

# Unravelling the web of inclusion



**Re-thinking the unbanked:  
5 markers to out-perform the informal sector**



## Methodology

This report was released at the Oslo Financial Inclusion Summit on 28 March 2019. The research and interviews for the report were conducted by MagnaCarta in February and March 2019.

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# Foreword

At Mastercard, a culture of diversity and inclusion is deeply ingrained within our corporate identity. As a result, we care deeply about the subject of financial inclusion. We also believe that, through our technologies and partnerships, we can contribute to significant and positive change.

Often, the debate on financial inclusion focusses on access to financial services, and the potential of digital and mobile technologies. Indeed, mobile technology has the potential to draw an extra 607 million people into the financial mainstream – and reduce the world's unbanked population by more than a third.

But, simply providing access to financial services is not enough.

To achieve any real impact, people also need to become active users of financial products. Yet, globally, one-in-five bank accounts are inactive, two-thirds of mobile money accounts lie dormant, and billions of people still resort to informal financial products – like neighbourhood savings clubs, local money lenders, and unlicensed remittance services.

Also, on its own, technology does nothing to address the deep gender gap in financial inclusion – and could exacerbate the inequalities.

This report aims to take a human-centred perspective. It considers the financial lives of underserved populations. It evaluates the informal financial products and services they currently use, and the risks they are exposed to. And it looks at what will enable, encourage and empower them to turn to the financial mainstream.

Ultimately, we need an ecosystem that includes efforts from governments, NGOs, banks, telecommunication companies, utilities, and payment networks to unravel the web of exclusion – an ecosystem with partners that are willing and able to collaborate to provide products and services that are relevant to the under-served.

We hope this report launched for the 2019 Financial Inclusion Summit in Oslo will help to focus the discussion, and direct the attention of all of us in our efforts to make financial exclusion history.

**Ann Cairns**  
**Executive Vice Chairman**  
Mastercard



# Executive summary

**Launched at the Oslo Financial Inclusion Summit in March 2019, Unravelling the Web considers the financial lives of the 1.7 billion “unbanked” adults, and the 1 billion “seemingly-banked” adults who have an account, but don’t use them<sup>1</sup>.**

Contrary to common thinking these people are likely to be experienced users of financial services, but have concluded that the world of mainstream financial services is not for them – perhaps because using the informal sector is easier, or it offers them a better deal.

So, the battle for inclusion is not about creating new behaviours. Nor is it about simply providing access to the financial mainstream. It is about how bona fide players and regulated providers can do a better job of **out-competing the informal sector.**

The cost of doing nothing is high. Using informal financial products and services, leaves the “unbanked” and “seemingly-banked” vulnerable. Informal products lack legal protection, certainty, and transparency. They are also problematic for governments.

But they often have attributes which people value. They may be deeply embedded in local communities, have an intimate knowledge of customers and are unlikely to intimidate customers with form-filling and bureaucracy. A significant advantage in regions where literacy rates are low.

As such, a traditional emphasis on greater access to financial services is not enough. As the report outlines, a tactical approach – focusing on mobile to deliver access to the **15 countries** that make up **60% of the world’s unbanked** – could draw an extra 607 million people into the financial mainstream reducing the world’s unbanked population by a third.

But like any business targeting new customers, inclusion strategies need to be relevant, so that they drive regular use, alongside other considerations:

- » **Cost** – the market is acutely cost-sensitive
- » **Complexity** – cater to the lowest common denominator
- » **Convenience** – minimise opportunity costs of formal financial services need to be minimised
- » **Customisation** – solutions need to meet the needs of micro-markets
- » **Cultural relevance** – align solutions to cultural expectations and preferences

And to ensure efforts to overcome a web of barriers – from lack of formal identity, to literacy rates and gender divides are built in.

Combining insights from discussions with innovators, banks and development finance institutions with analysis of current thinking, the report concludes with five ‘markers’ to help innovators

and institutions with their strategies to unravel the web of financial inclusion, summarised as follows:

- 1. Make products that are better in every way** – place the emphasis on human-centric design
- 2. Get the regulatory regime right** – achieve the right balance and design the right safeguards
- 3. Find alternative ways to achieve access that drive usage** – deploy a solutions-based approach combining different channels and distribution models
- 4. Pursue shared goals, seek collective gains** – pursue an ecosystem approach and nurture the network effects
- 5. Inspire ‘digital drift’** – promote digital payments to extend access and usage while empowering consumers

As the saying goes, ‘success has many fathers’ – though given the statistics, ‘many mothers’ might be more accurate. Indeed, it’s only through this kind of collective, collaborative thinking – one of the hallmarks of the Nordic region’s developmental and economic success – that financial exclusion can finally be consigned to history.

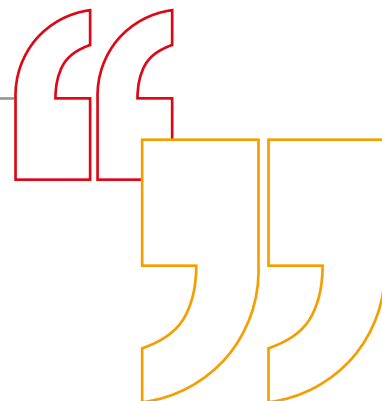
<sup>1</sup> As of 2017, 1.7 billion adults remained unbanked, according to the World Bank’s Global Findex Database





## INTRODUCTION

# Is the language getting in the way of solutions?



The importance of financial inclusion as a tool for economic development is widely known. It offers a route out of poverty. And is a prerequisite for many of the United Nations Sustainable Development Goals.

But there is something odd about the language – which misrepresents the reality of the situation and may even stand in the way of solutions.

Whereas the industry routinely uses words like “inclusion” and “exclusion”, few of the unbanked 1.7 billion adults<sup>2</sup> may actually regard themselves as “excluded” or “underserved”.

After all, if you are managing to get by on the equivalent of US\$5 a day<sup>3</sup>, you will probably be running an incredibly well-ordered financial life. You will

almost certainly be an experienced user of financial products (from payments to remittances, saving, and borrowing).

Like more mainstream customers, you will probably gravitate towards providers who offer the best combination of cost, convenience, certainty, and cultural relevance. It’s just that the daily mechanisms you’re using to do these things are outside the formal economy.

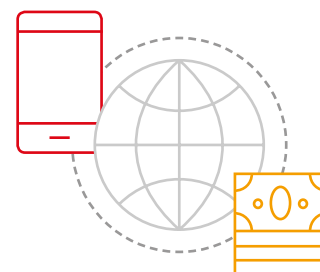
So, it is not that the 1.7 billion are necessarily excluded. Instead, they could have concluded that the formal sector is not for them – because the informal sector is easier to access or offers them a better deal – or simply that mainstream institutions have not done enough to prove the advantages and security they offer over their current informal arrangements.

2. As of 2017, 1.7 billion adults remained unbanked, according to the World Bank’s Global Findex Database

3. A McKinsey & Company report into the users of informal financial products suggested that the majority have an income of less than \$5 a day (see <https://www.mckinsey.com/industries/financial-services/our-insights/counting-the-worlds-unbanked>)

## Consider some of what we know:

1. McKinsey has calculated that around US\$4.2 trillion of savings are currently tied up in the informal sector (a sum larger than the entire US consumer credit market<sup>4</sup>).
2. Every single “excluded” household routinely uses at least four financial instruments, the average being eight-to-ten<sup>5</sup> (which doesn’t sound that different from our own experience).
3. It is estimated that the informal sector could account for as much as three quarters of the global remittance market (at more than US\$600 billion, the value of formal remittance flows dwarfs the value of official development aid by a factor of three<sup>6</sup>).
4. Even when people open a bank account (and become “included”), many continue to use the informal sector for the majority of their transactions. One-in-five account holders globally have ceased using their bank account<sup>7</sup>.
5. Everyone on earth has access to a rudimentary yet serviceable payment system, which is widely trusted, universally accepted, and perceived to be fee-free – it is called cash, and, in emerging economies, it accounts for more than 95% of all retail payments<sup>8</sup>.



So, the battle for inclusion is about how bona fide players and regulated providers can do a better job of **out-competing the informal sector** – whether by using new technology to improve efficiencies and lowering the cost-to-serve, or by closer collaboration between innovators, mainstream institutions, and ecosystem participants to drive access in lock-step with usage. In the parallel universe of the ‘unbanked’, the incumbents are not banks. They might be eager entrepreneurs, running successful businesses, deeply embedded in local communities, with an intimate knowledge of customers and

their circumstances. And, because they operate outside of the mainstream, they avoid the costs and the unwieldiness of regulatory compliance.

In this report we look at the subject from this perspective. Starting from the viewpoint that the unbanked are customers we should feel privileged to win, not pitied into serving, the research considers what it takes to out-compete the informal sector – and the strategies that an emerging class of financial inclusion-focused fintechs, and their institutional peers, need to deploy in order to succeed.

The report looks at the web of barriers impeding access to the nearly 2 billion customers globally that remain unbanked and at some of the recent successes from the global fintech community.

Coinciding with the 2019 Financial Inclusion Summit in Oslo, we also draw inspiration from the Nordic countries – a region with a strong track record in out-competing established norms – where a new generation of fintechs are working alongside development agencies, telecoms and financial services to tackle one of society’s most intractable challenges. To make financial exclusion truly a relic of history.

4. In February 2019, the US Federal Reserve announced that, for the first time ever, US consumer credit had exceeded US\$4 trillion (see <https://www.marketwatch.com/story/us-consumer-credit-tops-4-trillion-in-december-2019-02-07>)

5. Portfolios of the Poor, Stuart Rutherford, Jonathan Morduch, Daryl Collins, Princeton University Press, 2009

6. <https://www.theguardian.com/global-development-professionals-network/2016/may/11/remittances-three-times-greater-aid-sdgs>

7. McKinsey & Company calculates that three-out-of-four of the world’s population live in countries in which cash accounts for more than 95% of payments by volume (see <https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Employment%20and%20Growth/How%20digital%20finance%20could%20boost%20growth%20in%20emerging%20economies/MGI-Digital-Finance-For-All-Executive-summary-September-2016.ashx>)

8. McKinsey & Company calculates that three-out-of-four of the world’s population live in countries in which cash accounts for more than 95% of payments by volume (see <https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Employment%20and%20Growth/How%20digital%20finance%20could%20boost%20growth%20in%20emerging%20economies/MGI-Digital-Finance-For-All-Executive-summary-September-2016.ashx>)





## SECTION 1

# Why does it matter (not just to economies, but to people)?



The link between financial inclusion and economic development is well-documented.

