



OCGAP

# Digitizing merchant payments: What will it take?

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# Introduction & Overview

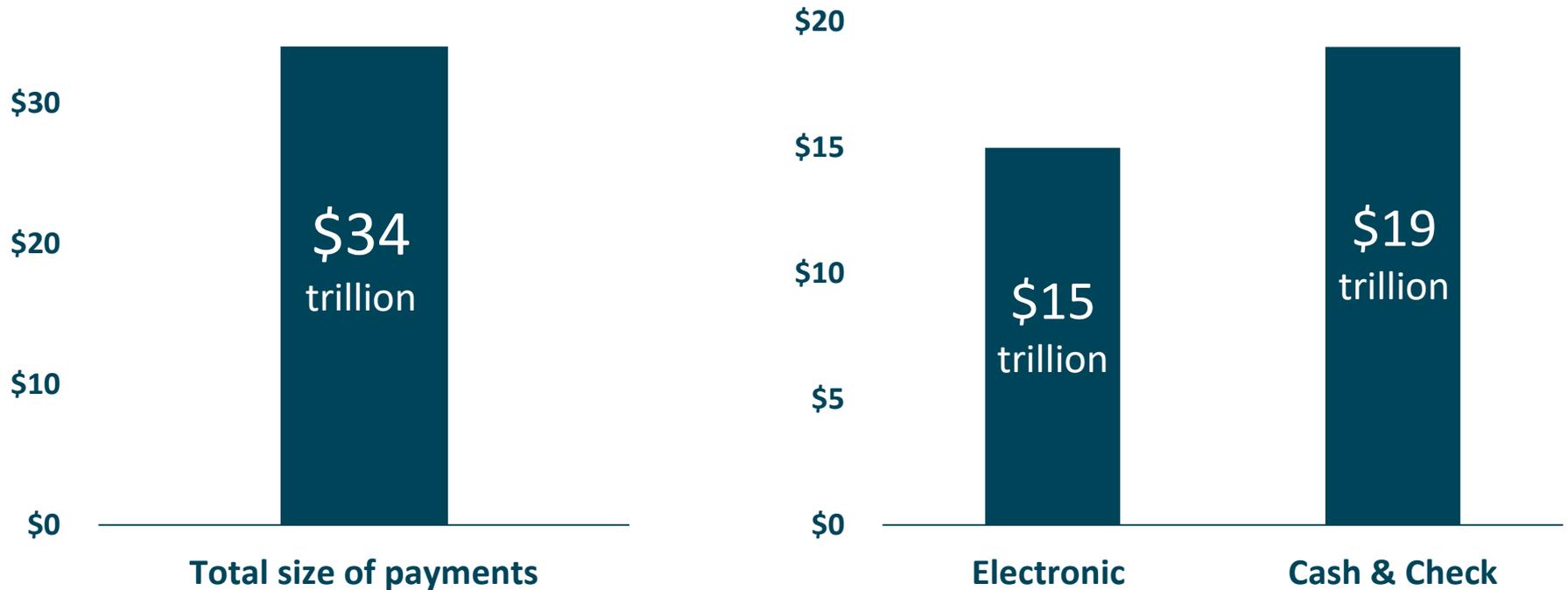
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- Digital Financial Services (DFS) providers increasingly sense a key opportunity in digital retail transactions, or merchant payments
- Early ventures into the space have however shown that achieving adoption at scale is difficult even for large players
- This deck gives a high level view of what CGAP sees as some of the key challenges in merchant payments
- It also outlines several ideas for providers to try out in order to overcome those challenges
- The deck is accompanied by several more detailed outputs to help generate further ideas

**Key question**

What is the opportunity for DFS providers in merchant payments?

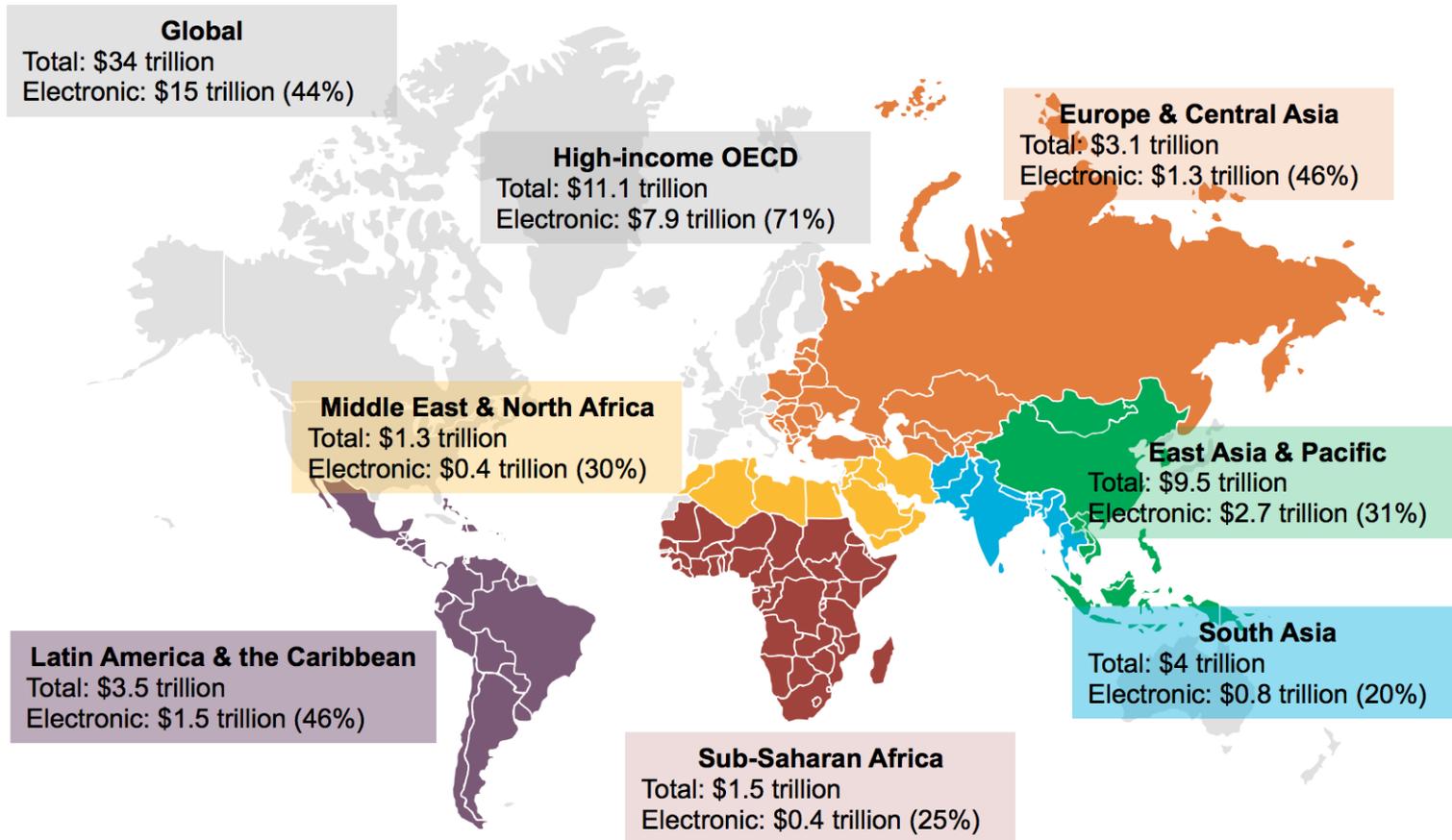
# A staggering amount of cash is paid to retail merchants worldwide



