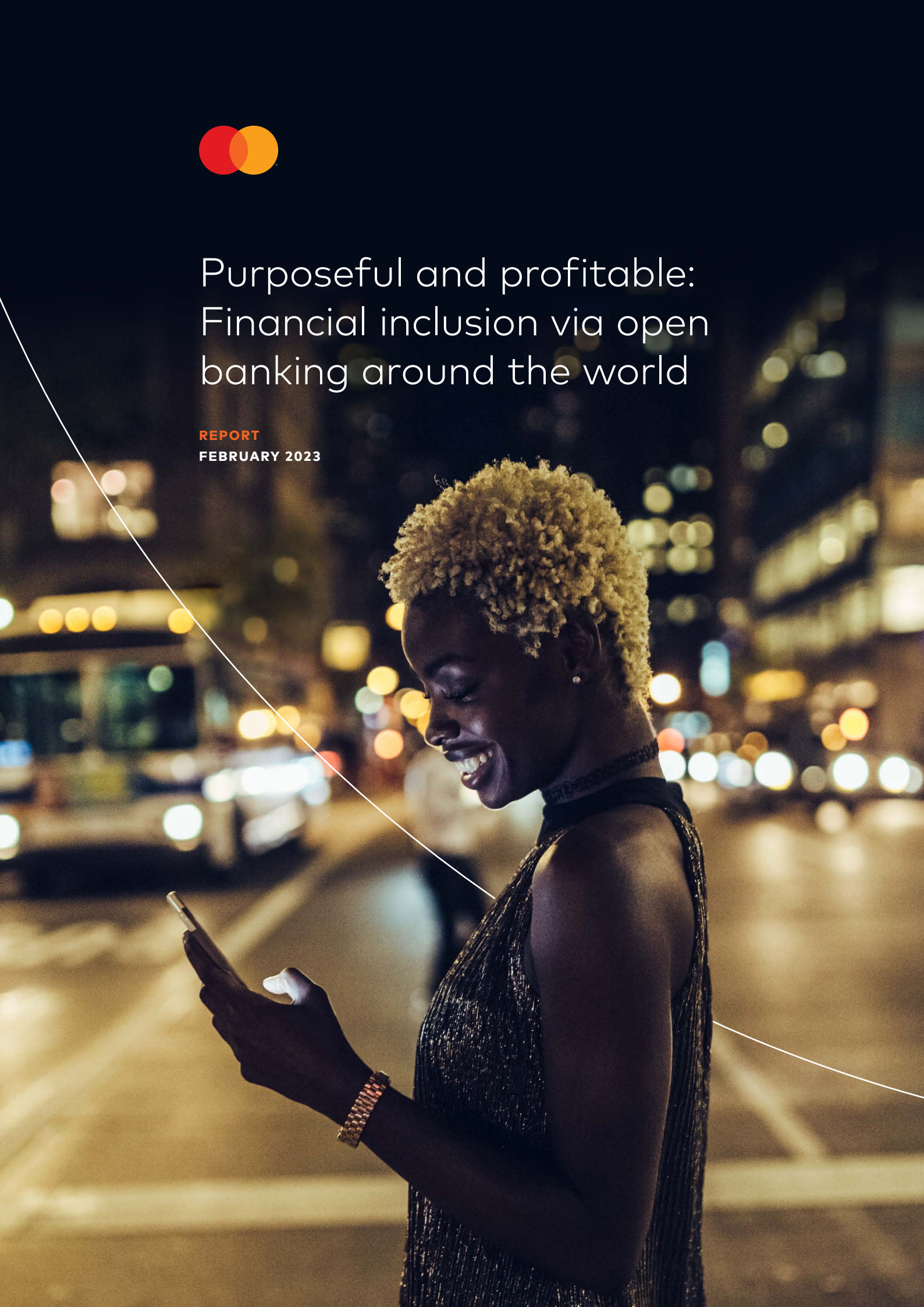
Purposeful and profitable: Financial inclusion via open banking around the world

REPORT

FEBRUARY 2023



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01 Introduction

"Mexico's Fintech Law is 'based on the principles of financial inclusion and innovation' in that order."