For example, the World Bank draws a direct correlation between financial exclusion and poverty<sup>9</sup>. McKinsey & Company calculates that the widespread use of digital finance could boost the annual GDP of all emerging economies by \$3.7 trillion by 2025<sup>10</sup>. And Accenture reckons there is a US\$380 billion opportunity in annual revenues for banks who draw more people into the formal sector<sup>11</sup>.

But it can be useful to take a broader perspective, and think about the motivations of real people living real lives. Because, unless they see a compelling reason to change habits, they will stick with existing products and providers.

“  
Sure, it's possible to transact in the informal sector. That's what most people do. But I've seen exactly how difficult it is to transact in my home country of the Congo.

People assume it's just the way things are. But I've experienced the security and speed of real-time payments in the West. And I believe technology can bring the benefits that we, in the West, take for granted.”

*Gisele Mwepu, Founder, Okapi Finance*

9. See Piecing Together the Poverty Puzzle, The World Bank, 2018

10. See Digital Finance for All, McKinsey Global Institute, 2016

11. Billion Reasons to Bank Inclusively, Accenture Banking, 2015



**It is useful to remember the inherent disadvantages of informal products. Characteristics that can never be fixed – unless of course, the providers were to move to the formal sector.**



None of this is to say that, by definition, the informal sector offers a shoddy service. Freed from the burden of regulatory compliance, some providers may offer a lower-cost or more convenient service. Also, because they are embedded in the local community, they may benefit from high levels of trust (whereas formal providers may be seen as remote and impersonal).

However, there are certain attributes which informal providers do not have or would find it hard to replicate. And this means that the formal sector should benefit from some inherent competitive advantages.

### Unlocking legal protection

This is the big one. Outside of the formal sector, there is no formal right of recourse. Money lost is unlikely to be refunded. There are no binding terms and conditions. No clarity over rights, responsibilities, and liabilities. And no guarantees against over-charging or cheating.

### Unlocking certainty

Products from the informal sector are likely to be shrouded in uncertainty. There will seldom be a price-list, or a contract, or any accompanying literature. There may be uncertainties about charges, and liabilities, and timescales.

### Unlocking transparency

One characteristic of a healthy financial services marketplace is choice. And, with choice, comes the ability to compare providers and select appropriate products. In the informal sector, choices are likely to be more limited, with little basis to make like-for-like comparisons.

### Unlocking access

The informal sector is locally-based. People are restricted to the providers who happen to be operating nearby. With digital finance, distances become less relevant, while use of digital services leaves a 'footprint' that can unlock opportunities to access products that require payment or credit history.

### Unlocking flexibility

In the formal sector, prohibitions against restrictive practices mean customers are unlikely to be "locked-in" to a particular product or provider. In the informal sector, there will often be less scope for people to opt-in or switch-out.

### Unlocking scale and scope

Financial services tends to be a volume business. The greater the scale, the greater the efficiencies, and (in theory at least), the lower the prices. The informal sector is unlikely to summon up enough scale to compete, price-for-price, against a volume player.

### Unlocking convenience

One of the big benefits of bank accounts and digital finance is the convenience they can bring. People without accounts often travel long distances to pay bills. They spend money getting there. They stand in line when they arrive. When, all that time, they could have been more productive.

### Unlocking "syndicated" trust

Informal products tend to be deeply embedded in the local community, so are trusted. But what happens when populations change or become more transient? With the formal sector, there's less reliance on the "earned" trust, as trust can be "syndicated" via brands and regulatory protections.



## SECTION 2

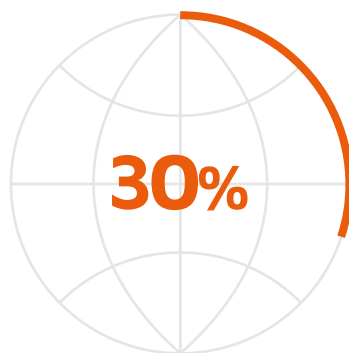
# What does it take to out-compete the informal sector?



## Transactional accounts

Often the entry-level product – the gateway, that will draw people into the wider world of formal financial services.

The trouble is that, for anyone on a low income, there is little obvious rationale to open one, especially in a predominantly cash-based economy. For the 30% of adults worldwide who don't have such an account, it just isn't seen as relevant. Nearly two-thirds say they don't have enough money to warrant one, 30% say they do not need one, and 26% say a family member already has one. Other barriers include cost, distance from a branch, and a lack of documentation<sup>12</sup>.



**30% of adults worldwide do not have a transactional account**

**Nearly two-thirds** say they don't have enough money to warrant one



**30%** say they do not need one



**26%** say a family member already has one



### Hero products

#### Advantages

Ease and convenience

No application process

Privacy  
(from the authorities or family members)

No cost

**Jam jar**

**Cigar box**

**Mattress**



#### Disadvantages

Risks of loss and theft

No automated way to pay bills or transfer money

### Alternatives

**Current account**

**Mobile money account**

**Prepaid card account**

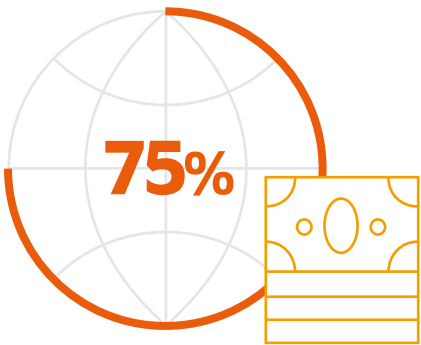


12. Global Findex Database, World Bank, 2017

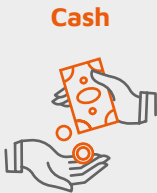
Payments


The benefits of electronic payments and the inherent costs in managing, processing and obtaining access to cash may be widely understood but the majority of the world’s retail payments still involve cash, and the world’s emerging economies remain heavily cash-centric. Cash is a universal problem - the cost of it impacts developed as much as developing markets. In 2015 the US spent around \$200 billion handling cash, while in India an estimated 72 million hours were spent chasing cash<sup>13</sup>.

In fact, just 2% of the global population live in countries where more than 50% of payments are digital. By contrast, three-quarters live in countries where cash accounts for more than 95% of payments<sup>14</sup>. For buyers and sellers alike, there is no obvious rationale to change. Equipping oneself to pay or get paid digitally entails cost and time and effort. And, if few of your peers ever use anything but cash, what’s the point?



of the global population live in countries where cash accounts for more than 95% of payments

Hero products		
Advantages	<div>Cash</div> 	Disadvantages
<div>Universal acceptance</div> <div>Ease and convenience</div> <div>No application process to navigate</div> <div>Privacy (from the authorities or family members)</div> <div>No cost</div> <div>Trust</div>		<div>Time taken to withdraw cash or make payments</div> <div>No opportunity for remote or distance payments</div> <div>Risks of loss and theft</div> <div>Little opportunity for spontaneous purchases</div> <div>No in-built scope for multi-currency payments</div> <div>No consumer protection</div>

Alternatives
<div>Prepaid cards</div> <div>Debit cards</div> <div>Mobile money</div> <div>QR payments</div> <div></div>

13. The Hidden Cost of Cash, Mastercard, 2016  
14. See Digital Finance for All, McKinsey Global Institute, 2016



## The poorer you are, the higher the costs of cash

From the consumer's perspective, the perceived benefit of using cash may be largely driven by the perception that cash is cheap. However, a recent study from South Africa suggests that using cash is far from cheap – and the poorer you are, the more expensive it becomes<sup>15</sup>.

The study measured the direct costs of cash (including ATM, branch costs and cash-back at Point of Sale) and the indirect costs of cash (including travel costs, time-related costs, foregone interest, and theft) for consumers across low, middle and upper-income segments of the population, taking into account their respective behaviours and preferences:

Cash costs South African consumers

**R23 billion**  
(us\$1.6 billion)

or 0.52% of GDP

Cash accounts for

more than  
**50%**

of all consumer transactions by value

The **indirect cost** of using cash accounts for

**61%**

of the total cost of cash to consumers

The costs are disproportionately carried by low-income earners – who forfeit

**4%**

of their earnings to the costs of cash, compared to the **national average of 1.1%**

The study also suggests that low-income earners, **46% of whom are unbanked, tend to use cash as a result of very limited card acceptance at micro-merchants, particularly in rural and peri-urban communities.**

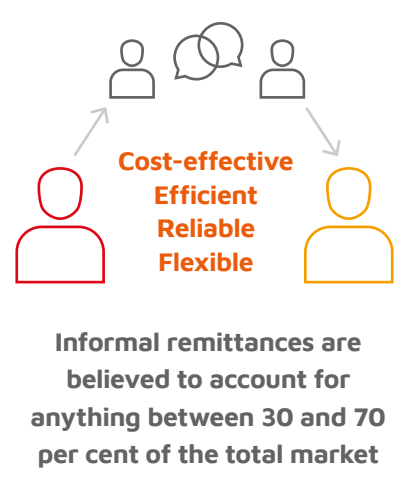
<sup>15</sup>. Cost of Cash Study, 2017, commissioned by Mastercard and conducted by Genesis Analytics

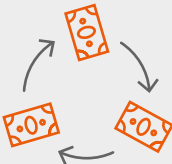
Remittances

A large majority of the world’s remittances travel through informal channels.

Options can include the physical transfer of hard cash (in several African countries, for example, transport operators such as bus and taxi companies have developed elaborate cross-border remittance systems, whereby cash can be transferred to even the remotest of villages<sup>16</sup>). But, more often, funds will be channelled through well-established business and social relationships (often referred to collectively as the ‘hawala’ system<sup>17</sup>).

These informal remittances are believed to account for anything between 30 and 70 per cent<sup>18</sup> of the total market, and it is easy to understand why. For example, one analysis of the hawala system suggests that it benefits from cost-effectiveness (as operators have low overheads), efficiency (as remittances can be completed within a few hours), reliability (as the system is based on trust), flexibility (as there is no need for formal identification), and cultural friendliness (given the close ethnic and kinship ties with brokers)<sup>19</sup>.