Micro, Small and Medium Retailers (MSMRs) made and accepted around \$34 trillion worth of payments in 2015

More than half the payments were in cash or by check

# The majority of these cash and check payments in retail are made in low and middle-income economies



I B2B payments include only those from the retailers to immediate suppliers

Mostly markets with low card penetration but widespread mobile phone use, meaning they could leapfrog directly to mobile payments

To put this in perspective, the value of cash payments in retail is over 100x more than all payments made on all MM platforms worldwide

**\$5.9b**

Circulating value



December 2016

P2P transfer Merchant payment

**\$8.2b**

Outgoing transactions



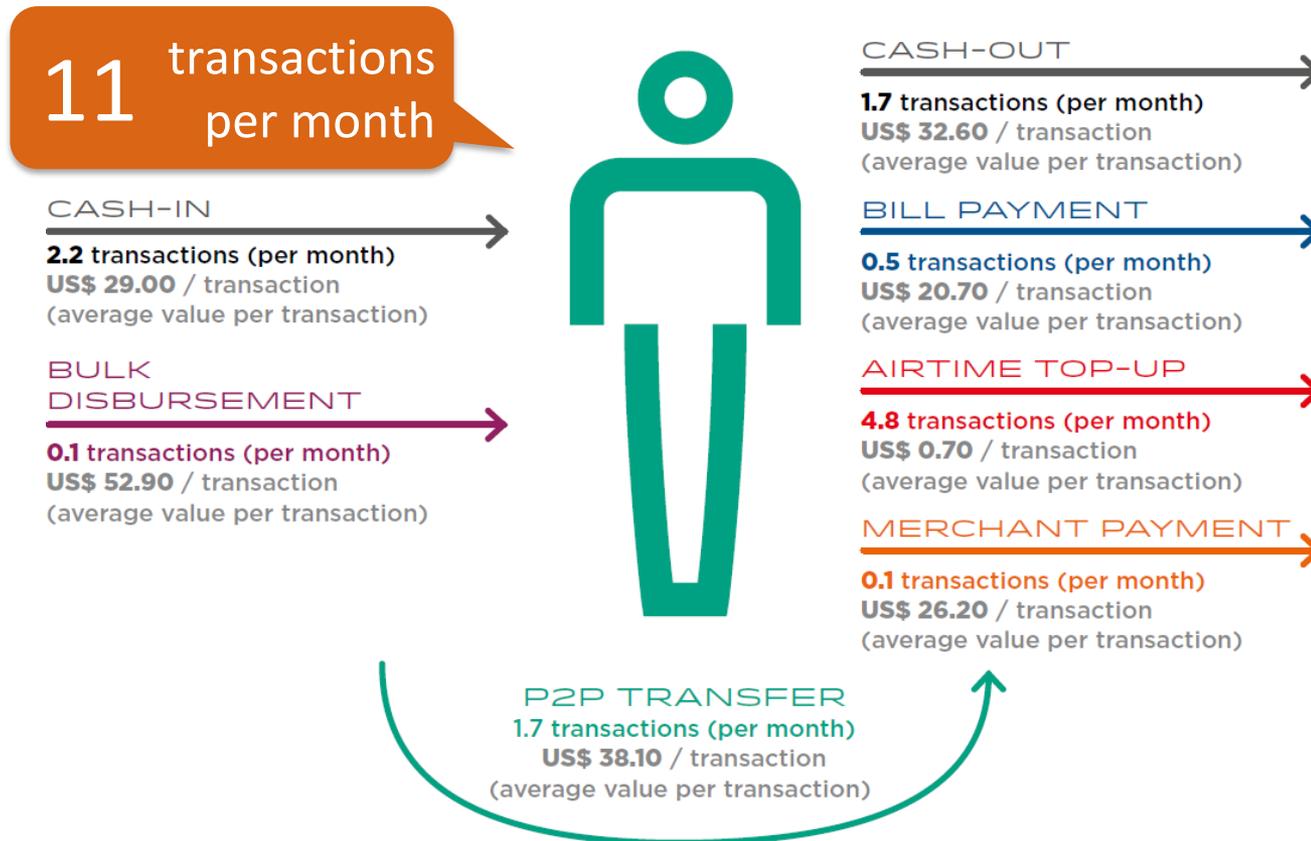
December 2016

Cash-out Bill payment Airtime top-up Mobile-to-bank Off-net transfer International remittance

GSMA estimates the total value of circulating and outbound mobile money transactions globally is ~\$14b per month or \$170b per year

# For MFS providers, merchant payments also offer an opportunity for far greater engagement with their customers

A month in the life of the average active customer



Greater engagement also generates more data that can be used to support other products, including digital financial services

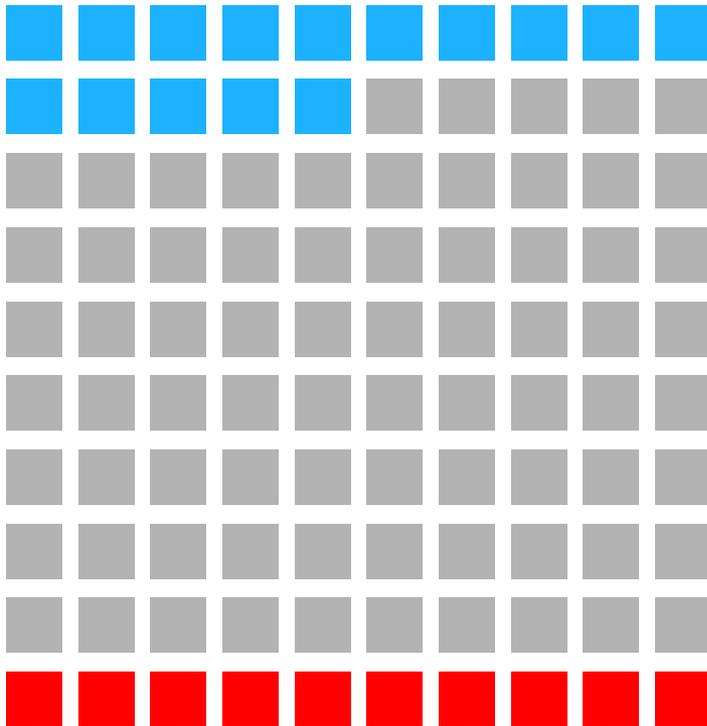
# Merchant payments could also help unlock access to capital for informal retailers, which is one reason CGAP finds this topic important

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- The World Bank estimates that there are **400m** micro, small and medium enterprises (MSMEs) in emerging markets
  - These contribute over 60% of total employment and up to 40% of national income (GDP) in emerging economies
  - But as many as **70%** of these companies lack access to formal credit. The credit gap for SMEs is **\$2.6 trillion**; with the micro segment included, it's likely to be larger still
  - A central barrier to access is lack of information due to informality, which makes assessments on credit worthiness difficult for banks
  - Digitizing merchants' payments directly helps to overcome this barrier by providing detailed, time series data on cashflow

