile Money. Even though gender is not in itself a determinant of merchants’ success in reaching customers, the fact that female open market merchants interact with and influence disproportionate numbers of women means that they can be effective in reaching this underserved group. However, rates of uptake by female market merchants are lower than other types of merchants, which has limited the potential impact of the service on female customers.



Figure 10

Percentage of merchants’ customers who are women

Average across MoMo Pay merchants, by gender and location. Based on self-reported estimates by merchants.



Source: Phone survey of MoMo Pay merchants. N=170 for open air market merchants and 330 for non-market merchants

Merchant use of MoMo Pay: Barriers and drivers

Merchant recruitment is an important component of any merchant payment service.¹⁰ To ensure a service is widely available and adopted, it is important to register a large number of merchants. As discussed in previously, merchants have an important role to play in consumer awareness and

understanding of MoMo Pay and helping them overcome initial hurdles to adoption.

Merchants face some of the same initial barriers to MoMo Pay adoption as their customers, and the qualitative interviews revealed they often use

MTN Mobile Money as customers as well as offering it as a payment option for their customers. However, there are some important considerations that are unique to merchants.

10. <https://www.cgap.org/research/publication/challenge-two-sided-markets-merchant-payments>

Customer requests are the main reason merchants initially adopt MoMo Pay

As with consumers, the factors that initially trigger a merchant to adopt MoMo Pay are not necessarily the same benefits they experience from using the service. As shown in Figure 11, the phone survey of MoMo Pay merchants found that customer requests were the main reason they initially offered the service, as an option for payment, rather than any specific benefit of the service. This was especially the case for male merchants.

It is interesting to observe a “virtuous circle” of MoMo Pay uptake, whereby merchants promote the service and teach customers how to use it, and customer requests encourage merchants to offer and continue using the service.

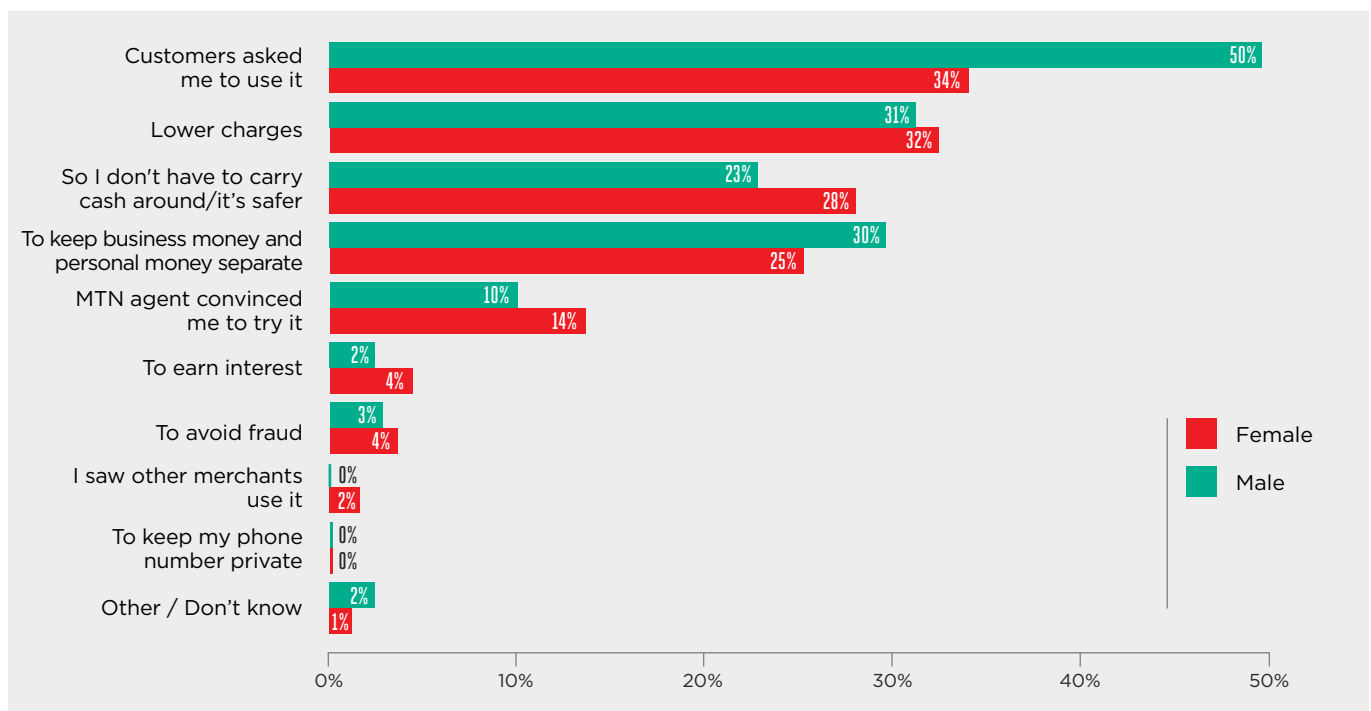
The lower cost of MoMo Pay, most notably the ability to transfer funds to a bank account for free, was the second most important factor