"The United Kingdom's Financial Conduct Authority views financial inclusion as one of open banking's 'new developments'."

Competition was the order of the day when the European Union opened the open banking floodgates with its revised Payment Services Directive (PSD2). The order still stands. But another impetus is now making its own waves on the back of the increased competition: financial inclusion.[1]

Its importance across all countries debunks a misconception that financial inclusion is pro-bono and lacks sustainable business models. Instead, it is now an attractive proposition for banks and financial technology (fintech) companies if they properly avail of the opportunities.

No longer an optional extension of open banking, different countries' prioritizations of financial inclusion reflect relative levels of importance and the recency of formal proclamations on the topic. For example, Mexico's Fintech Law is "based on the principles of financial inclusion and innovation" in that order,[2] while the United Kingdom's Financial Conduct Authority views financial inclusion as one of open banking's "new developments".[3]

Degrees of prioritization are associated with degrees of financial inclusion. Often used as a blanket term in reference to individuals or their small businesses, financial inclusion serves two audiences: unbanked people outside of the financial system and underbanked people inadequately served by the financial system. For Mexico, the focus is on both; for the U.K., the focus is largely on the underbanked. But there is no binary split. Regardless of banked status, the sharing of customer-permissioned data remains a core tenet of open banking everywhere in creating an inclusive financial system for all.

Mobile phones are often seen as a panacea for many of the challenges associated with financial inclusion. But access to financial services is not as simple as access to a mobile device, and a mobile phone with stored funds does not automatically equate with financial inclusion. Still, it makes for a very good start.

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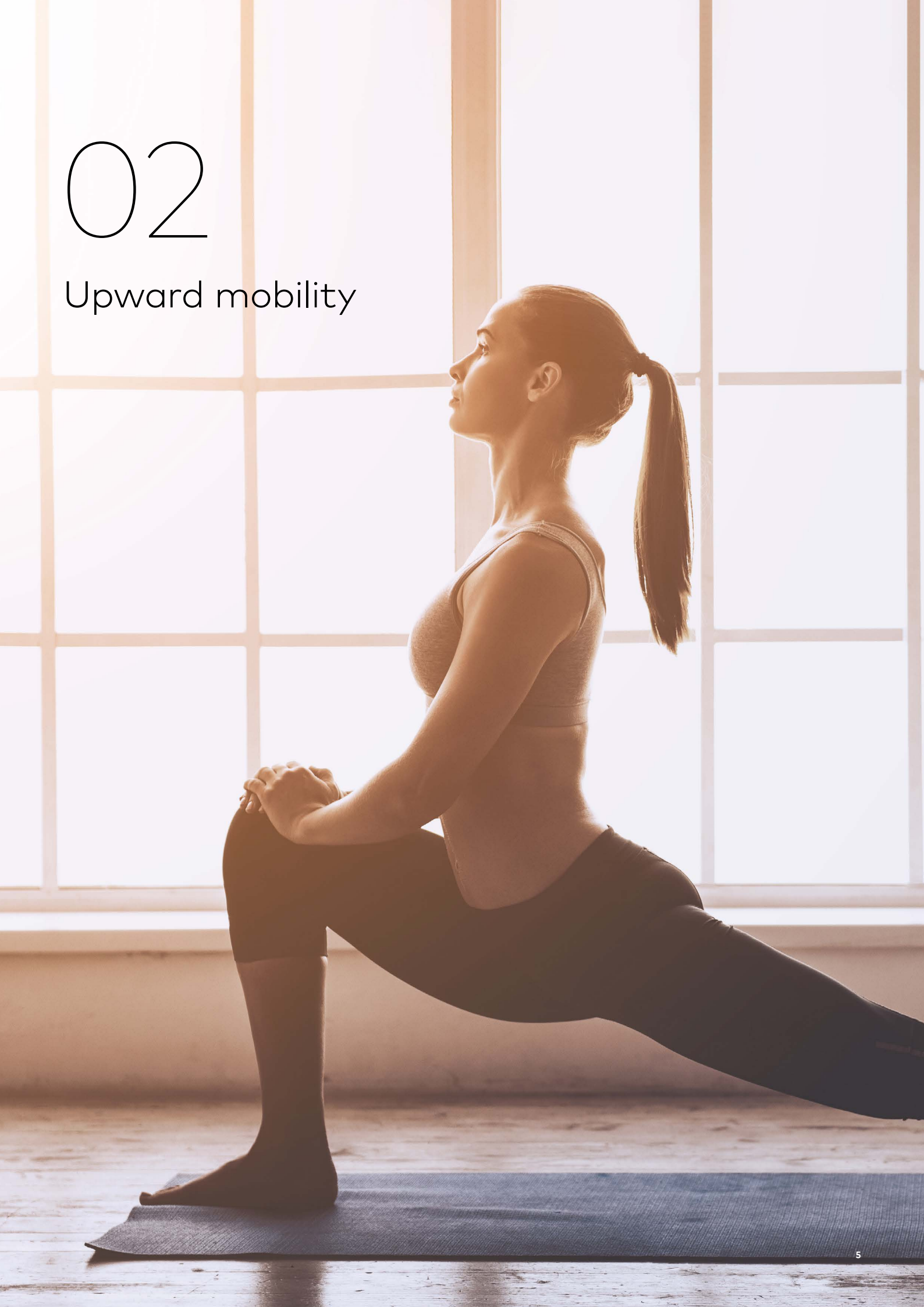
Upward mobility