Hero products		
<b>Advantages</b>  Low cost  Ease and convenience  No application process  Privacy (from the authorities or family members)  Speed of transfer  Trust	<b>Physical transfers of cash</b>  <b>Alternative value transfer systems</b> (like hawala, hui kuan, hundi, or chit systems)  	<b>Disadvantages</b>  Risks of loss and theft  Risk of overcharging or unexpected charges  No consumer protection


Alternatives

**Bank transfers**

**Mobile transfer operators**

**Postal organisations**

**Mobile remittances**



16. A useful description of the involvement of transport operators can be found in Informal Remittance Systems in Zimbabwe, R Dillon, 2013

17. For a useful description of the various systems and how they differ, see International transactions in remittances, a guide for compilers and users, International Monetary Fund, 2009

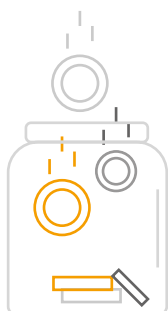
18. In fact, some estimates on informal remittances put the figure at up to 300 per cent. But one of the most authoritative and widely cited studies puts it at between 30 and 70 per cent - Remittances: Transaction Costs, Determinants, and Informal Flows, C Freund & N Spatafora, 2005

19. Hawala remittance system and money laundering, M Chêne, 2008

## Savings

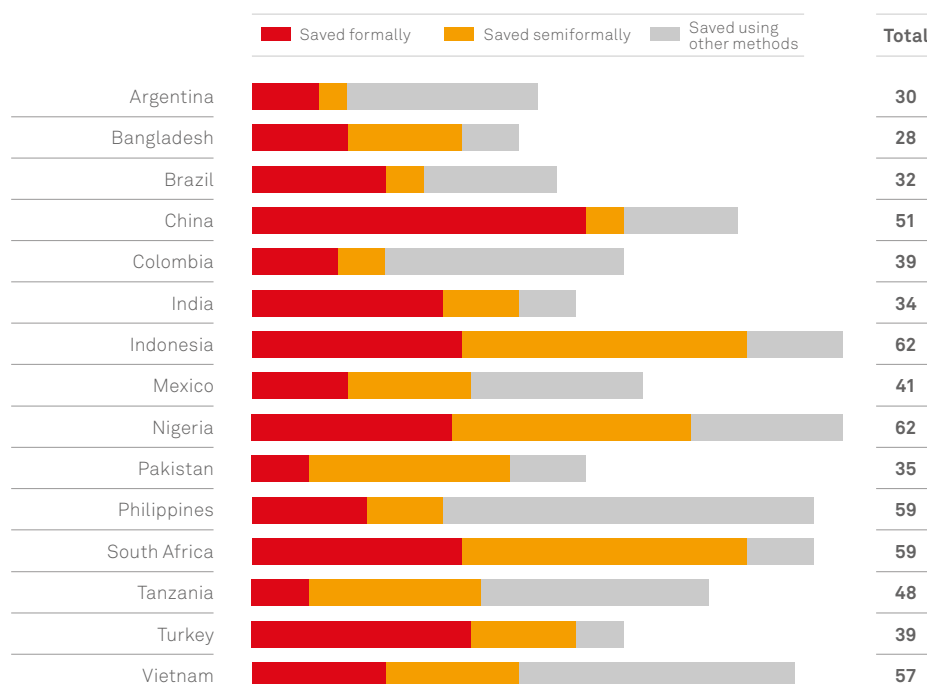
Savings are widely acknowledged to be the most effective mechanism to improve individual resilience, a key contributor to financial health, and according to the World Bank, around a third of unbanked adults save.

Even if they have a formal banking relationship however, many consumers in developing countries continue to turn to the informal sector for their savings. As the World Bank's most recent Findex survey shows the informal savings sector is thriving, often operates on a hyper-local basis (see figure 1), and savings behaviour is highly diverse across all regions.



**Fig. 1: Savings behavior varies widely across developing economies**

Adults saving any money in the past year (%), 2017





Source: Global Findex database.

Note: People may save in multiple ways, but categories are constructed to be mutually exclusive.

Saved formally includes all adults who saved any money formally.

Saved semi-formally includes all adults who saved any money semi-formally but not formally.

Hero products			Alternatives
<b>Advantages</b>	<b>Mattress</b>	<b>Disadvantages</b>	
Ease and convenience	<b>Savings groups</b>	Risks of loss and theft	<b>Current account</b>
No application process	<b>Rotating Savings &amp; Credit Associations</b>	May have low or negative interest rates	<b>Mobile money account</b>
Strong cultural relevance	<b>Assets</b> (jewellery, gold, livestock, etc)	Lack of flexibility	<b>Savings account</b>
Trusted local players and mechanisms		Risks of misunderstanding	<b>Investments</b>
			

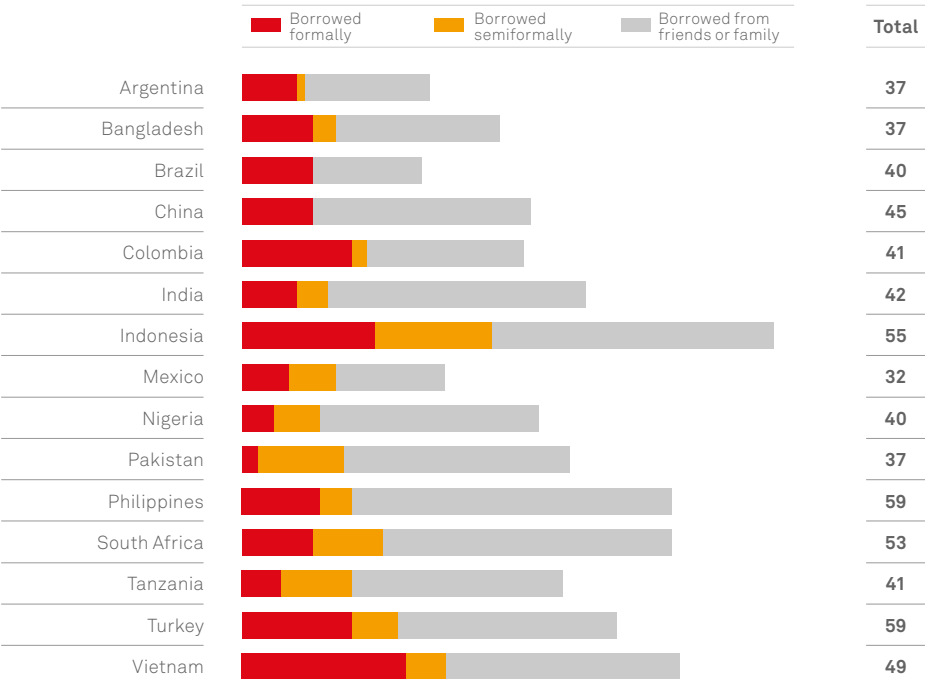
Borrowing

Like the market for informal savings, the informal borrowing sector is large, diverse, and generally thriving. In developing economies, people are most likely to turn to the informal sector for their borrowing needs, irrespective of whether they have a bank account with significant variations across the globe.



Fig. 2: Differing sources of credit across developing economies

Adults borrowing any money in the past year (%), 2017



Source: Global Findex database.  
Note: People may borrow from multiple sources, but categories are constructed to be mutually exclusive. Borrowed formally includes all adults who borrowed any money from a financial institution or through the use of a credit card. Borrowed semiformally includes all adults who borrowed any money semiformally (from a savings club) but not formally. Borrowed from friends or family excludes adults who borrowed formally or semiformally.

Hero products			Alternatives
<b>Advantages</b>	<b>Borrowing from friends &amp; family</b>	<b>Disadvantages</b>	<b>Credit card</b>
Ease and convenience	<b>Pawnbrokers</b>	Risks of overcharging	<b>Bank overdraft</b>
No application process	<b>Money lenders</b>	May have high interest rates	<b>Bank loan</b>
Strong cultural relevance	<b>Informal credit</b>	Lack of flexibility	<b>Micro-finance</b>
Trusted local players and mechanisms	<b>Savings &amp; Credit Associations</b>	Risks of misunderstanding	



## Challenging assumptions

No reader of this report should conclude that we are advocating the informal sector. As outlined in Part 1, informal products have many innate disadvantages for consumers, leaving them locked-out of opportunities to change their circumstances, develop their business or save for their future. They are also problematic for governments.

But it is worth challenging the assumption that the informal sector is, by definition, bad, unscrupulous or uncompetitive. For an extreme view on the matter, consider the table below from Hari Srinivas of the Tokyo Institute of Technology, who calls for a better understanding of the credit systems developed by low income households and their implications for devising appropriate formal mechanisms:

### Why informal credit markets are used by the urban poor in India

It does not require a license
It facilitates very small savings behaviour
It is non-profit motivated
It has strong organizational structures
It does not need collateral
It provides localized services
It has specific borrowers identified
It has personalized services
It has multiple proprietorships
It has close informational links
It has high repayment rates
It facilitates reciprocation of credit disbursal
It is not regulated by the central bank
It encourages community participation in other fields of development

Source: Hari Srinivas, Global Development Research Center, 2016<sup>20</sup>

“

In every market we've worked in, we've seen thriving informal markets. Often, the informal sector is as much as 85% of the total market. So, we ask ourselves, who should we work with? And how do we factor this into our planning? ”

Joakim Hedenstedt, COO and Co-Founder, Aion Sigma

“

The assumption is that so-called excluded customers use inadequate financial mechanisms. But the fact is, the financial lives of those thought to be excluded are more complex than the financial lives of people who use the financial system. ”

Dr Graunt Kruger, Head of Strategy Research, Intellidex

“

It's not a simple matter of signing up agents. We need them to represent our brand, and deliver our products, and look out for the financial well-being of our customers. Training and service quality are new disciplines we've had to master. ”

James Mwangi, CEO, Kenya Equity Bank

20. For the full details and context, see: 14 Reasons why the Informal Credit Market is used by the Poor: Policy Implications for Microcredit Programmes in Developing Countries, Hari Srinivas, 2016 (published by the Global Development Research Center at <http://www.gdrc.org/icm/14reason.html>)

Gaining competitive advantage

Part 1 of this report looked at the disadvantages of the informal sector and, conversely, the innate advantages of formal providers, including:

Legal protection	Flexibility
Certainty on conditions and pricing	Scale and scope
Transparency	Convenience
Access	Syndicated trust

But on their own these are not enough. So, drawing on the above analysis, what other attributes should providers consider when designing, creating or promoting new products and services:



Cost

This market is acutely cost sensitive – and the cost structures of traditional banks often prevent them from reaching or serving low income people and micro-businesses.

That is not to say that consumers won’t pay for the value they receive. Take, for example, some of the Susu saving schemes in West Africa. Typically, you may pay a set daily amount of just a few cents. Then, at the end of the month, you get all of your deposits back, minus one day’s worth. That is regarded as a small price to pay for the discipline of saving. You put the money well out of temptation’s way. And you get back a lump sum. But that small price equates to a negative annualised interest rate of 40%.