triggering merchants to adopt MoMo Pay. This was followed, for female merchants, by the greater safety of using MoMo Pay than carrying cash, which was a slightly more important factor than for men. The convenience of having a separate account for business transactions also emerged as an important factor, ring fencing business funds from everyday spending and improving business accounting practices.

Figure 11

Reasons for adopting MoMo Pay

Percentage of MoMo Pay merchants



Source: Phone survey of MoMo Pay merchants. N= 327 for men and 173 for women. Respondents could select multiple responses.

MoMo Pay has substantial benefits for merchants who understand the service

The qualitative research found that merchants who use MoMo Pay often reap substantial benefits. Although not all merchants fully understood the service, and therefore did not benefit fully from its features, many found day-to-day advantages, such as greater security, privacy and ease of control over finances, as the service allowed them to have separate consumer and business accounts. Many merchants also reported saving time, improving their accounting and ultimately increasing sales. Many merchants also valued the ability to pay their suppliers using MTN Mobile Money, either through P2P transfers or with MoMo Pay.

“There’s no arguments over money between the shopkeeper and customer, as to whether the right amount was paid or not. No misunderstanding.”

24 years old, Female MoMo Pay merchant with a smartphone, Kasoa market

Day-to-day impacts on merchants

- Greater control over personal and business finances, as they can be separated more easily;
- Greater security since funds are stored digitally; and
- Greater privacy from being able to provide a merchant ID to customers instead of a phone number.

Economic impacts on merchants

- Greater productivity due to time savings;
- Higher sales from impulse purchases (due to lower transaction costs for small transactions and less need to carry cash to make purchases);
- Stronger value proposition for customers;
- Improved accounting practices; and
- More business savings due to free cash-out from bank account.

Many MoMo Pay merchants used a mobile money service as consumers in their daily lives before adopting

MoMo Pay, but most did not use it in their business. Fifty-three per cent of current MoMo Pay merchants did not accept any mobile money payments from customers before they adopted MoMo Pay, accepting cash payments only. All these merchants now accept mobile money payments via MoMo Pay, which suggests that the service not only reaches merchants that already used mobile money in their businesses via P2P transfers, but also those who had previously only used cash. This demonstrates that MoMo Pay is helping to drive the digitisation of commerce in Ghana.

Barriers to merchant uptake of MoMo Pay

Despite the benefits that merchants reported, several barriers still prevent many merchants from adopting MoMo Pay. These relate primarily to awareness and understanding of the service, or the challenge of registering for it. Some merchants also expressed reluctance to spend time teaching customers how to use the service and did not see a sufficient incentive to do so.

Figure 12

Barriers preventing uptake of MoMo Pay for open market merchants

Based on results of qualitative research

Barriers to adoption and use of MoMo Pay for open market merchants

Lack of awareness and understanding of the product

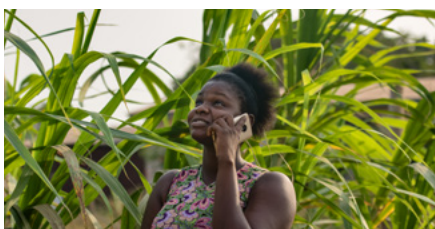
Many merchants have never heard of MoMo Pay or do not know the benefits of the product or how to use the menu.

Do not know how to register

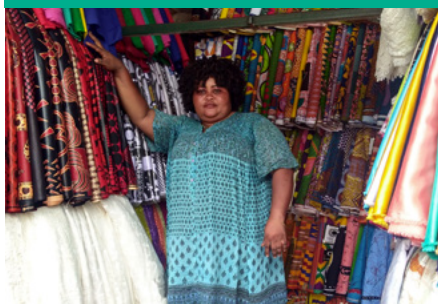
Many merchants would like to offer MoMo Pay, but do not know how. “What do I have to do to sign up?”