**This could be a significant opportunity to expand financial inclusion and presents a new revenue opportunity for DFS providers**

But merchant payments are proving more difficult than expected and uptake is still low, even for leading DFS providers in mature markets

Below is a stylized example of what have seen in various markets



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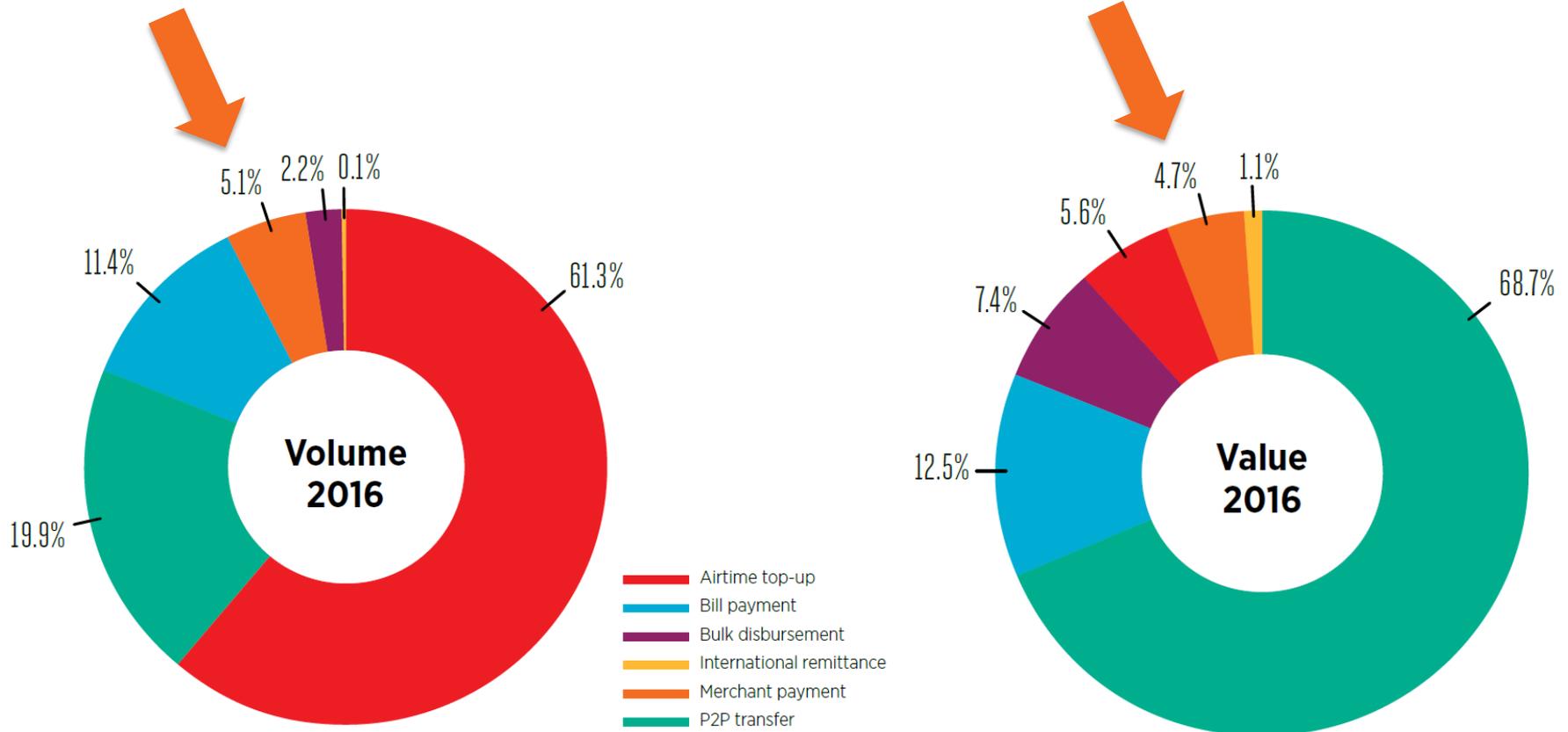
A big DFS provider has pursued merchant payments for e.g. 2 years

The provider has built a network of say 100,000 merchants, but **only 15%** of them are using the service at least once a month

The provider has >5m active wallet users but **only 10%** of them are making digital merchant payments

This mirrors the global picture: digital merchant payments account for only 5% of mobile money transactions worldwide

## Global product mix in mobile financial services, 2016



## Conclusion

Getting adoption on merchant payments is proving hard even for leading providers.

**Key question**

Why are providers not seeing more traction on merchant payments?

# Part of the answer is that merchant payments is a two-sided market

*Merchants are very different from agents, who get paid for their services*

A thriving digital retail payments market needs active buy-in from both merchants and customers. They both have to:

- **Sign up** for (the same) payments service (acquisition)
- Have a functioning payment/acceptance **instrument**
  - *Customer account with a positive balance*
  - *Customer authentication mechanism*
  - *Merchant acceptance hardware + power + connectivity*
- **Want** to use the payments service (incentive/value)
- **Remember** to use the payments service (top of mind)
- **Know how** to use the payments service (education/UX)
- Potentially **be willing to pay** for the service

The value of the service to one side of the market is directly dependent on uptake from the other side of the market. Hence, providers need to create real value for both sets of users

# So what exactly is the value offered to *customers*?

## Typical value proposition providers cite:

1. Digital is more convenient than cash
2. E-money is safe from theft or fire
3. Digital is cheap, efficient and cool



## Talking to customers, it turns out:

- Most people receive their income in cash—depositing it on an account requires time and effort on their part
- Even active users don't tend to leave much of a balance on their account
- Most merchants don't accept mobile money, so users must still carry cash
- This creates a headache to decide how much to carry in cash vs digital
- If users get that balance wrong, they must take the time to find an agent, plus pay a cash-out fee
- Paying digitally may cost users a fee, while cash is perceived as free

**Thus people do pay digitally—  
but mainly as a fallback option**

## ...and what exactly is the value offered to *merchants*?

### Typical value proposition providers cite:

1. Merchants' customers who want to pay digitally can do so
2. Merchants can use digital payments to pay their own staff and suppliers
3. E-money is safe from theft or fire
4. Digital is cheap, efficient and cool



### Talking to merchants, it turns out:

- Very few customers ask to pay digitally
- Merchants' existing business processes are based on cash and paper; adding digital may create a minor headache
- Suppliers don't have mobile money—they want cash or a bank transfer
- Staff often don't want to be paid with mobile money—they tend to prefer cash
- So if they collect revenue digitally, to pay staff or suppliers in cash merchants must close shop, find an agent, pay fee
- On top of that, merchants are typically charged a transaction fee to take digital payments—but cash is seen as free

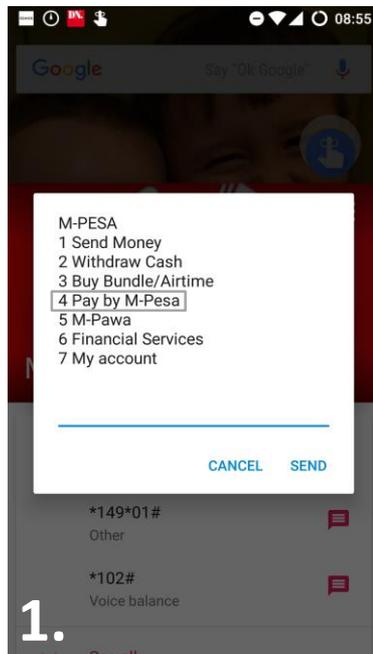
**Thus merchants do sign up—  
but mainly as a fallback option**