“In theory, microfinance is great. In practice there are two big issues – the operating models are too expensive and they are not sufficiently scalable.

The promise of the Fintech community is that it brings the mindset, the skills, and the technology to solve these issues. If they can combine a low cost of service with an ability to scale-up, the effect can be transformational.”

Erik Sandersen, EVP and Head of Financial Institutions, Norfund

“When we look at the data, one clear takeaway comes to light: The poor – especially poor women – are neither riskier nor less profitable to serve than other, more mainstream clients.”

Camilla Nestor, CEO, MIX

“Microfinance is, by its very nature, a cost-intensive model. But Fintech has the potential to change everything – by reducing operating expenditure and credit risk and increasing outreach.”

Arthur Sletteberg, MD, Nordic Microfinance Initiative

## Complexity

Mobile technology is championed as a solution to financial exclusion. And around two thirds of the world's unbanked adults have a mobile phone.

But this is a market with a very long tail. Basic feature phones are common place. Gaps in network coverage are the norm. So, for solutions to take root, they need to cater to the lowest common denominator.

“

We had to make some big shifts.

Liquidity had to be available as soon as funds are deposited, account fees had to be replaced by service fees, and minimum balance requirements had to be scrapped. We also needed to improve access, with mobile bank-branches and agent relationships. And we needed to offer a digital banking service that could be accessed by older, 2G phones.

If, as a bank, you're serious about financial inclusion, you need to re-think and re-formulate everything - the business model, organisation culture, brand, delivery channels, products and services, and pricing. ”

*James Mwangi, CEO, Kenya Equity Bank*

“

In a country like Niger, technology has to be adapted to work off-grid. For example, to support communities who don't have regular or affordable access to data communications, asynchronous reconciliation is necessary. We also have to build for older types of phone, as smart phones are suffering in this environment. And we need to replace conventional text-based menus with icons. ”

*Sofie Blakstad, Founder and CEO, Hiveonline*

“

Never underestimate the technical and infrastructural challenges facing many emerging markets.

Although mobile access may be high, the capacity and capability of the networks can be very low. Often, there is just not enough bandwidth available, and data connectivity can sometimes be down for days. ”

*Tina Sommer Blond, VP  
Business Development, Bancore*

## Convenience

---

Many commentators on financial exclusion talk of the opportunity costs. People without bank accounts often travel long distances to pay bills. They spend money getting there. They stand in line when they arrive. And all that time they could have been earning.

But consider the flip-side. Formal products are difficult to access and apply for, especially if branch networks are sparse, opening times clash with working hours, and official documents are necessary. In the World Bank's Findex survey, almost a quarter of unbanked adults said that financial institutions are too far away. In some economies the share was higher, with about 33% citing distance as a barrier in Brazil, Indonesia, and Kenya—and 41% in the Philippines<sup>21</sup>.

By contrast the informal market may be served by hyper-local, hyper-attentive providers, who will visit your home or place of work. They won't intimidate you with form-filling and bureaucracy, nor will they expect you to be literate. This level of convenience can be hard to replicate over online channels.

“

In the old days, your bank was a place you visited. But what if you live a two-day journey away from your nearest bank (which isn't unusual in rural locations)? Then, to add to the cost of the banking services, you have the opportunity cost of physically getting there. That's why we looked at an agent model and started investing in mobile solutions. ”

*James Mwangi, CEO, Kenya Equity Bank*

“

The whole banking model has been transformed. A few years ago, the branch network was the only delivery channel. Today, 79% of transactions go through mobile phones, and 12% through our agents.

Clearly, it's easier and more convenient for our clients. But it also reduces our cost base. And it makes it easier for us to grow – because, when the bank is digital, there are no limits. ”

*Abraham Guzman, Founder, EVVA Finanzas*

“

For us, a key was to take the bank to the people. We did it with an agency network. We did it with mobile technology. And we even did it with Land Rovers – creating a mobile branch on four-wheels and driving it the last mile. ”

*James Mwangi, CEO, Kenya Equity Bank*

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21. Global Findex Database, World Bank, 2017



## Customisation

This is not a single market. It is a bewildering array of micro-markets.

Even within national boundaries, you are likely to confront an array of different requirements, especially between urban and rural populations. By way of comparison, consider the ways that consumer product brands may flex their products.

“

In Peru, we work with mom-and-pop shops, which are generally run by women. And, for them, it's a complementary income. They live upstairs, the shop is downstairs, and an attractive proposition for them is one that makes life simpler.

In Mexico, it's different, and more business-like. The stores tend to be bigger, and to be the main source of income. So, the motivation is different. An attractive proposition is one that helps them grow and manage their risks. ”

*Dan Cohen, CEO, Tienda Pago*

## Cultural relevance

Many mechanisms in the informal sector can have a strong social purpose and can be deeply embedded in local communities, which means people may be very comfortable dealing with them – and uncomfortable rebelling against them.

By contrast, many of the unbanked believe financial services are not relevant to them. Globally, almost a third of unbanked adults say they don't need an account, 16% said they distrusted the financial system, and 6% (equivalent to 102 million consumers) said it conflicted with their religious principles<sup>22</sup>.

“

I took a long hard look at Mexico's consumer lending market, sitting down with people, and discovering the realities of their situation. They had plenty of opportunities to get informal credit through the so-called prestamistas (money lenders), but ran the risk of getting completely locked-in to them.

There were no easy ways to get formal credit – which could bring more flexibility as well as a better deal. ”

*Dan Cohen, CEO, Tienda Pago*

22. Global Findex Database, World Bank, 2017

Thinking beyond tactical access

The commentary on financial inclusion often focusses on access to financial services – and the potential of mobile technology to unlock access to greater numbers of people.

Indeed, just 15 countries account for over 60% of the global unbanked population where 607 million people have a mobile phone, but do not yet have a bank account. Mobile technology could viably provide them with immediate access to the benefits of financial inclusion.

In all of these countries, except India, the number of people with a mobile phone outnumbers the number of people with a bank account by several million (rising to 204 million in China).

“For micro-retailers, there’s a huge issue with working capital. If they can get their hands on low-cost, short-term finance, they can more easily keep high-rotation products in their stores, and the momentum of their business can grow.”

Dan Cohen, CEO, Tienda Pago

While this sounds exciting, simply providing access to financial services is not enough to address financial exclusion. To achieve real impact, people also need to become active users of financial products. Globally, 20% of people with a bank or mobile money account have not used it for more than a year, and many more people only ever use their account on an occasional basis.

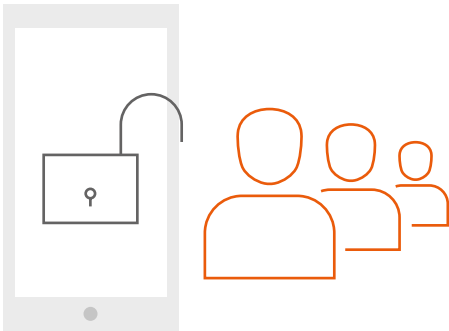
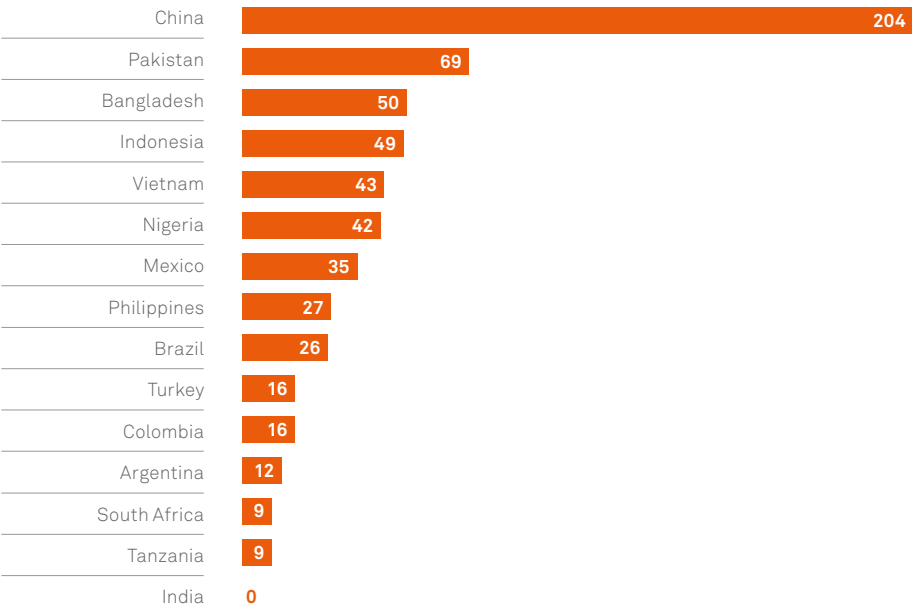
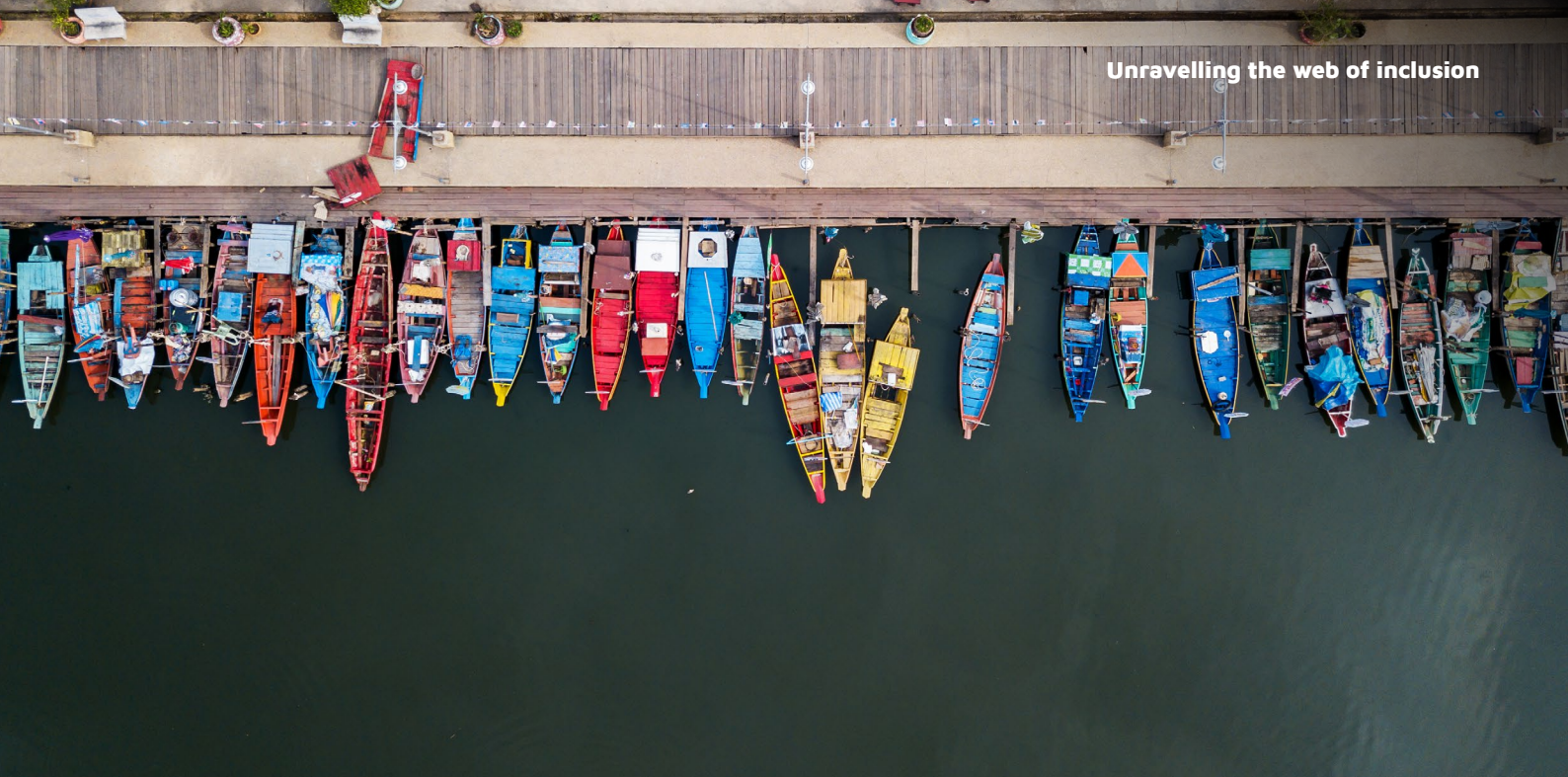