Requirement to educate customers about MoMo Pay

Merchants typically need to educate customers about MoMo Pay to encourage them to use it. Many do not see the value of investing time to do this, so rarely use MoMo Pay. About 40 per cent of female MoMo Pay merchants and 30 per cent of male merchants never or only rarely suggest MoMo Pay to their customers.



Pen Portrait: Ama, MoMo Pay merchant, Madina Market



“When I wasn’t taking mobile money, I kept losing my customers, but now people pay through mobile money if they don’t have cash on them. I think mobile money is safer because you never lose the money on it whether your phone gets lost or stolen.”

Ama is one of the many open market merchants who sells clothes in Madina Market, a large market area at the centre of Ghana’s capital, Accra. Ama’s motto is simple: “The customer is king.” She offers excellent customer service by providing different payment options to her clientele to ensure a smooth transaction. She promotes MoMo Pay for its ease of use and even teaches customers how to use it.

Ama loves MoMo Pay because of its ease of use and lower charges than P2P transfers. She has connected her MoMo Pay wallet to her bank account to enable her to save, and uses it to pay her suppliers without

leaving her shop, increasing the amount of time she can spend attending to her customers. For her, the future of payments is MoMo Pay.



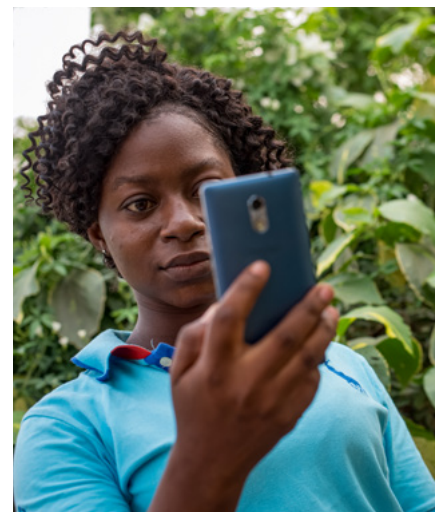
“If the person doesn’t know how to go about making such payments with their wallets even though they have money on their wallets, I educate them on how to go about it since it is easier.”

Pen Portraits represent a composite of findings from respondents. Please note that all names have been changed.

The impact of MoMo Pay on women in Ghana

MoMo Pay is a use case that is most likely to be embraced by those already using MTN Mobile Money. Most existing MoMo Pay users had already registered for Mobile Money before MoMo Pay launched in January 2017. It has therefore not driven significant uptake of MTN Mobile Money by new customers, either male or female.

However, both the qualitative research and transactional data analysis show that, for those who use the service, MoMo Pay can encourage more regular use of MTN Mobile Money and engagement with a wider range of Mobile Money services.



MoMo Pay drives more regular and diverse use of MTN Mobile Money services

After customers adopted MoMo Pay, several effects were observed that led them to rely more heavily on MTN Mobile Money, maintain a higher balance in their mobile account and spend more using mobile money. Some of the more engaged users of MoMo Pay were also acutely aware of the indirect savings MoMo Pay provided, such as reduced travel times and cost that would otherwise be needed to acquire cash.

Our qualitative research also demonstrated that particularly engaged users, both male and female, began using Mobile Money in other ways, such as connecting their bank account to their Mobile Money account, ordering home deliveries, saving through an MTN Y’ello Save account and using Mobile Money for leisure applications, such as paying for Uber ride sharing, making purchases through e-commerce sites