# Is paying with mobile money really more convenient?

Many first generation merchant payments products use a laborious USSD menu

**\*150\*00#**

A customer walking up to the counter to pay with mobile money typically starts with dialing a short code



Select payment to a merchant

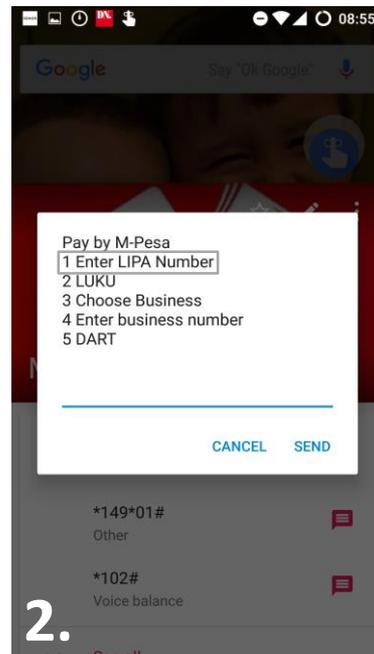
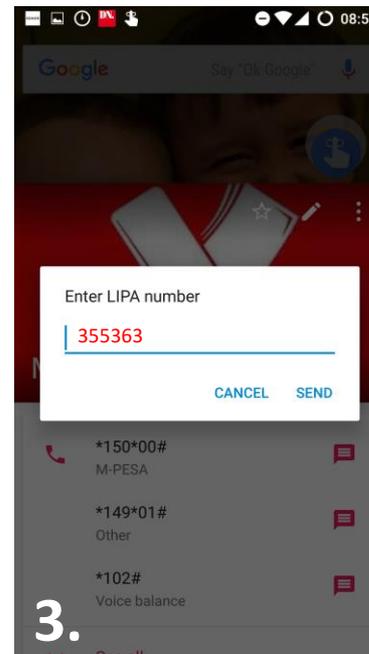
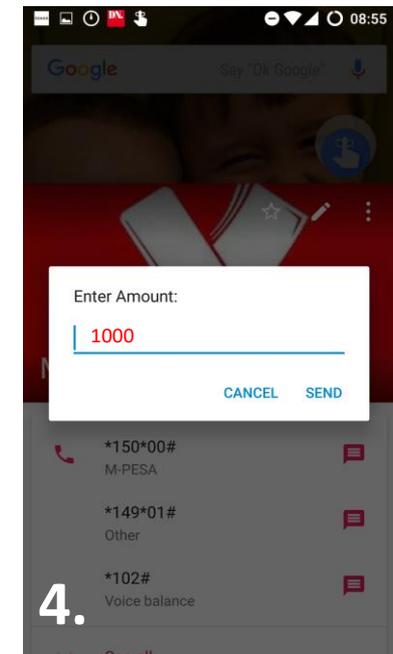


Figure out which menu item to pick



Find and input the merchant's till number

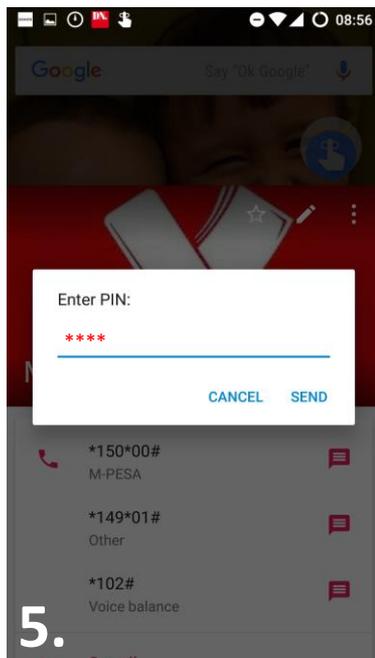


Enter the total amount to pay

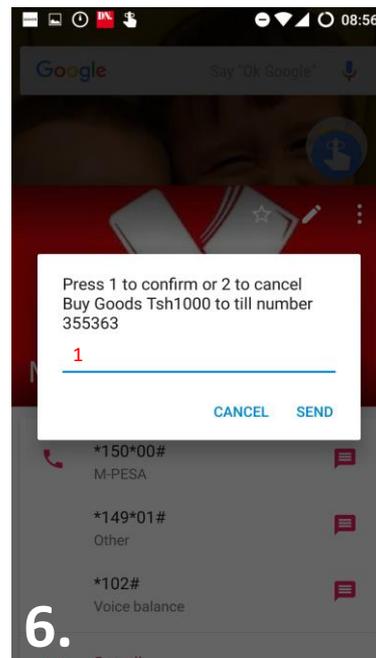
# Is paying with mobile money really more convenient?

Many first generation merchant payments products use a laborious USSD menu

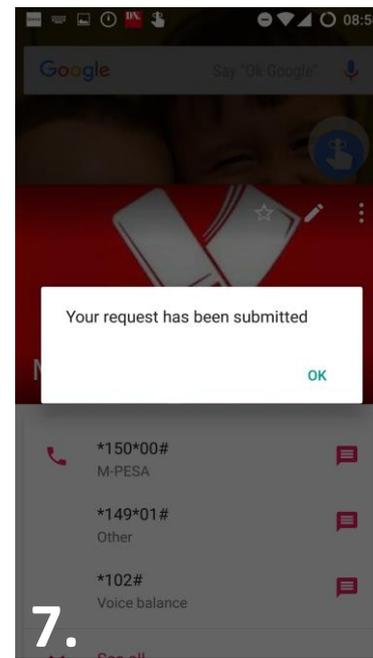
This works for remittances, where alternatives are expensive or slow, but not in retail



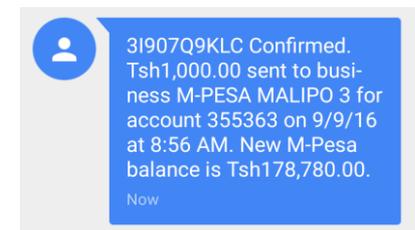
Enter the pin



Confirm the transaction



Are we done?



No - now we wait for the confirmation SMS. This can take seconds or minutes – or not arrive at all.

## **Conclusion**

The typical product lacks a strong value proposition for either merchants or customers.