Mobile money accounts vs mobile bank accounts

Ownership of any kind of financial account increased from 51% of adults worldwide in 2011 to 76% in 2021, according to the World Bank's Findex database.[4] Developing economies account for most of that change, where a dearth of traditional bank accounts has little bearing on the penetration of mobile phones.

Yet the idea that mobile phones can simply put access to financial services in the palms of unbanked and underbanked hands is somewhat misled. Anyone with a mobile phone can link their phone number to a mobile money account and then make and receive payments using text messages. But mobile money accounts are not mobile bank accounts, which are exclusively the preserve of people with actual bank accounts.

Different definitions allow for different interpretations. In 11 of the 23 Sub-Saharan economies included in the Findex, more adults have only a mobile money account than adults with a traditional bank account. More specifically, the 55% share of adults with accounts in the region includes a 33% share of adults with mobile money accounts. Unlike the World Bank, the International Monetary Fund (IMF) considers that 33% to still be unbanked unless they also have a mobile bank account.[5]

Technically the IMF stance is valid; a bank account is a prerequisite of being banked. But the Findex position is equally valid in terms of the GSM Association's observation that mobile money increasingly provides access to broader financial services such as credit, savings and insurance.[6]

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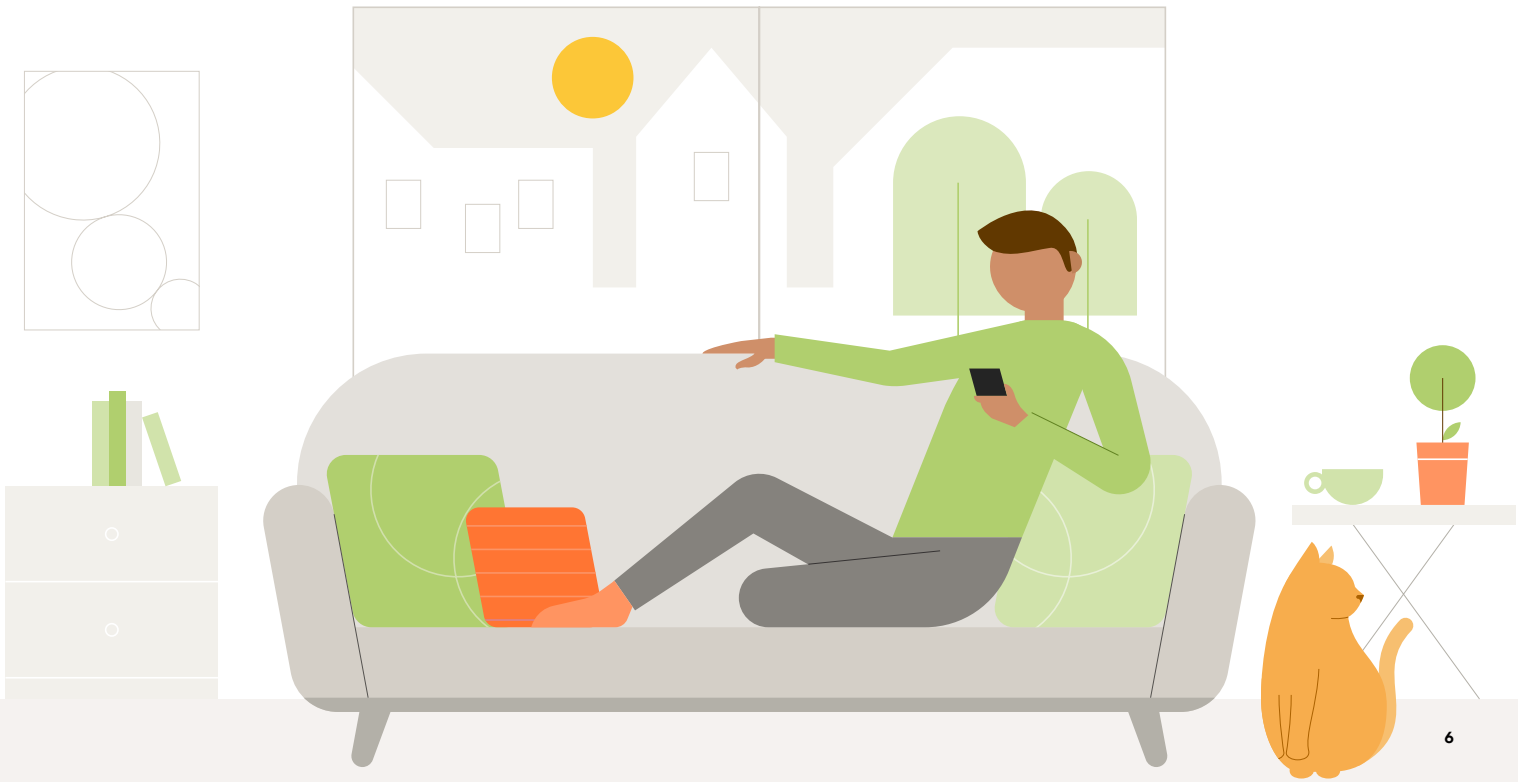

Not just a handset

Whether a licensed financial institution or fintech company, providers of mobile bank accounts and mobile money accounts are increasingly partnering with other financial service providers. Open banking is the conduit for these partnerships via application programming interfaces (APIs). They provide an efficient and secure way to share customer-permissioned data and confer banking capabilities as Banking as a Service (BaaS) for embedding into new customer propositions.

One of the biggest challenges for financial inclusion is how to provide people on the fringes of the financial system with better access to finance through more precise credit scores and digital identities. The evolution of open banking into open finance helps by broadening the types of permissioned data, which may even come from mobile devices themselves. SMS messaging data from regular transactions and bill payments can help with soft credit scoring and with the cross-checking of customer inputs for electronic know-your-customer (e-KYC) verifications. Last mile customer onboarding, a particular challenge in less central locations, is far easier on a mobile device.

The addition of broader behavioral data, such as the permissioned tracking of regular visits to an employer via GPS on a mobile phone as evidence of stable income, can also complement financial data. Over time, the creation of a financial history can evolve into full participation in the financial system. Populations long-considered inefficient to pursue now appeal to financial service providers in more ways than just a moral duty to alleviate the "poverty premiums" levied on individuals cut off from competitive marketplaces.