Fig 3: Tactical Reach Index: Unbanked Populations v Mobile Ownership

Number of customers with a mobile phone but with no bank account (million)



Source: Mastercard analysis based on figures from the World Bank’s Global Findex Database, GSMA Intelligence, and Pew Research Center

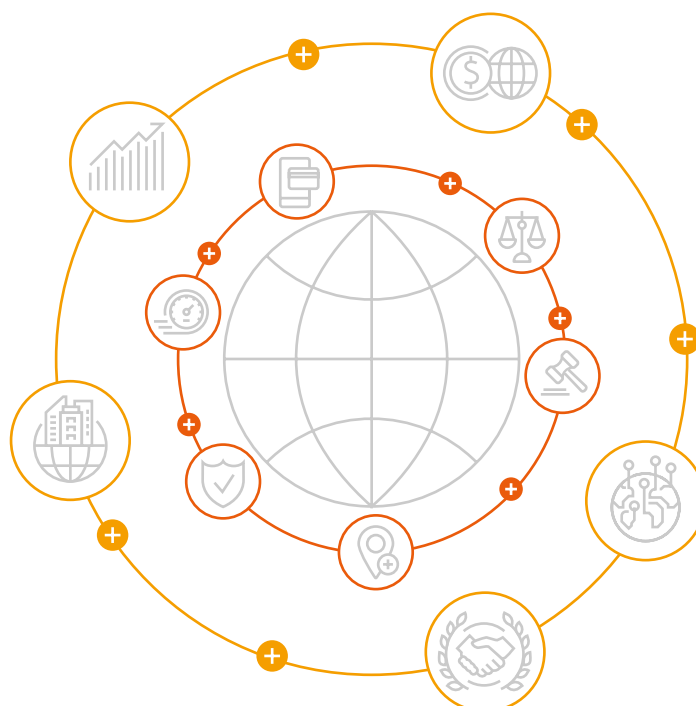


## SECTION 3

# What's the size of the prize? (and what's standing in its way?)

We have considered the financial lives of the unbanked. We have concluded that they are often experienced and discerning users of financial products. And we have suggested that, often, they receive a decent service from an attentive cadre of informal providers.

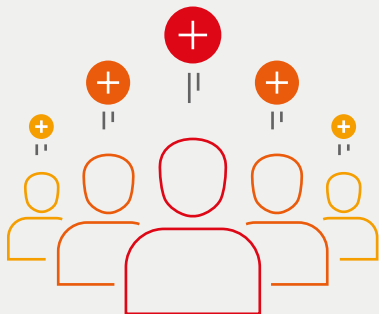
Even where the informal sector may be providing a reasonable service however, it robs people of certainty, legal protection, the advantages of scale and deprives the wider economy of much needed liquidity. It can harbour criminal activity. And compromises the ability of nations to develop – meaning that divides along economic and gender lines remain, or even widen.



**On a micro-level, the gains may not be that significant.  
On a macro-level, the dividends of a well-functioning  
financial services market are immense.**

### The World Bank

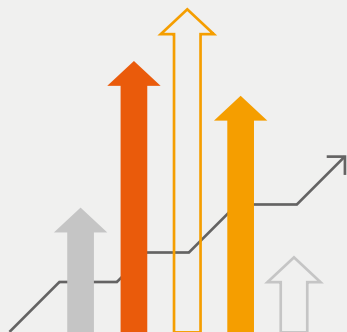
cites a wide range of studies to show how access to formal financial services can help **improve people's income-earning potential and thus reduce poverty**, help them to manage risk, help them accumulate savings and increase spending on necessities, and reduce the time and opportunity costs of receiving payments<sup>23</sup>.



### McKinsey & Company

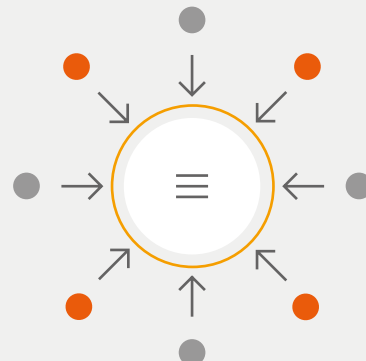
calculates a wide range of potential gains, that could be captured by 2025, such as:

- » **Boosting global GDP by US\$3.7 trillion**
- » **Liberating US\$4.2 trillion in new deposits**
- » **Extending US\$2.1 trillion in additional loans**
- » **Reducing government leakage by US\$110 billion<sup>24</sup>**



### Accenture

believes that, by 2020, banks could **generate up to US\$380 billion in annual revenues** by closing the small business credit gap and bringing unbanked or underbanked adults into the formal financial system<sup>25</sup>.



## No fintech is an island

The size of the prize is significant. And immense progress has been made in extending the reach of formal financial services (the World Bank's Global Index

Database reports that the proportion of adults who have an account at a formal financial institution jumped from 51% in 2011 to 69% in 2017<sup>26</sup>).

23. See the report accompanying the 2017 Global Findex Database for specific examples and quantified benefits

24. See Digital Finance for All, McKinsey Global Institute, 2016

25. Billion Reasons to Bank Inclusively, Accenture Banking, 2015

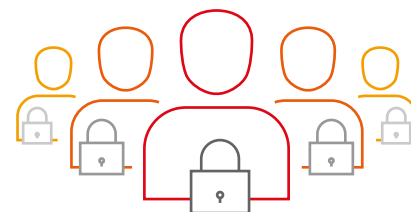
26. 2017 Global Findex Database



## Despite progress the remaining 1.7 billion unbanked are the hardest to reach.

And the concern is that a complex web of barriers stands in the way of further progress - ranging from distribution, to national regulation and literacy rates.

The network effects of this web are preventing consumers from migrating from the informal to the formal financial services sector:



### The crisis of identity

Generally speaking, you cannot enter the world of formal financial services unless you can prove who you are. Yet the World Bank reports that 1 billion people globally face

challenges in proving who they are because they lack official proof of their identity, and close to 40% of the population aged 15+ in low-income countries do not have an ID<sup>27</sup>.

### The lack of literacy

Generally speaking, you will find it difficult to enter the world of formal financial services unless you can read or write. Yet 781 million adults globally are

thought to be illiterate, more than three quarters of whom live in South Asia, West Asia and sub-Saharan Africa<sup>28</sup>.

“

It's a huge challenge for displaced people and youth in emerging markets to prove their skills and identity. With a digital proof of skills, we can enable untapped talent with global work opportunities and empower financial inclusion. ”

*Thea Sommerseth, Co-founder and CEO, Diwala*

### The issue of access

Generally speaking, you will be deterred from entering the world of formal financial services unless you live close to a bank branch, have a reasonably capable mobile phone or benefit from reasonably reliable mobile reception. Yet, 22% of adults without an account say that distance to a financial institution is a barrier

(rising to 33% in countries such as Brazil, Indonesia, and Kenya, and 41% in the Philippines)<sup>29</sup>. Similarly, a third of unbanked adults (equating to 560 million people) have no mobile phone. And those that do will often have a basic feature phone and, in remote areas, gaps in coverage are commonplace.

“

With 177 branches, in Kenya alone, we have quite a big network. But it is no way big enough to reach into rural areas. So, we signed-up 36,000 agents, which gives us a presence in 36,000 villages. It's a huge change for us, and for the people we serve. ”

*James Mwangi, CEO, Kenya Equity Bank*

27. Identification for Development (ID4D) Annual Report, 2018

28. CIA World Fact Book, 2015

29. 2017 Global Findex Database

The gender divide

Another important consideration is a deep gender gap, which could widen if mobile and digital technologies become the primary delivery channel for financial services. In developing countries, for example, there is already a gap of 8% in account ownership (67% of men have an account compared to 59% of women). This gap extends to

double-digits in many countries, such as Morocco and Peru, and reaches 30% some countries, like Pakistan and Bangladesh. Women are much less likely to have made or received a digital payment, more likely to have used informal financial products, and less able to come up with emergency funds in the face of an emergency.

Given the inter-connected nature of these barriers, on their own, even the most creative Fintech player or innovative bank will find it hard to overcome them.

These are self-reinforcing developmental problems, that require coordinated partnerships between public, private and civil society actors to solve.