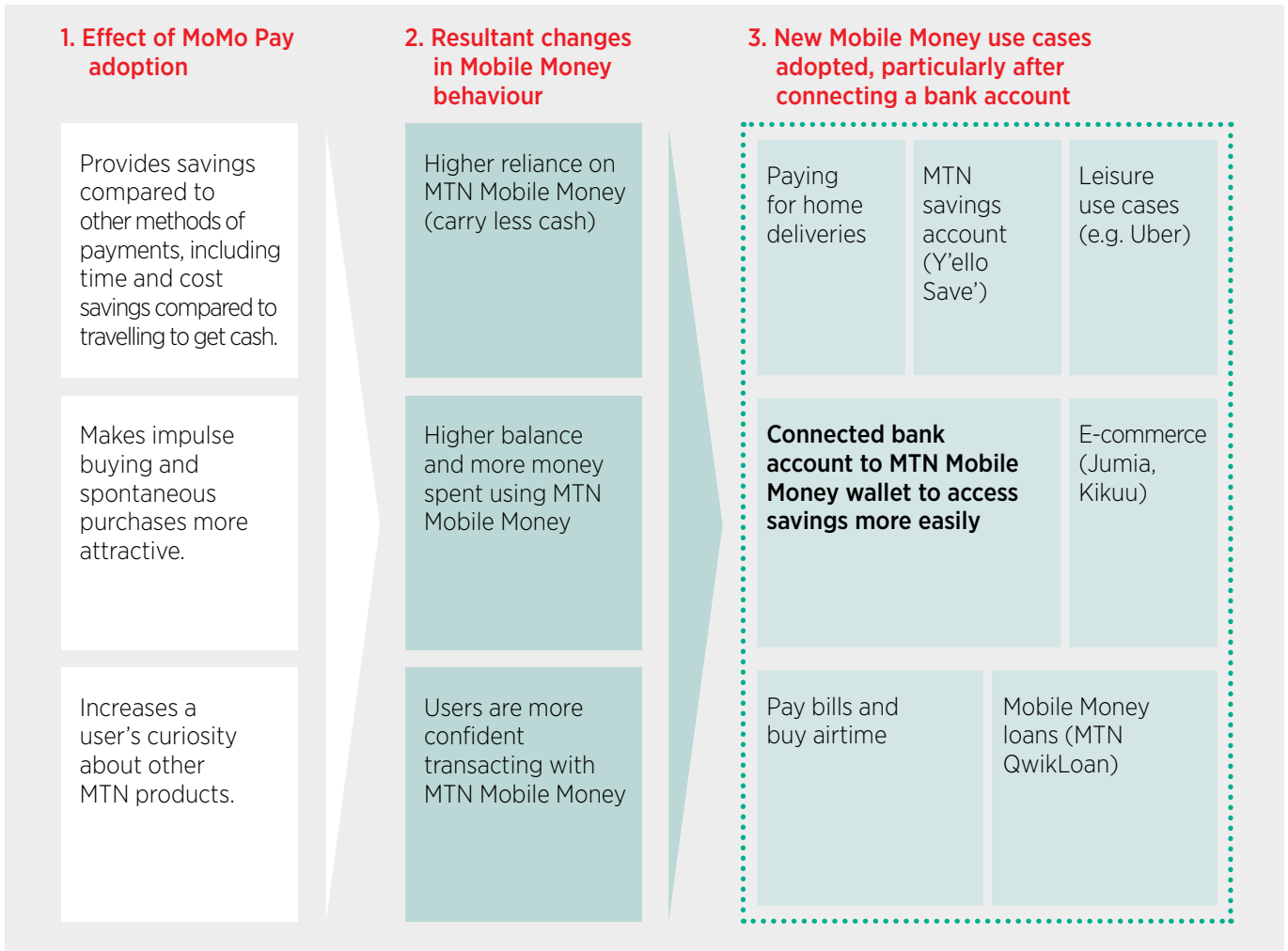
like Jumia and Kikuu, paying bills and buying airtime and accessing loans like the MTN Qwik loan (see Figure 13).

For many of these subscribers, MoMo Pay was a catalyst for increased Mobile Money use and engagement overall, particularly when it prompted them to connect their account to a bank account.

Figure 13

The impact of MoMo Pay on wider use of MTN Mobile Money

Based on results of qualitative research with MoMo Pay users



MoMo Pay is having significant commercial impact

The qualitative findings indicating an increase in mobile money usage following adoption of MoMo Pay are corroborated by an analysis of MTN Mobile Money transactions since the launch of the service in January 2017. This analysis showed the impact of MoMo Pay across three key metrics (see Figure 14). Mobile Money use by MoMo Pay subscribers became:

- More frequent;
- Higher value; and
- More consistent with less propensity to churn.

To arrive at these results, the transaction patterns of users of MoMo Pay were analysed in the three months before they adopted the service and six months post-adoption. Each subscriber's change in behaviour was then compared to the change in transactional behaviour of the overall customer base for the same period.