The Findex suggests that receiving a payment into a mobile account can be a gateway to other financial services. The potential is certainly there, and open banking can make the connections. The challenge that remains is how to bring people through the gateway and then encourage them to keep on progressing.

"Populations long-considered inefficient to pursue now appeal to financial service providers in more ways than just a moral duty."

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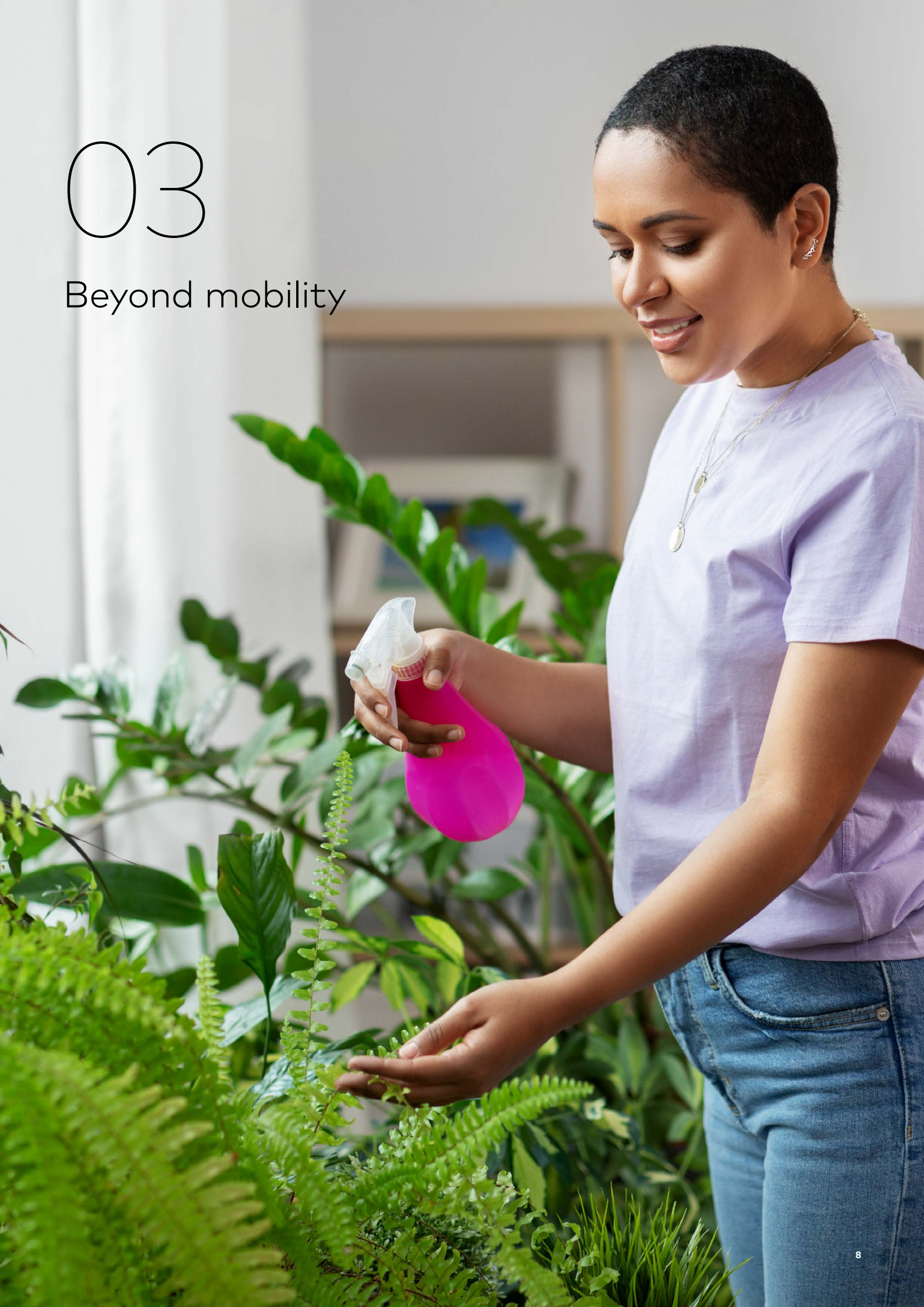
Beyond mobility



"Mobile banking neither sounded the death knell for physical banking, nor did it negate the need for physical banking in previously unserved and underserved regions."