In the coming decade, differing patterns of ownership and usage of mobile phones between men and women in emerging regions, will mean that multi-stakeholder partnerships will be essential to avoid widening existing divides (fig 4).

Fig 4: Mind the Gap

Digital divides may widen without coordinated action  
% (developing economies)



“To serve the micro-business market, you cannot do it alone. You need cooperation from multiple parties. Governments, telcos, big brands, old banks, and new solutions providers. Everyone needs to come together, and be prepared to work together over the long-term – because big changes don’t come over night.”

Dan Cohen, CEO, Tienda Pago

## Regulation: the highest barrier of all?

Regulation can be both barrier and enabler. While it provides certainty, security and legal protection for consumers. It also determines which institutions can participate, to what extent, and under what terms. And regulatory requirements, especially those related to know-your-customer

and customer identification, have significant impact on access, convenience and usage.

The 2017 Brookings Financial and Digital Inclusion Project (which ranks different countries according to their financial inclusion readiness) uses six dimensions:

**1. Is agent banking permitted?**

**2. Are non-banks eligible to lead mobile money deployments?**

**3. Have e-money regulations or policies been issued?**

**4. Is interoperability between mobile money platforms required?**

**5. Are account access and usage requirements conducive to greater inclusion?**

**6. Are agents permitted to perform both cash-in and cash-out services?**

“

Regulators are really struggling to cope with the speed of change in the market.

How can a regulator know as much about technology as a Fintech? How can a regulator strike the right balance between protection and innovation? ”

*Ronald Eriksen, Executive Chairman and CEO, Prego*

“

The regulatory climate is a make-or-break issue. In Mexico, for example, we see great potential. The government seems determined to drive inclusion through fintech regulation. It's also looking at the huge growth in Asian QR payments, and looking to apply the lessons at home. ”

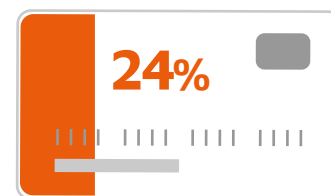
*Abraham Guzman, Founder, EVVA Finanzas*

## Bridging the gap from access to usage

It's important to keep in mind that opening an account is a means to an end, not an end in itself.

Still, a large proportion of accounts are either completely dormant or are 'letterbox' accounts (emptied as soon as funds are paid in) – 24% of account holders (around 907 million people) say they neither made or received any digital payments in the previous year<sup>30</sup>.

The journey to financial inclusion isn't about opening accounts. It's about linking financial access to financial health - by providing accounts that are easy and attractive to use and that contribute to the financial health of the account holder by making it easier to find buyers or get paid more quickly<sup>31</sup>. Otherwise, the 'seemingly banked' will continue to rely on the familiarity of the informal sector.



**of account holders say they neither made or received any digital payments in the previous year**

“

Don't make assumptions about what people want – because your assumptions will almost certainly be wrong.

In 2004 South African banks came together to design a specific type of bank account called Mzansi intended for the country's sizeable unbanked population. Even though the banks had the best intentions, the product was conceived and marketed incorrectly. In the end it was replaced by a much more robust set of products and innovations around ATMs, mobile and agent banking that were what the customers had wanted from the get-go. This was a very expensive and time-consuming way to find out what people wanted. ”

*Dr Graunt Kruger, Head of Strategy Research, Intellidex*

“

The concept that “if you build it, they will come” doesn't really apply when it comes to enabling underserved populations. I think we need to work together to improve the design aspect of financial technologies so that these technologies take into account human needs – and the business case. ”

*Drew Propson, Financial Inclusion Project Lead, World Economic Forum*

30. 2017 Global Findex Database

31. The Next Frontier in Financial Inclusion: Moving Beyond Access to Usage, Mastercard, 2018



## SECTION 4

# 5 markers to out-compete the informal sector

As we've outlined above, a "build it and they will come" approach will not draw new customers into the world of formal financial services in anything like the numbers needed to make financial exclusion a postmark of history in our lifetime.

It might improve access, but a standalone strategy can't enable usage at sufficient scale to tackle the web of barriers facing unbanked customers explored in this report that currently prevent them from joining the formal financial services marketplace and benefiting from the growth of the digital economy.

Based on insights from a series of global interviews conducted for this report, and inspiration from innovators and government across the Nordic and Baltic region, the research identifies five markers for fintech entrepreneurs (to be deployed in collaboration with

governments and institutional peers) that offer the best chances of reducing the number of excluded or underserved customers around the globe.

Explained in detail over the next few pages, they can be outlined as follows:

- 1. Design, design, design:**  
**Make products that are better. In every way.**
- 2. Re-write the rules:**  
**Create a more flexible regulatory framework**
- 3. Find new roads:**  
**Identify new ways to enable access that drive usage**
- 4. Create win-win scenarios:**  
**Pursue shared goals, seek collective gains**
- 5. Tackle the cash economy:**  
**Inspire 'digital drift'**

For each marker we've included a case study from around the world followed by an example from the Nordic and Baltic region – a region with a unique reputation for design-led thinking and a strong track record in out-competing established norms.

While there are no direct parallels – the Nordic region is quite different to the realities of the emerging world – the Nordic spirit is a valid source of inspiration, that offers useful signposts to the mechanisms needed to end financial exclusion and drive regular use of financial services. It's a source of insight that, we hope, innovators, institutions and their ecosystem stakeholders can build on to fully unravel the web of exclusion in the years ahead.



MARKER

# 01

## Design-led thinking - Make products that are better in every way

**It sounds obvious. But, time and time again, we see new products and propositions that never take hold – because people prefer to stick with existing behaviours. And don't feel the need or feel comfortable trusting market newcomers.**

**In itself, the 'formality' of a financial product is not enough. It also needs to deliver an optimum mix of cost, convenience, access, simplicity, availability, and relevance. To complicate matters further, a solution that's successful in one market won't necessarily succeed in another.**

## M-Pesa and the story of mobile money

### A simple matter of replicating the model?

Back in 2010 it all seemed so simple. Out of nowhere, a mobile money system called M-Pesa had apparently taken Kenya by storm. By replicating the model, billions of people could be drawn into the world of mainstream financial services. That was the theory. The reality has been somewhat different...

Anyone with even the slightest interest in the world of financial inclusion will be aware of the brand name M-Pesa. The underlying technology had apparently emerged as a student project in Moi University in Nairobi. It was then acquired by Kenya's mobile operator Safaricom, who commercialised the service in 2007. And, by mid-2010, more than 10 million people had become active users.

### Uneven growth

Based on this wildfire growth, it was assumed the model could be replicated right across the developing world. But, in reality, progress has been uneven. Mobile money has taken root in East Africa and is gathering momentum across the wider continent. Elsewhere success has been less impressive.

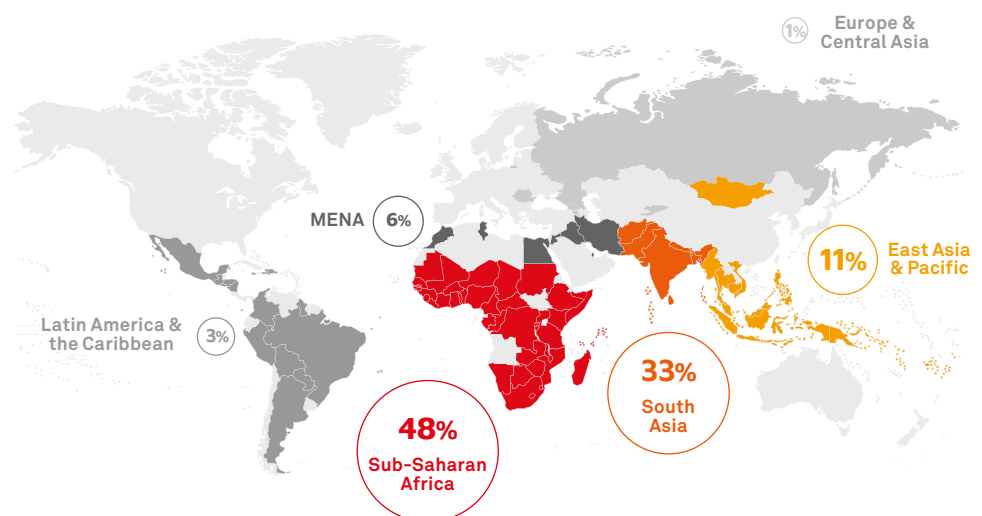
### Key success factors

You could say that it has been a classic case of out-competing the alternatives.

Africa has the lowest penetration of bank branches in the world. By contrast, the telco's have more customers (Africa's largest operator MTN has over 170 million users), better physical distribution networks (Kenya's Safaricom has over

**Fig 5: Global spread of registered mobile money customers**

December 2018



Source: 2018 State of the Industry Report on Mobile Money, GSMA

130,000 mobile money agents), and direct control over a digital distribution network (mobile penetration across Africa reaches an average of 80%).

### Human-centred design

As well as building on these inherent advantages, Africa's mobile money leaders also took a human-centred design approach. As McKinsey & Company puts it: "A number of telco's have managed to develop a superior client experience early in the evolution... M-Pesa's client experience is remarkably simple: it takes only three inputs and six clicks to send funds, on any type of handset. Registration is simple; merchant acceptance is widespread, and there are no transaction fees on bill payments."

By looking at those African countries with lower uptake of mobile money solutions, the impact of regulation also becomes clear. "In Nigeria and Egypt, regulatory frameworks have allowed few players to offer mobile money services, resulting in lower levels of investment and fewer innovative products and services. In Ethiopia, a strictly regulated telco, restrictions on competition, lack of internet connectivity, and low levels of consumer trust and financial literacy have created barriers to uptake and market entry," says the GSMA.

Although Sub-Saharan Africa remains the world leader, global growth in the sector is now being driven by developments elsewhere – particularly in South and East Asia.

### Success Factors

#### Out-competing the incumbents

A strong rationale and emotional case to change behaviours

#### A benign regulatory environment

The right frameworks to enable competition, attract investment, and foster innovation

#### Comprehensive digital infrastructure

Ongoing adoption and usage is predicated on reasonable levels of connectivity

#### Widespread agent networks

Physical presence and distribution continues to be a key consideration

#### Human-centred design

An elegant user-experience (especially for older devices and feature phones) is a prerequisite

### Key Facts

**+60%**

The proportion of the Sub Saharan Africa population with a mobile money account

**272**

Mobile money deployments live in 90 counties

**866million**

Mobile money accounts globally (a 20% increase in just one year)

**45.6%**

The proportion of the world's mobile money customers who live in Sub-Saharan Africa

**132**

Mobile money deployments live in Sub-Saharan Africa

**41%**

Annual increase in active mobile money accounts in East Asia

**x2.6**

The total number of people using a smartphone app to transact more than doubled year-on-year

### A source of Nordic inspiration

#### Out-competing piracy - *How Spotify took on free music and won*

In the early years of digital, the entire music industry was haunted by the fear that the one thing customers really wanted was free music. After all, why pay anything at all when you can get the same product for nothing elsewhere?