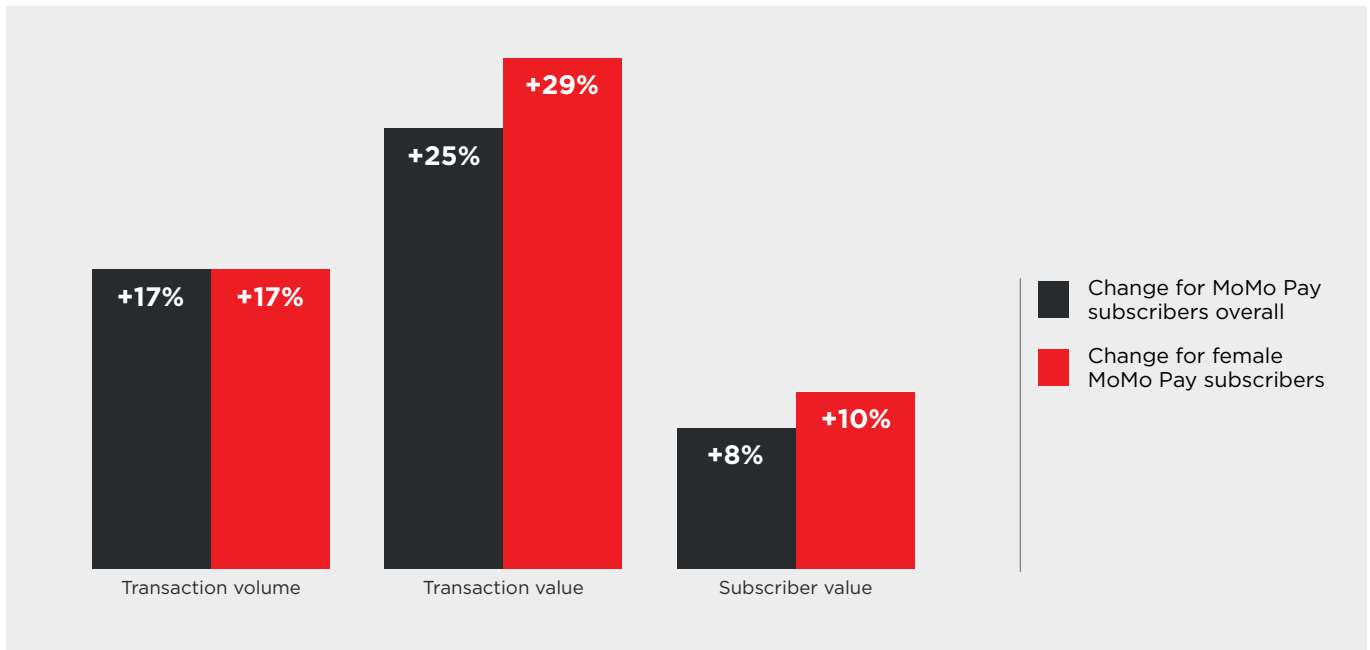
This analysis found that, subscribers who adopted MoMo Pay showed

significant changes in their wider Mobile Money usage. This is true even accounting for the upward trend observed in Mobile Money use among subscribers who continue to use the service – MoMo Pay users were found to increase their usage at an even greater rate.¹¹ On average, their transaction volumes increased by 17 per cent over those of the overall base, transaction values increased 25 per cent over the total base, and they were eight per cent more likely to still be transacting compared to the overall customer base, demonstrating churn was reduced. Crucially, these changes were more pronounced for female users of MoMo Pay.

11. Transaction volumes and values were on average found to increase over time for MTN Mobile Money customers who continued to transact. The figures here describe the growth for MoMo Pay customers in excess of the rate of growth seen in the base overall. This growth can therefore be more confidently attributed to the adoption of MoMo Pay, rather than representing a natural upward trend.

Figure 14

Change in transaction behaviour of MoMo Pay adopters six months after adoption, in excess of change in the overall base



Source: MTN Mobile Money transactional data, January 2017–December 2018

Despite the barriers to MoMo Pay adoption for customers and merchants alike, for those that do adopt the service it is a significant driver of

expanded use of MTN Mobile Money. This provides advantages both to the customers and merchants who benefit from deeper financial inclusion, as

well as delivering notable commercial returns for MTN through increased transactions and improved subscriber retention (see Figure 14).

Pen Portrait: Dzifa, MoMo Pay user



“I think with the MoMo Pay, it’s hard for someone to hack into your account because when I was entering the merchant ID during the transaction, I made a mistake with the digits and the whole transaction cancelled, but with the normal subscriber account, it would have ended up in someone else’s account.”

Dzifa is a 28-year-old woman living in Accra. She began using MTN Mobile Money as a convenient way to receive financial help from her family when she was in school. She was told about MoMo Pay by a merchant when she was shopping and decided to try it. Dzifa feels that MoMo Pay is safer than regular P2P transactions. Moreover, she believes that MoMo pay is safer and more efficient for traders, too.