"After access"

There are two facets to the mobile ideal: the underbanked leapfrog desktop banking by going from physical branches directly to mobile apps; the unbanked simply use mobile apps from the outset.

More realistic is the "after access" model described in the Digital Intelligence Index, a collaboration between the Fletcher School at Tufts University and Mastercard. It calls for a focus on meaningful economic exchanges that currently vary even in highly digitalized economies based on the quality of connections, experiences and devices.[7]

Mobile devices increasingly provide the means for these "meaningful" exchanges, but not exclusively so. Although an SMS messaging feature on a regular mobile phone will allow for basic transactions, it is otherwise limited. That matters when over two-fifths (41%) of the global population does not subscribe to a mobile broadband connection, and one quarter of mobile phones in use worldwide are not smartphones.[8]

Regardless of mobile access, more complex financial transactions may benefit from larger desktop screens in any case. Yet even in high-income economies, where wired broadband is common and account ownership is near-ubiquitous, only 39% of adults use their accounts for a combination of saving and borrowing in addition to payments.[9] For example, the Findex notes that 95% of adults in the U.S. have a financial account, but estimates suggest that 19% of adults in the U.S. are either credit invisible or unscorable.[10]

On top of technology and infrastructure are issues around financial education. Almost two-thirds (64%) of unbanked adults in the Findex said they would need help to use a bank account if they had one. Brazil's recent experiences with its "coronavoucher" disbursements are instructive (see case study).

Case study

Brazil's "coronavoucher" disbursements brought roughly 36 million unbanked Brazilians into the financial system. But one month in, less than five percent of funds were being used for digital transactions, such as bill payments or purchases via QR codes and virtual debit cards, offered via the associated mobile app. People just wanted the cash.[11]

The introduction of a 30-day moratorium on withdrawals and transfers provided an incentive for Brazilians to stay in the system while in-person and online tutorials showed them how. Four months in, the five percent had become 63%.[12] Subsequent disbursements were linked to Brazil's new Pix real-time payment system, which was later synced with open banking APIs to enable account-to-account transactions without the need for account information or passwords.

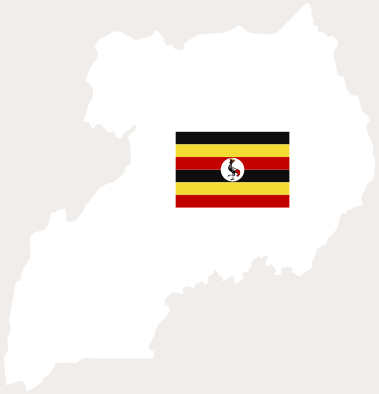
When a Brazilian street vendor accepts payments into a personal account via Pix instead of cash, financial service providers can use that transaction data as the basis for an alternative credit score.[13] Yet quick and easy account-to-account payments have limitations. While they can thrive in cash-dominant economies at the point of sale, their use is comparable to mobile money accounts with stored funds. Meanwhile, their appeal in card-dominant economies tends to be limited to activities away from the point of sale, such as bill payments, where the irreversibility of transactions and the lack of chargeback mechanisms are less of a concern.

Impressive usage rates of open banking-supported real-time payments in Brazil also come with two caveats in terms of financial inclusion. They do not distinguish between one-time use to avail of a disbursement and sustained use as a first step toward financial inclusion that extends beyond basic money transfers. Nor do they distinguish how many users were already banked in the first place.

Solid infrastructure and education can only go so far in a mobile environment. Mobile banking neither sounded the death knell for physical banking,[14] nor did it negate the need for physical banking in previously unserved and underserved regions.