The runaway success of Swedish start-up Spotify disproved this assumption. The founder, Daniel Ek, famously said he

wanted to, "create a product that's better than piracy"<sup>32</sup>. Despite living in a country where illegal downloading was rampant, he built his company on the belief that people would be willing to pay for a higher quality experience. He therefore understood what customers really valued, and used the power of digital to meet their needs. From launch in 2006

the company now has 96 million paying subscribers and more 200 million active users every month.

**With a laser-like focus on customer wants, needs, and circumstances, what can be done to out-compete the informal sector?**

32. An often-used phrase quoted in many places, such as Spotify's Daniel Ek: The Most Important Man In Music, Forbes, January 2012

MARKER

02

## Get the regulatory regime right

**Achieving the right balance of regulatory flexibility with the right safeguards is essential. And challenging for regulators. Now more than ever regulation needs to move on from the simple demarcations of the past (for example, where one authority managed the prudential domain of deposit taking, one for managed payment services, one for telecoms, and so on). And to keep pace with technological innovation.**

**But there are clear examples of where and how progressive regulation has enabled change – and where it remains a barrier.**

## Electronic invoicing in Latin America

### Bringing more businesses in from the cold

In an effort to squeeze the shadow economy, countries in Latin America have been mandating the use of e-invoicing. As well as increasing tax revenues, this is opening up a vibrant new market for digital B2B solutions. And giving small and micro-businesses more reasons to enter the formal financial services sector.

Across Latin America, governments have identified a what they believe to be a proactive solution to tax evasion. It's called electronic invoicing (or e-invoicing), which is now mandatory in many countries in the region, and appears to be a powerful way to squeeze the shadow economy. As more businesses are led into the light, they have more reason and more opportunities to digitise their finances.

With e-invoicing, every bill is issued and passed through the government (this doesn't mean that the government must approve invoices, only that they get notified of all business activity). This record of business activity also becomes the basis for new types of financial solutions.

### 32% annual growth rates

Chile was one of the first countries to implement mandatory e-invoicing, as far back as 2003. An estimated 97% of B2B billing is now filed electronically. In Brazil, suppliers are prohibited from shipping goods without an official e-invoice. Similar regulations are in place across countries like Mexico, Colombia and Costa Rica. According to a recent study from Billentis, the

use of e-invoices across the region is expected to grow at 32% a year to 2024.

Although, initially, the business community may have been resistant to the change, the benefits are becoming clear. For example, it's now easier to prepare accounts and file taxes. Because their business is above board, proprietors are more likely and more able to access financial services.

### Opening up access to financial solutions for micro businesses

As a consequence of the regulation, Latin America is now a global leader in factoring. This allows suppliers to access working capital by selling their invoices, or accounts receivable, to lenders for cash. Using digital technologies, factoring companies can create solutions and calculate offers based on a firm's reputation and invoicing activity.

This lowers the cost of borrowing for suppliers, particularly SMEs, and provides easier access to mission-critical liquidity. For example, the interest on an unsecured line of credit in Chile may be over 40% per year, compared to between 12%-24% with factoring, because the lender can use the invoice as collateral.

Similarly, with an electronic invoice footprint, small traders and micro-businesses are better able to access working capital through short-term financing. A new breed of fintech players, like Tienda Pago, have built their propositions on the back of the e-invoicing phenomenon. As more businesses participate, they have less reason to suppress cashless payments from their clients.

## Success Factors

### Get the network effects going

Squeezing the shadow economy is just part of the story – the potential to create a vibrant market for B2B financial services and digital payments is equally significant, but requires an ecosystem of solution providers

### Breaking down cultural barriers

Even when they get access to credit, many small businesses see no rationale to take it – because the concept is alien to them

### Enabling regulatory environment

Large banks aren't necessarily equipped to service high numbers of low-value loans, so it helps to open up the market to non-traditional players

### A trickle-down strategy that works

As more transactions become electronic, the benefits can cascade, with fewer reasons for small business to suppress cashless payments

### Bring big consumer brands onside

With finance for micro-retailers, the big commercial brands tend to have a lot of reach, a lot of influence, and trusted brands

## Key Facts

**32%**

Predicted annual growth in e-invoicing across Latin America to 2024

**97%**

Of B2B billing filed electronically in Chile

**75%**

Reduction in borrowing costs for SMEs thanks to factoring

**US\$250 billion**

The estimated financing gap for SMEs in Latin America

**Argentina, Brazil, Chile, Colombia, Mexico, Peru**

Some of the countries to have introduced mandatory e-invoicing

## A source of Nordic inspiration

### Out-competing the corporation - *How Estonia re-defined the nature of business and the world of work*

The Baltic states were saddled with a challenge – how to create a bold, new identity for themselves that could re-define them and make them a beacon for digital business. In response, Estonia pioneered the e-residency programme – that would enable anyone, from anywhere to register a business in Estonia in just 3 hours. And, if they could make the trip, to open a bank account.

Lithuania swiftly followed – announcing a new regulation that would enable fintechs faster access to a banking

licence letting them trade (passport) across the 28 members of the European Union and a commitment to process applications in 3 months or less. It proved timely – announced in 2017, the country jumped on the opportunity to attract fintechs from the UK worried about the country's planned exit from the trading bloc.

Their efforts succeeded – Lithuania is home to a thriving digital financial services sector that includes a large presence from Western Union and a

growing fintech community. Invest in Estonia says 98% of companies are registered online, and, keen to attract more 'digital nomads' (tech workers needing to work while they travel), is now developing a digital visa to attract more tech workers to use the country as a hub.

**With a clear policy goal, and a programme of bold new regulations, what can be done to swing the balance in favour of alternative options (that, on the surface, may not look too compelling)?**

MARKER

# 03

## Find new ways to unlock access and drive usage

**Access is only important as a means of enabling regular use.**

**One of the crucial ingredients behind the success of M-Pesa was its network of Safaricom agents (and a regulatory regime that enabled them to deliver a mobile money service).**

**Agent networks have since become a priority in many developing economies. But, as ever, a cookie cutter approach is unlikely to succeed. And easier access is only one of the necessary ingredients.**

## Lessons on agency banking

### Beyond 'access all areas'

Agent networks have helped to open up access. But, in cash-based societies, it's not enough to draw people in to the world of financial services. Experience from Latin America offers up some useful lessons.

When it comes to account access, the countries of Latin America have an impressive story to tell. In the late-2000s, there was a strong pan-regional push for agent or branchless banking. Banks and mobile money players made their products available through third party agents – typically neighbourhood stores – who provided a useful cash-in/cash-out facility. Starting with basic transactional accounts, these agent networks could set consumers on a path to the adoption and use of more sophisticated products and services.

### From -0.5m to +5.0m

On paper, the approach was a success. Globally, GSMA estimates the ranks of mobile money agents grew from about 500,000 to 5.3 million between 2011 and 2017. And Latin America led the charge. In Brazil, for example, a dramatic increase in financial access is attributed to a network of more than 400,000 bank agents.

However, a decade on, it's becoming clear that easy access doesn't equate to guaranteed usage.

### LatAm success

In Mexico, a 2015 survey of low-income workers with payroll accounts showed they typically withdrew their cash in full each week or month. And a quarter of un-banked customers were

actually de-banked (an estimated 11 million people once had an account, but found they had no use for it).

Brazil was a similar story. In a 2013 survey, 70% of respondents were using agents for bill payments, but only around 4% had gone on to open a conventional bank account, and just 6% had accessed credit. A more recent 2016 study from Peru suggests that the agent model had helped to establish the JUNTOS conditional cash transfer programme, but most people withdrew all their money as soon as it hits their account.

This isn't to say that agent banking is irrelevant (it's not) – just that an added dimension is often necessary to drive regular use.

### The need+relevance+access trinomial

In Mexico Banamex teamed up with OXXO, the largest corner store retail chain, on a new proposition called Saldazo. It's quick, easy and cheap to open an account, customers can use a range of basic mobile money services, and over-the-counter transactional services are available in-store 12-hours a day. Since the 2012 launch, OXXO has become Mexico's number one transactional account provider, with 5 million accounts – and usage rates are reassuringly high, at +60% and counting.

It's not just OXXO and not just Mexico. To strengthen the agent model, several Latin American governments have eased regulations around mobile money, and a large number of fintechs have joined the movement to deliver on the "need+relevance+accessibility" trinomial.



**Key Facts****5.3 million**

The number of bank and mobile money agents worldwide

**+5 million**

The number of Saldazo accounts opened in Mexico thanks to the partnership between Banamex and OXXO

**US\$1000**

Typical start-up costs for a bank or mobile money agent

**9 months**

The average payback time to a bank for adding an agent to their network

**30-to-40**

The number of transactions an agent may process each day in a busy rural location (like a highway intersection, market town, or rural fuel station)

**+400,000**

The number of agents in Brazil

**US\$0.20**

The average commission an agent earns for each US\$30 transaction

**Success Factors****Thinking beyond access**

To succeed, the agency model needs to deliver clear and tangible benefits to the consumer and the agent, as well as the bank or mobile money provider

**Considering town and country**

Additional support is generally required for agents in remote, rural locations – where need is often greatest, but low transaction volumes may prevent agent locations from growing organically

**Productive partnerships**

There is a strong rationale for banks and mobile money providers to team-up with other industries (like agricultural suppliers, fuel companies, and consumer goods brands) who typically have better-established rural footprints and processes for managing agents

**Aligning interests**

A lot of prospective agents are already likely to be providing informal financial services (like credit lines and savings clubs) so, it's necessary to find ways to align the interests of every party

**Acknowledging potential issues**

There are plenty of examples of agents delivering poor quality service and, in some instances, perpetrating fraud – which means standards and safeguards need serious consideration

**A source of Nordic inspiration****Out-competing cash** - *How iZettle made cash look out-dated*

Go ten years back, and pretty much globally the only way to get paid if you were a taxi driver, small stallholder or shopkeeper, was cash. The processes and credit records needed made it difficult, if not impossible, to take card payments. Meaning much greater potential for lost sales for independent stores or workers.