Dzifa now advocates for MoMo Pay among her friends who shop in the open markets. She uses Mobile Money more often because of MoMo Pay and argues that paying with it is faster and more convenient than cash, especially when making

larger transactions. She is now more inquisitive about MTN Mobile Money and experiments with other offerings on the MTN platform, such as Y’ello Save.



“I first deposited 20 cedis into their Yello Savings to see how it works. After a while, I transferred the money into my bank account. And I needed to see how their loan also works. So, I just do that to see how their services work.”

Pen Portraits represent a composite of findings from respondents. Please note all names have been changed.

Implications for the industry

Mobile money has the potential to be a powerful enabler of economic participation for women, and MoMo Pay demonstrates a clear way in which a merchant payment service can deliver disproportionate benefits to women, under the right conditions.

While the findings of this evaluation are specific to the particular context of MoMo Pay's implementation in Ghana, they nonetheless have implications for other providers considering leveraging merchant payments to increase financial inclusion of women.

The principles below outline key lessons from this evaluation that may be relevant to other markets. However, local context is critical and can vary greatly, so **these principles should not be interpreted as exhaustive or universally applicable.**

Success is determined by engaged and proactive merchants

- Merchants are critical to customer uptake and use of merchant payments. Ensuring customers fully understand how the service works is crucial to widespread uptake.
- Female merchants are key to reaching female customers. Our research has shown that female merchants in Ghana interact disproportionately with female customers, and help to raise awareness and drive adoption among women.

- Savvy vendors see merchant payments as an important competitive advantage, attracting customers who transact more frequently and in higher values.
 - Merchants who recognise the benefits of investing time in training customers how to use the service are rewarded with loyal returning customers.
- While some vendors point to convenience as a reason for offering merchant payments, the tipping point for adoption is often when vendors link this to greater control over their finances, saving them time and improving their accounting.

Customers have more than one way to pay

- An intuitive, streamlined user experience when transacting can be the difference between choosing merchant payments over cash or P2P transfers.
- Transaction security and fraud are particular concerns for women when using mobile money, and a dedicated merchant payment service can help address these fears.
- Where P2P payments have a strong foothold, it is crucial to make the distinction between merchant payments and P2P transactions.
- For both merchants and their customers, safety is an ever-present concern. Mobile money merchant payments have an advantage over cash as a safer option that protects against theft.
 - For merchants, there is the added benefit of seamless transactions with their bank account, eliminating the associated risk and cost of cash-outs.

Strong marketing is needed to boost awareness and understanding of merchant payments

- Promoting widespread product awareness and understanding, for both merchants and their customers, is vital to reach a critical mass of users.
 - Merchants generally see more value in the service once they fully understand its features, but low awareness and understanding of how to register can inhibit uptake.
- While ATL (above-the-line) marketing can help strengthen a brand, our research has also found operational tactical investments MNOs can make to reach more customers and ensure uptake and use of merchant payments is sustainable.
 - Where female customers still rely on merchants to explain the benefits of the service and help them perform their first transaction, operators should consider strategic channel marketing, leveraging the merchants directly to reach customers.
 - The example of MoMo Pay demonstrates the value of a channel of distribution that disproportionately reaches women. Operators could similarly consider leveraging female-dominated channels of marketing or distribution to increase female uptake or usage of merchant payments and mobile money services – for example, female-led enterprises, or female-dominated agricultural co-operatives, female business and entrepreneur associations





GSMA Connected Women

The GSMA represents the interests of mobile operators worldwide, uniting more than 750 operators with almost 400 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and internet companies, as well as organisations in adjacent industry sectors. The GSMA also produces the industry-leading MWC events held annually in Barcelona, Los Angeles and Shanghai, as well as the Mobile 360 Series of regional conferences.

For more information, please visit the GSMA corporate website at www.gsma.com

Follow the GSMA on Twitter: [@GSMA](https://twitter.com/GSMA)

GSMA's Connected Women programme works with mobile operators and their partners to address the barriers to women accessing and using mobile internet and mobile money services. Connected Women aims to reduce the gender gap in mobile internet and mobile money services and unlock significant commercial opportunities for the mobile industry and socio-economic benefits for women.

For more information, please visit www.gsma.com/connectedwomen



BFA Global uses finance, data, and technology to craft innovative solutions that equip individuals, organizations, and communities to create sustainable and inclusive economies. Together with our partners and clients, we seek to empower people to address their vulnerabilities and shape their own futures.

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