**Key question**

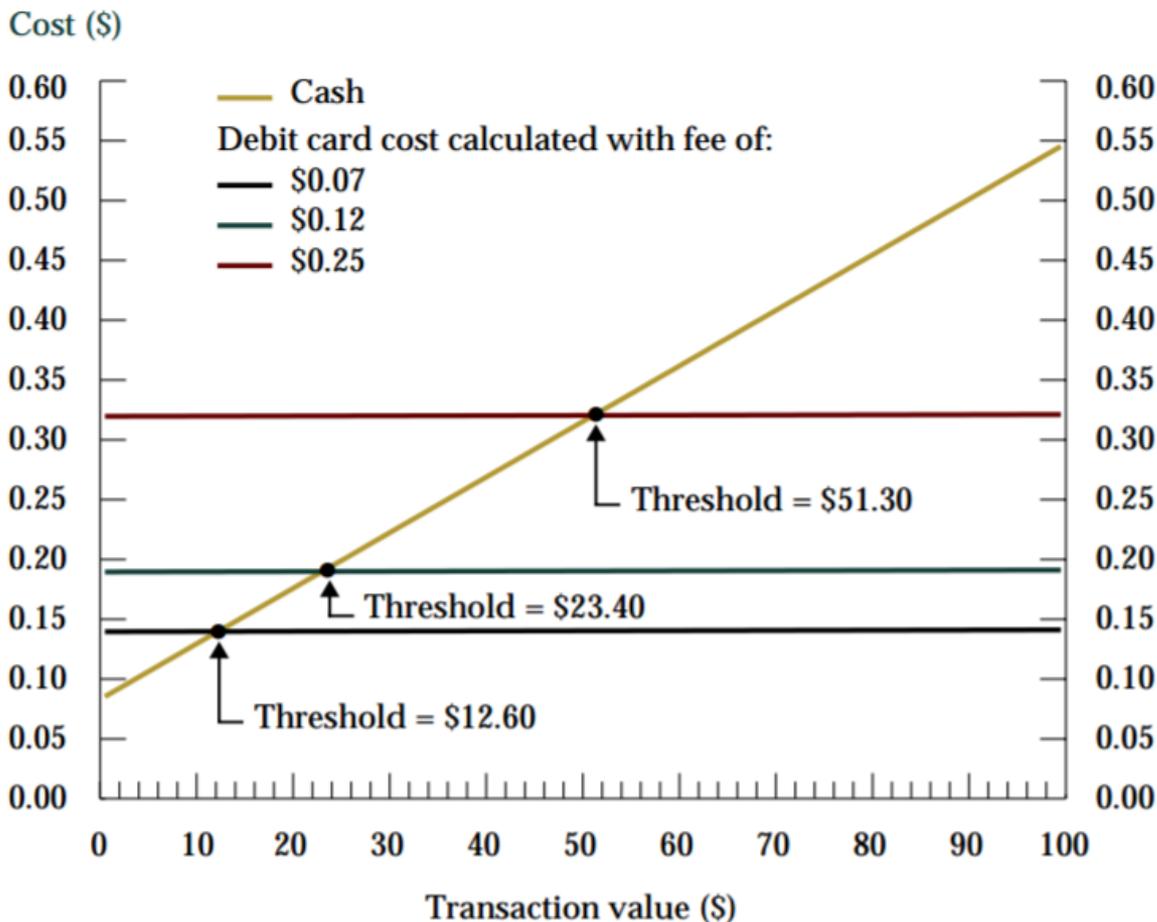
How does mobile money compare to cash in merchant payments?

# Depending on the fee structure, digital payments can be cheaper for merchants in the vast majority of retail transactions

The costs of cash increase with the amount paid, but those for digital payments do not. Hence **digital is always cheaper above a certain threshold**

This threshold depends on transaction fees for a given payment instrument and on cost levels in the economy

The example here is from Canada, so figures would be lower in an emerging market—but the principle remains the same



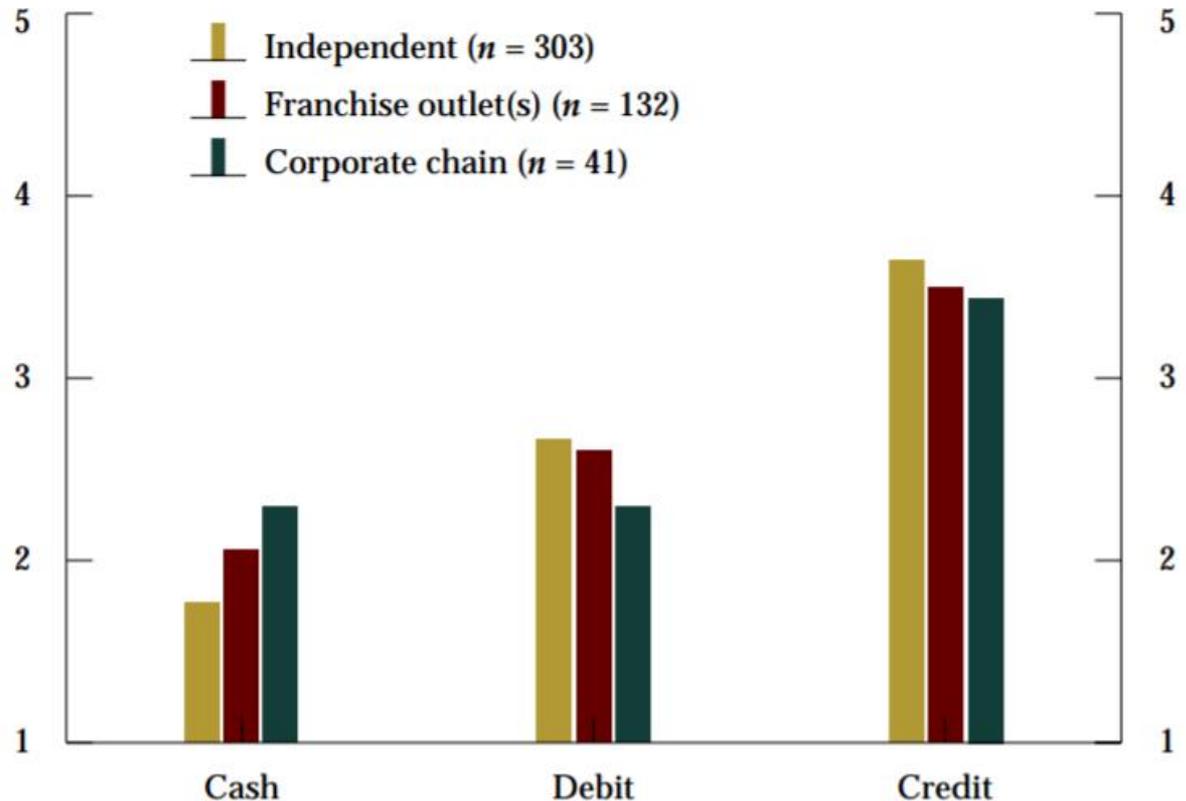
## ...but merchants still tend to *feel* that cash is cheaper

When asked to rate which payment methods they perceive to be more costly, **merchants often think that cash is cheaper**

This is because they aren't aware of the total costs of cash in the economy, but see only the direct costs to themselves—and may even under-estimate those

Large retailers tend to have a better sense of the costs of cash, but may still underestimate them compared to the costs of card payments

Average cost rating



# Cash has many other advantages over digital payments in retail

*Ignoring or underestimating them is a sure path to failure*

## Cash payments

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- “Free” to use
- Accepted everywhere
- Used by everyone
- Fast to exchange
- Intuitive to use
- Anonymous
- No pre-requisites
- Reliable