Agency banking

The history of banking in Brazil also includes its preeminent use of local retailers as banking agents who deliver financial services on behalf of banks. The earlier reference to these agents as "correspondent banks" by the International Finance Corporation (IFC) is somewhat of a misnomer since the agents are not licensed banks.[15] But the terminology turns out to be prescient in terms of how BaaS now enables these agents to essentially become fintech companies by adopting open banking APIs (see case study).



Case study

The IFC's support of a shared agent banking network in Uganda is suggestive of future developments.[16] A common platform connects banks across the country and allows licensed agents to process transactions and open accounts for customers on behalf of banks. Broadband access at the location, wired or wireless, is all that is needed; a mobile phone is more nicety than necessity.

Phone or no phone, what stands out is the network approach that chimes with recent European initiatives to make open finance into something more than just open banking with a broader scope.[17]

Europe's moves toward formal open finance regulations go beyond breadth by layering shared functionality on top of shared data. Where open banking connects APIs across a shared framework, open finance connects the resulting products and services across a shared framework too. A fully-fledged example of open finance comes from the U.K.'s application of variable recurring payments (VRPs) to sweeping money between accounts to improve liquidity. The centralized approach ensures consistent experiences irrespective of specific service providers.

VRPs are a niche service, but the underlying concept of shared functionality has broader ramifications. U.K. retailers are now starting to offer cash withdrawals in the manner of bank-owned ATMs — a spin on cashback that does not require a purchase, pre-confirms the availability of funding and has parallels with one of the core roles of mobile money agents in other countries.[18]

Financial inclusion can thrive in countries like Uganda if local agents are able to provide core banking services, from cash withdrawals to bill payments, under one centralized brand on behalf of multiple competing providers. Rather than something solely for developing economies, the concept is largely akin to white-label banking at post offices and major retailers in high-income economies as an early form of BaaS. The difference is that open banking makes it more efficient and affordable, while open finance ensures consistency and competition across multiple underlying providers.

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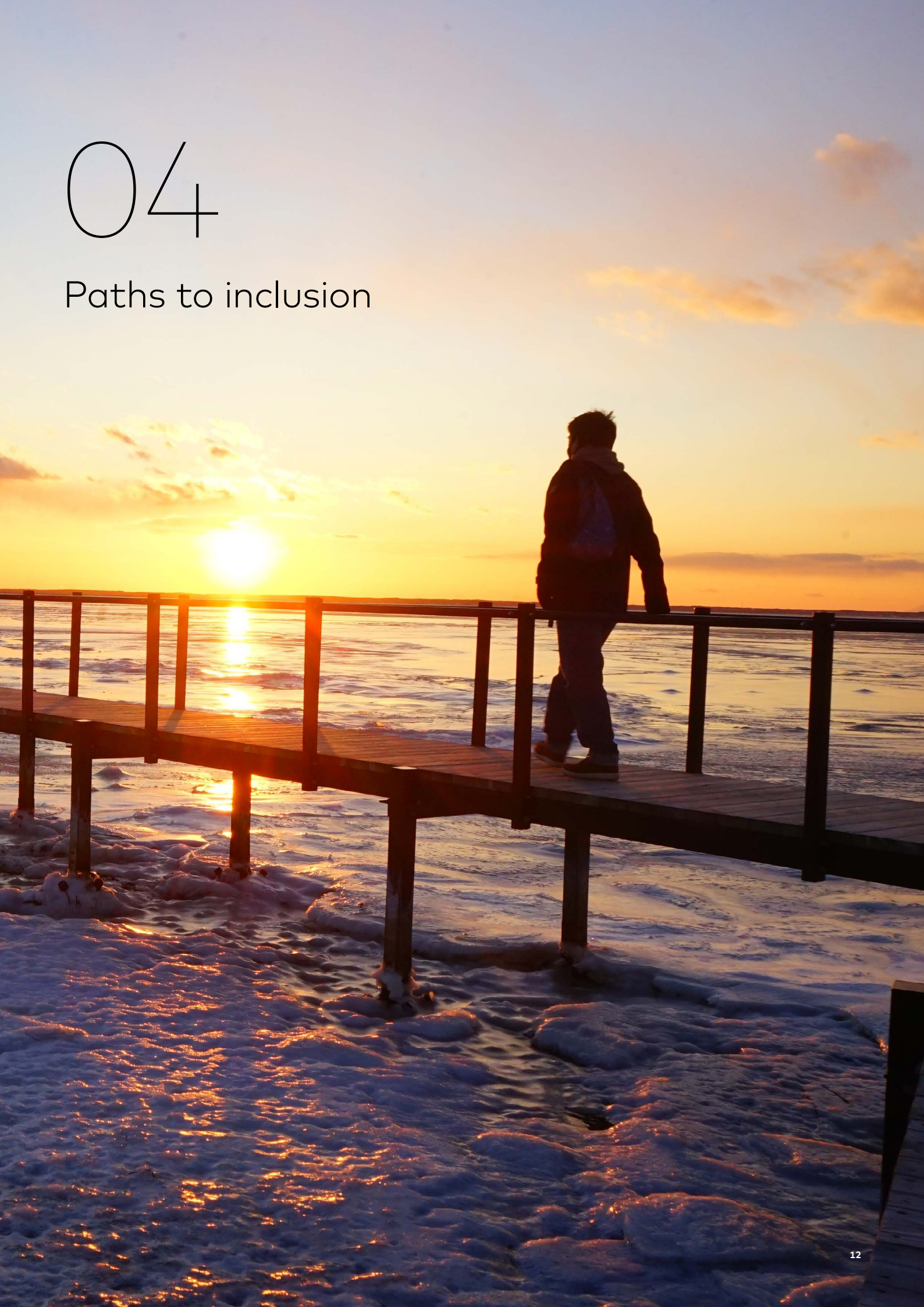
Paths to inclusion