Then came iZettle. Launched in Stockholm in 2011 the company came up with a plug-in 'dongle' for smartphones that would mean even street musicians could accept card payments. The product took

off in emerging markets as much as developed ones. iZettle is now available in Brazil and Mexico as well as 9 countries in Europe serving around 500,000 small and micro-businesses and processing around \$6 billion in payments a year. The company was recently bought by PayPal to drive global expansion.

**What is the opportunity for unusual, authentic, stripped-back products, that use creativity to break with previous norms and conventions?**

MARKER

# 04

## Create win-win scenarios: Pursue shared goals, seek collective gains

**Financial services is a network-based, ecosystem-dependent business – especially in the area of cashless payments. To take root, many different players need to participate, and they all need a compelling reason to do so.**

**On its own, one party cannot achieve the necessary changes. Instead, they must work together, to build a thriving ecosystem, and the network effects can get going.**

## Digital lending in Africa

### Fill Your Stores!

Ever wondered why small stores in out-of-the-way locations have such limited stock? Surely, if more goods were available, more could be sold?

Generally, the issue is a lack of working capital – storekeepers simply don't have enough cash to buy more stock, so can never get ahead of themselves. One option could be to raise some credit. But, if the only route available is money lenders in the informal sector, the charges will often outweigh the benefits.

It's a tough challenge to solve. Working on its own, it would be hard for any single provider to make a difference. But, if several parties could come together, enabled by digital technology, with the ability to achieve real scale, the effect could be transformational.

### Smart analytics + digital payments + enlightened lending

This is the thinking behind Jaza Duka (Swahili for "Fill up your Store"), a first-of-its-kind digital lending platform. The platform combines inventory data from Unilever, analytics and digital payment capabilities from Mastercard, and an enlightened attitude to micro-credit from Kenya Commercial Bank (KCB).

Unilever provides details of how much inventory the storekeeper has

traditionally turned over. The analytics platform turns this into a rudimentary credit profile. KCB provides small-scale loans, which are interest-free for the first 17 days. All the money is moved around using a mobile platform. And, to ensure the credit is used effectively, the merchant receives training on financial and business skills with the help of the Mastercard Center for Inclusive Growth.

### Significant success

Following an eight-month pilot, the scheme was officially launched in May 2018, with 800 live merchants in Nairobi, applications from 5,000 more, and ambitions to reach scale within a few months. The stories of success were also encouraging. On average, participating merchants benefited from a 20% lift in sales, with some reporting gains of more than 50%.

For 62% of merchants, it was the first experience of accessing credit from the formal market.

### One year on...

By early 2019, almost 18,000 stores had signed up, with a target to get 30,000 on board by the end of the year. And, based on the learnings, there is potential to take the approach further afield in Africa and export it to Asia.

**Key Facts****Micro-credit for micro-merchants**

Working capital to buy more stock

**3x partners**

Unilever, Mastercard, Kenya Commercial Bank

**Smart analytics**

To give a credit score from inventory data

**20%**

Average uplift in sales for micro-merchants

**62%**

Merchants say it's the first time they've accessed formal credit

**18,000**

Stores signed-up within the first year

**Success Factors****Pragmatic partnering**

A coalition of players coming together to solve a challenge none of them could address on their own

**Inventive analytics**

Deducing a rudimentary yet reliable credit score from non-traditional data

**Digital access**

Using mobile technologies and payments to link the players and move the funds

**Astute education**

Merchants get training on financial and business skills

**Media endorsement**

Extensive press coverage, domestically and internationally, to get the message across and build trust

**A source of Nordic inspiration****Out-competing narrow self-interest**

*- how the Nordic Model successfully pitted social good over personal gain*

"If you had to be reborn anywhere in the world as a person with average talents and income, you would want to be a Viking. The Nordics cluster at the top of league tables of everything from economic competitiveness to social health to happiness." This particular passage comes from the Economist<sup>33</sup>. But it is not unusual in its praise for the so-called Nordic Model.

The Nordic countries are widely lauded for their ability to embrace collectivism, collaboration, and capitalism. And, when it comes to financial services there are fewer stronger examples of collaboration for collective benefit.

Starting with the foundation of the region's largest bank, Nordea formed in 2001 by the merger of 4 regional banks and now one of Europe's largest

financial institutions – the concept of one entity greater than the sum of its parts quickly took hold.

Over the last two decades the region has experimented, and succeeded, with examples ranging from digital ID solutions (through collaboration between banks, government and telcos) to payments and is now preparing for the launch of the world's first real-time multi-currency payments infrastructure (the intriguingly titled Project 27)<sup>34</sup>. Cash not welcome here.

**What scope is there for strong private-public-commercial partnerships, that manage to combine a strong social purpose with a commitment to competition and free trade?**

33. The Next Supermodel, The Economist, 2013

34. <https://www.bloomberg.com/news/articles/2018-07-15/banks-are-building-a-super-speed-money-highway-in-the-nordics>

MARKER  
**05**

**Inspire 'digital drift'**

**Cashless payments have a positive impact on economic well-being.**

**Increased velocity, reduced friction, and lower costs – an electronic payment system tends to be far more efficient than cash. Cashless payment systems can also draw people, at scale, into the formal banking system – squeezing shadow economies, and bringing a ready supply of low-cost funds into the economy.**

**By definition, encouraging more people to use cashless payments for more of their spending leads to higher levels of financial inclusion.**

**Social digital payments in Asia**

**The QR revolution**

If you live in the West, you may have a dim view of QR codes. Back in the early 2010s, QR codes started appearing everywhere, promising a direct link between the physical and the digital worlds. Many of us were curious. So, we downloaded a dedicated QR-reading app. Struggled to get it to recognise its first code. Eventually found ourselves on an unremarkable corporate webpage (rarely optimised for mobile). And never bothered again.

**In Asia, it's been a very different story.**

While the marketing community in the west struggled with QR, the techno-entrepreneurs in the east have not. Every day, hundreds of millions of people across Asia use QR codes, from stores and street food stands, to gaming, to social media apps, to business cards. Meanwhile, the introduction of QR-based payment systems enabled the development of one of the world's largest, fastest-growing digital commerce ecosystems.

**A dramatic shift to digital**

In 2018 alone, Chinese citizens spent over US\$15 trillion with these QR-based systems, up from practically nothing in 2013. Between 2010 and 2015, the proportion of China's retail consumption transacted in cash fell from 61% to 40%. And the broader impact has been remarkable – enabling financial inclusion, and opening up new economic opportunities and markets for individuals and small businesses. If anything, the concern is that the shift has been too rapid, with the reluctance of merchants to accept cash excluding those who don't have a mobile device or a bank account.

**Opening-up access to a wider market**

It's not just payment. The related e-commerce platforms have opened access to a wider financial services market, which has created a virtuous cycle encouraging regular use, while the data generated has led to the availability of new credit scoring services.

For example, Yu'e bao (meaning "left over treasure") is a low-risk money market account for low-value savings. Launched in 2013, it attracted 152 million customers and had US\$117 billion assets under management within the first three years.

Meanwhile a service called Huabei (or "Just Spend"), launched in 2014, enables shoppers on low incomes to take out small month-to-month loans. On Single's Day 2016 (a major consumer-focussed holiday similar to Valentine's Day), consumers used it to spend US\$3.9 billion on two major e-commerce platforms.

**Easy to implement, no physical acceptance infrastructure**

A key to success has been the ease of implementation. The QR system has emerged as a secure, easy-to-use service that doesn't require a physical acceptance infrastructure. Instead, users simply download an app to their smartphone.

On the surface at least, it would seem that the lessons can be applied in other markets. QR-based systems are being deployed in markets like Thailand and Indonesia. And, with developments like the Bharat QR system, there is potential for QR-based payments to take root in India.

**Key Facts****US\$15 trillion**

The amount spent by Chinese consumers using QR payments in 2018

**A sudden, dramatic shift**

One of the world's largest, most sophisticated payment ecosystems took root in less than a decade

**61% to 41%**

The drop in the proportion of China's retail consumption transacted in cash from 2010 to 2015

**20-fold**

The growth in QR payments between 2012 and 2016

**Success Factors****Platform agnostic**

QR-based systems can work across Android and Apple platforms

**Easy-to-use**

Users can unlock their phone and click on an icon to show an auto-refreshing QR code that can be scanned by the merchant

**Inexpensive**

Users transact for free and receive loyalty points, while merchants pay around 0.6% in transaction fees

**Ubiquity**

Payments can be accepted on any smartphone, side-stepping the need for a physical acceptance infrastructure

**A source of Nordic inspiration****Out-competing hard cash**

*- how the Nordic countries became the world's most cashless societies*

The Nordic countries sit at the top of many global league tables. As just one example, a McKinsey & Company listing of countries with the highest share of digital payments places three Nordic companies in the global top-five (On this particular table, Norway is at the top, with a 78% share of digital payments).

This didn't happen by chance. And it wasn't solely the product of brute market forces. The state played its part with regulations to wean the economy off cash. The banks collaborated

to promote common solutions (see Marker 4 above). Retailers and regional technology companies made cash look old-fashioned. And, of course, the consumers embraced the opportunity.

**Are we ready to accept that a successful war against cash cannot be purely market-driven, and needs to be complemented by a holistic programme of rules, incentives and cross-industry collaboration?**



# Interviewees

Research interviews were carried out for this report with the following companies and individuals:

**Jari Ala-Ruona**

CEO and Co-Founder, Aion Sigma

**Mathieu Albrieux**

Senior Investment Officer – Latin America, Accion Venture Lab

**Dan Cohen**

CEO, Tienda Pago

**Payal Dalal**

Vice President, Global Programs, Mastercard Center for Inclusive Growth

**Ronald Eriksen**

Executive Chairman and CEO, Prego

**Denis Gikunda**

Director, Innovation Management, Mastercard Labs

**Abraham Guzman**

Founder, EVVA Finanzas

**Joakim Hedenstedt**

COO and Co-Founder, Aion Sigma

**Edwin Kaduki**

Director, Software Engineering, Mastercard Labs

**Dr Graunt Kruger**

Head of Strategy Research, Intellidex

**James Mwangi**

CEO, Kenya Equity Bank

**Camilla Nestor**

CEO, Mix

**Erik Sandersen**

EVP and Head of Financial Institutions, Norfund

In addition, we'd like to thank the more than 30 fintechs taking part in the 2019 Oslo Financial Inclusion Summit, some of whose insights have been included here.









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