## Digital payments

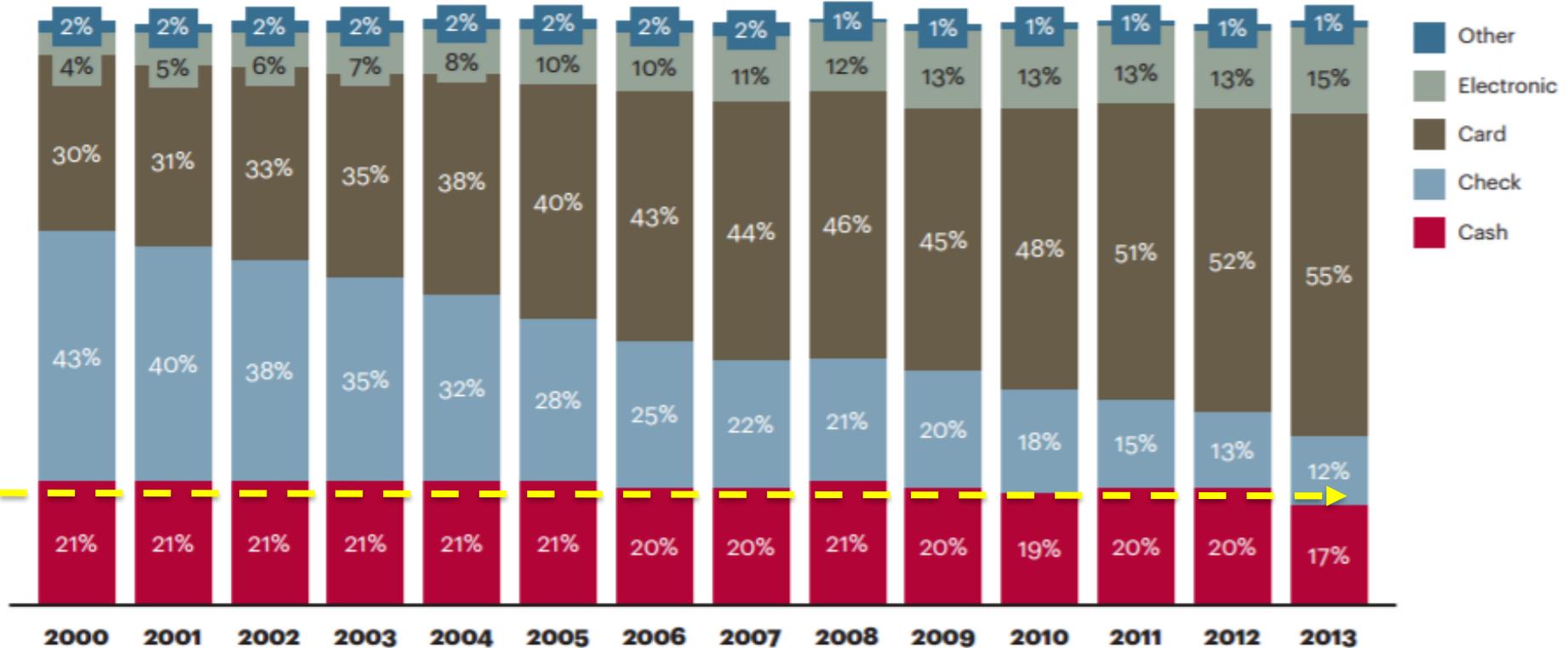
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- At least one side pays
- Not all merchants accept digital
- Not all customers use digital
- Often slow to use
- Often complex to use
- Not anonymous
- Requires special accounts, non-zero balances, hardware, software
- Subject to network, device, power, transaction failures

**Cash in retail works just fine for both merchants and customers**  
**To win, digital must be significantly better in some way**

We can see this even in the US, where cash use endures—*checks* are the payment instrument displaced by card and electronic payments

% of total U.S. consumer purchase volume



Note: Card includes credit cards, debit cards, prepaid cards, and electronic benefit transfer cards; electronic includes preauthorized payments and remote payments; other includes money orders, official checks, travelers checks, and food stamps.

Source: The Nilson Report

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If what you are offering to merchants and their customers is to fix their cash problem - don't bother.

**They don't  
have a cash  
problem.**



## Conclusion

Providers tend to underestimate the strength of cash in retail.

**Key question**

So is the merchant  
payments opportunity  
impossible to seize?

# Don't despair: There is a case for digital payments in retail

## Many of the challenges in the first generation of merchant payment offerings will be resolved as markets mature

- Some merchants do have **cash pain points** (security, distance, making change) and they may go digital despite the drawbacks
- Customers will keep **larger balances** on mobile wallets as trust grows, service offerings broaden, and digital payments become more widely accepted
- **Menu interfaces** will improve as smartphone ownership grows
- The introduction of **contactless technologies** like QR codes and near-field communication (NFC) is making the transaction process simpler and faster
- **Transaction flows** that require customers to do nothing but enter their PIN for authentication will make payments easier, faster, and less fraught with concern about making mistakes

## Don't despair: There is a case for digital payments in retail

It is perfectly possible to give merchants and their customers stronger reasons to prefer digital payments

- The cumulative costs of cash in the economy are substantial. The problem is **merchants and their customers aren't taking those costs into account** when making payment decisions
- Conversely, digitization opens up new revenue opportunities for providers. **But merchants and their customers don't get a share of that revenue, so have no reason to care**
- If we want merchants and their customers to choose to pay digitally, **providers must give them a stake in that choice**
- By tapping into the revenue and cost-savings potential, providers can generate the resources they need to reduce fees and other hurdles as well as to incent users through offers, discounts or loyalty rewards

**Providers must realize the gains of digitization from the start and distribute them to align incentives on both sides of the market**

## Conclusion

The real value to users from digital retail payments lies beyond the payment itself.

**Key question**

How can we offer enough value for merchants to prefer digital payments?

Value Added Service (VAS) powered by digital payments can help address actual merchant pain points and build a value proposition that is genuinely compelling

Small retailers across the world consistently identify the same types of pain points where a digital solution linked to payments could add real value:



### Customer Relationships

- Customer relationship management
- Loyalty
- Promotions
- Store credit
- Layaway



### Operational Challenges

- Working capital
- Inventory management
- Paying suppliers
- Paying staff
- Monitoring staff
- Managing fraud



### Business Intelligence

- Sales tracking
- Accounting
- Peer statistics
- Forecasting
- Tax reporting
- Customer feedback

If providers offer some of these VAS features, merchants typically say they would use digital payments - and pay for it

# VAS: Working Capital – The Challenge

*The single most common complaint from merchants is lack of access to capital*

## Pain points

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- 45% of MSMEs in Africa cite access to finance as big growth constraint
- In many countries, its likely even higher
- MSMEs in developing countries face a financing gap of up to \$2.6 trillion
- The main barriers cited are informality and lack of collateral and credit history

## Current solutions

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- Some retailers can access microfinance loans
- Most try to borrow from friends and family
- Some are forced to go to loan sharks
- In exceptional cases, suppliers can provide inventory on credit

## Challenges

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- The microfinance industry hasn't scaled enough to cover all MSMEs that need loans
- Microfinance loans can be expensive, laborious and time consuming
- Friends and family don't always have money to lend, and it costs social capital
- Loan sharks are very expensive and risky
- Very few suppliers are willing to give credit

# VAS: Working Capital – The Opportunity

*Merchant payments can help rapidly scale up access to formal capital for merchants*

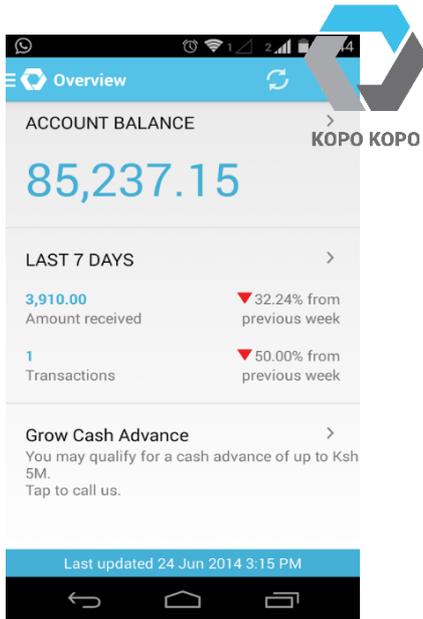
## Potential solutions

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- Auto credit scoring based on digital transactions
  - Credit limits based on a percentage of monthly cash flow
  - No collateral required
  - Apply instantly on phone app based on credit limit
  - One time fee with no late fees or hidden costs
  - No maturity or due date
  - Continual repayment as % of transaction value
  - Merchant chooses % of transaction value to repay
  - Fee depends on % chosen

- Digital payments generate a data trail that can be used for credit scoring
- Digitizing even a small share of transactions provides enough information for a working capital loan
- Such digital loan products have been successfully deployed in the US as well as in East Africa
- The features of these products are strikingly similar
- All appear to be profitable for providers and loved by merchants
- There is evidence they disproportionately benefit groups underserved by banks

# VAS: Working Capital – The Opportunity

An industry standard product is already emerging, with examples in Africa and the US



Loan limit is based on observed sales volume and expected future receivables



The merchant can pick a preferred repayment rate, with a lower total cost for a faster repayment rate



Repayment as % of transactions has several key advantages:

- Incentivizes merchants to promote digital to customers
- Better cash flow, easier risk management for providers
- Merchants feel “it repays itself”

# VAS: Customer Relationship Management – The Challenge

*The fundamental weakness at the heart of many small businesses*

## Pain points

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- Retail is a highly competitive space
- Margins are thin
- Merchants have few competitive strategies
- The relationship with the customers is what most cite as strength
- They have few tools to manage customer relationships well
- Driven merchants use manual systems

## Current solutions

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- Be a “nice guy”
- Keep a paper log of top customers and their phone numbers
- When a top customer hasn’t come in for a while, call them
- Send top customers SMS greetings
- Let top customers buy on credit sometimes

## Challenges

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- Manual processes take time and effort
- Records must be kept consistent or value falls
- Must remember to review the record regularly, make calls
- Hard to remember more than 20-30 top customers by face and name
- Employees don’t know who top customers are or use the log
- Calls and SMS messages cost both time and money

# VAS: Customer Relationship Management – The Opportunity

*Giving merchants the tools to know and engage their customers*

2A. CRM: CUSTOMER DATABASE ← HOME

☆	NAME ▼	CONTACT	VALUE ▼	VOLUME ▼	LAST VISIT ▼
	Gerard Pash	07918128626	1K TZS	10	876354
☆	Gerard Pash	07918128626	9K TZS	45	876354
	Gerard Pash	07918128626	2K TZS	2	876354
☆	Gerard Pash	07918128626	2K TZS	32	876354
	Gerard Pash	07918128626	3K TZS	23	876354
	Gerard Pash	07918128626	6K TZS	12	
	Gerard Pash	07918128626	5K TZS	18	
☆	Gerard Pash	07918128626	2K TZS	62	
☆	Gerard Pash	07918128626	10K TZS	47	
	Gerard Pash	07918128626	4K TZS	8	

Automatic record of transactions and contacts

One-click thank you messages to loyal customers

Auto-flag the best 25% to get to know not just your top ten, but your top hundred customers

2B. CRM: TRIGGERS & ACTIONS ← HOME

NEW UPDATE VIEW ALL

NOTIFY ME IF: on/off

If customer came **5+** times in 1 month

ACTION:

Send SMS saying **Thank you for your loyalty!**

Automatic discount **5%** off next purchase

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NOTIFY ME IF:

If customer spent **500,000** TZS in 1 month

ACTION:

Send SMS saying **Hope you like your purchases!**

Automatic discount **10%** off next purchase

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NOTIFY ME IF:

If customer has not come in **2** months

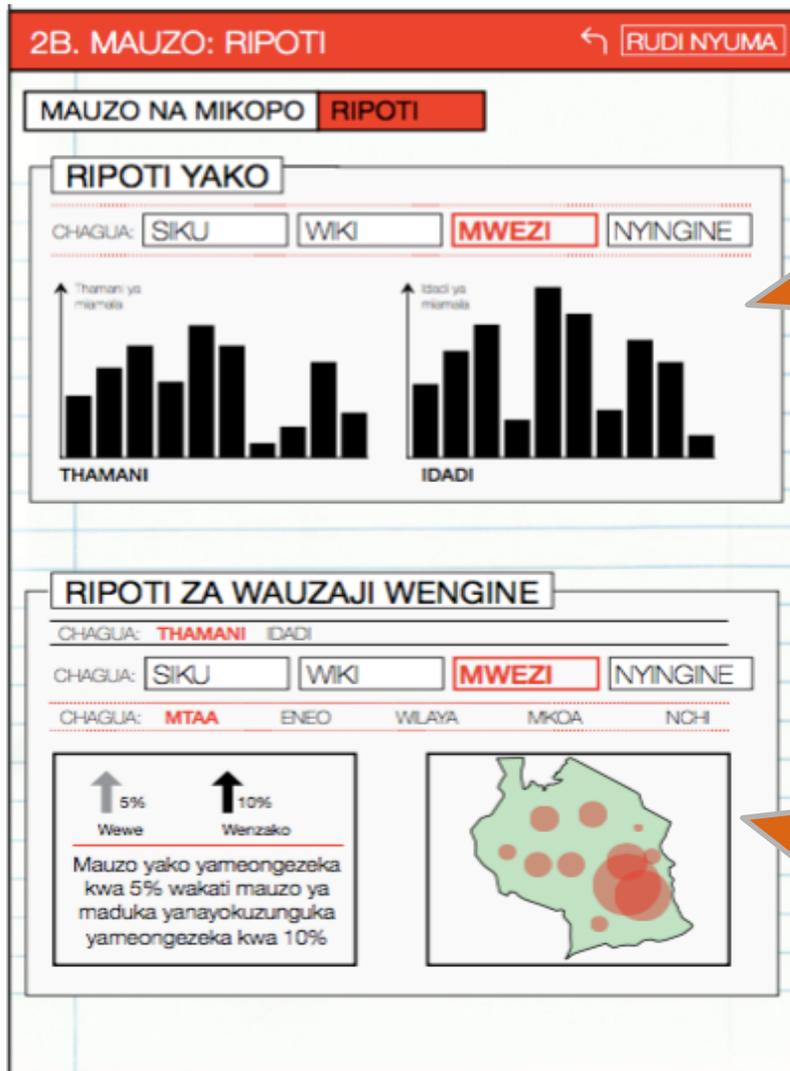
ACTION:

Send SMS saying **Have a look at our new stock!**

One-click marketing or offers to absent top customers

# VAS: Customer Relationship Management + Basic Analytics

Helping merchants see how their business is doing, over time or compared to peers



Sales volume and value by month, this year and last year

Sales growth in the last month, for you and similar merchants in the neighborhood

# VAS: Customer Relationship Management + Basic Analytics

*Showing merchants clear, concrete opportunities and simple ways to seize them*

**2. OPPORTUNITIES** ← MWANZO

**BRING YOUR LOYAL CUSTOMERS BACK!**  
You are missing out on **150,000 TSH** since **6** of your loyal customers have not returned this month.  
[CONTACT PAGE](#)

**PROMOTIONS BRING CUSTOMERS BACK!**  
By not offering any promotions this week, you are missing out on a total value of up to **200,000 TSH** that could be spent by **10 customers**.  
[PROMOTIONS PAGE](#)

**LOOK HOW OTHER MERCHANTS ARE BENEFITING!**  
In your neighborhood, SMS blasts have helped **7** merchants to increase their sales by an average of **80,000 TSH**.  
[PROMOTIONS PAGE](#)

Here's how much revenue you're missing out on due to absent former regulars

One-click call to action

Here's the response your peers are seeing to digital marketing

# VAS: Store Credit for Customers – The Challenge

*There are several ways to help merchants deal with store credit pressures*

## Pain points

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- Most merchants get requests from some customers to offer sales on credit
- They generally dislike extending store credit
- Yet they often feel obliged to extend it to top customers
- It is an important part of their otherwise sparse CRM toolkit

## Current solutions

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- Many merchants extend store credit to their best customers, even though they don't like it
- Customers spend time and effort to cultivate relationships with merchants to be able to ask for store credit in times of need

## Challenges

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- Merchants have scarce capital to begin with
- Credit risk assessment is not a skill they have
- It's hard for merchants to say no to good customers
- Conversely, due to a lack of relationship, merchants don't lend to customers who would in fact repay
- Reminding customers to repay takes time and incurs social stress

# VAS: Store Credit for Customers – The Opportunity

*There are several ways to help merchants deal with store credit pressures*

## Credit management

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- **Help merchants keep track** of store credit, including who borrowed what and when repayment is due, as well as the total amount outstanding
- **Remind the merchant** when credits taken are due for repayment
- **Issue automatic reminders** to customers for repayment, relieving merchants of the social friction around such reminders
- **Enable instant repayment** from customers' digital wallets, perhaps as a pre-authorized automatic direct debit

## Credit information

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- Builds up a **database on credit taken and repaid** by customers, like an internal credit reference bureau
- **Advises merchants on credit risk** by showing whether a prospective borrower is in good standing
- **Helps merchants avoid bad debt and gives them an external reason to say 'No'** to risky borrowers, saving them social capital in customer relations
- Enables merchants to **extend credit to customers they know less well**, which expands their business, welfare and financial inclusion

# VAS: Store Credit for Customers – The Opportunity

*There are several ways to help merchants deal with store credit pressures*

## Credit underwriting

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- **Third-party lenders underwrite the credit** on a merchants' behalf through a backend partnership with the DFS provider
- Underwriting **activates when a customer has a proven track record** of good repayment from multiple loans in the system
- **Eases pressure on scarce working capital** for merchants and reduces their risk of capital loss
- Merchant data on customers **reduces risk for digital credit providers** by providing credit history, just like credit bureau data
- Since high losses on new clients are a major driver of costly credit in current digital models, this **can lower overall credit costs**, benefitting the customer
- **Establishes a formal credit history for the customer** by replacing an informal store credit with a loan from a licensed financial institution

## **Conclusion**

DFS providers have lots of different ways to add real value for merchants.

**Key question**

Do value-added services give the merchants enough reason to drive digital payments?

# We tested the impact of VAS with Kopo Kopo, a merchant aggregator in Kenya, which offers a suite of services to its merchants



KOPO KOPO



## Business intelligence

Understand purchase trends and customer loyalty



## Outgoing payments

Make payments via bank transfer or mobile money



## Omni-channel

Access via a feature phone, smartphone, or computer



## Targeted SMS marketing

Segment messages to suit customer preferences



KOPO KOPO

**GROW**  
Cash  
Advance

Kopo Kopo merchants who use these VAS are indeed expanding the volume of digital transactions faster than similar merchants who do not



▲ 22%

**Higher growth in transaction volumes among merchants who used the Payments Hub**

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- Allows a Kopo Kopo merchant to settle from her merchant account in real time to almost any bank or mobile-money account in Kenya
- This resolves one of the key constraints merchants cite: the funds collected are stuck and must be cashed out (at cost) to be useful
- Kopo Kopo merchants can pay their suppliers digitally for new inventory, which is what merchants tend to spend the bulk of their revenue on

Kopo Kopo merchants who use these VAS are indeed expanding the volume of digital transactions faster than similar merchants who do not

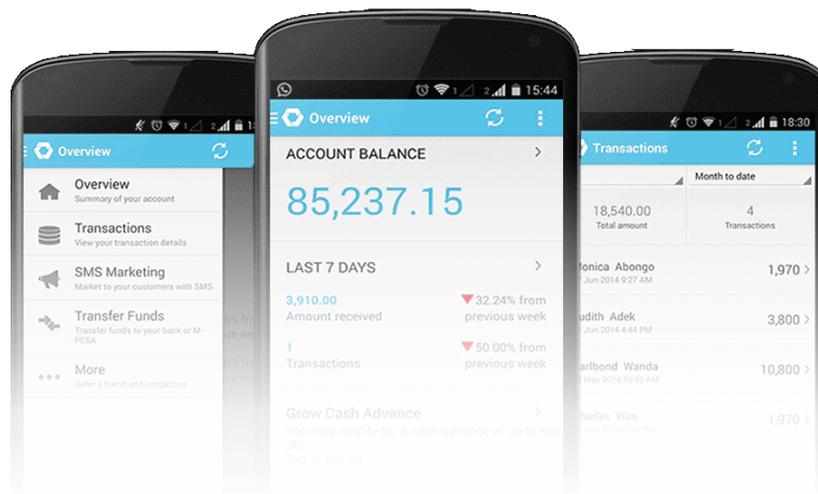


▲ 42%

**Higher growth in transaction volumes among merchants who used the GROW loans**

- Unsecured loan of up to \$50,000, no collateral needed
- No interest rate but a fixed fee depending on various factors, such as platform history, transaction volumes and repayment rates
- Repayment is made as % of each transaction. Merchants decide what % to use, which also affects the fee
- No due date, late fees or penalties. Loan is outstanding until paid
- Merchants must have been active on the platform for at least 3 months

There is also qualitative evidence that these VAS are strengthening Kopo Kopo's engagement with their merchants



- Merchants love the speed, efficiency and flexibility of the product
- The lack of a due date and continual repayment from transaction flow relieves the stress of the loan: “With GROW, you hardly feel the burden of repaying”
- The majority of loans are repaid faster than expected, across sectors, geographies and tenures on the platform
- Reuptake is very fast: the median time between GROW advances for repeat merchants is just three days

## Conclusion

Merchants can help  
drive the shift to  
digital payments

...if there is value in  
it for them.



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Visit [CGAP.org](https://www.cgap.org) for a playbook of detailed VAS concepts and get ideas for building a better value proposition for merchants, employees and customers to use mobile payments in the retail space.



THE GOVERNMENT  
OF THE GRAND DUCHY OF LUXEMBOURG