"The lack of consensus between the IMF and the World Bank in defining financial inclusion highlights the multi-faceted and idiosyncratic nature of being unbanked or underbanked."

Access to permissioned customer data is essential to open banking and financial inclusion. Yet aside from certain discrete uses, even pure data sharing is usually tied to other banking capabilities to create an effective value proposition. Open banking enables this in two related ways:[19]

1. **Banking as a service (BaaS) or embedded finance**
   Embedded finance refers to the integration into customer journeys of banking capabilities shared via BaaS. The technical distinction between the two terms is nuanced, but embedded finance is more neutral since it makes no hierarchical assumptions around providers being licensed banks rather than fintech companies — a relationship that may be inverted by fintech companies sharing data and capabilities with banks. In theory, embedded finance can make any company that adopts APIs into a fintech company. That can have a transformative effect on local businesses and, by extension, financial inclusion.

2. **Banking as a platform (BaaP) or bank platform as a service**
   A shared bank platform, where fintech and other API-first partners can collaborate and co-innovate, is effectively just another module in the BaaS stack that can be shared. Yet treating BaaP that way glosses over how it hosts many kinds of banking modules otherwise found individually in the BaaS stack. Where a BaaS provider benefits from further reach and possibly referral fees, a BaaP provider benefits from the co-creation of new products that it can white label or take to market itself.

BaaS or BaaP, what matters is the use cases that result. The lack of consensus between the IMF and the World Bank in defining financial inclusion highlights the multi-faceted and idiosyncratic nature of being unbanked or underbanked. Individual circumstances may include financially instability and vulnerability to economic shocks because of irregular income, a lack of liquidity or disproportionate outgoings on household expenses. There may be difficulties in accessing financial services without civil documents, such as an ID card or an acknowledged address. Gender may play a role if social norms limit control over finances and "poverty premiums" in uncompetitive markets may blight financial situations.

Five main use cases for open banking via BaaS or BaaP provide various paths to financial inclusion:

1. **Financial management**
   - Budgeting support and improved financial literacy for individuals
   - Liquidity management and bookkeeping capabilities for businesses

2. **Expanded choice in payments**
   - Alternative payment options through payment initiation services, such as account-to-account payments via QR codes — ideally in real time

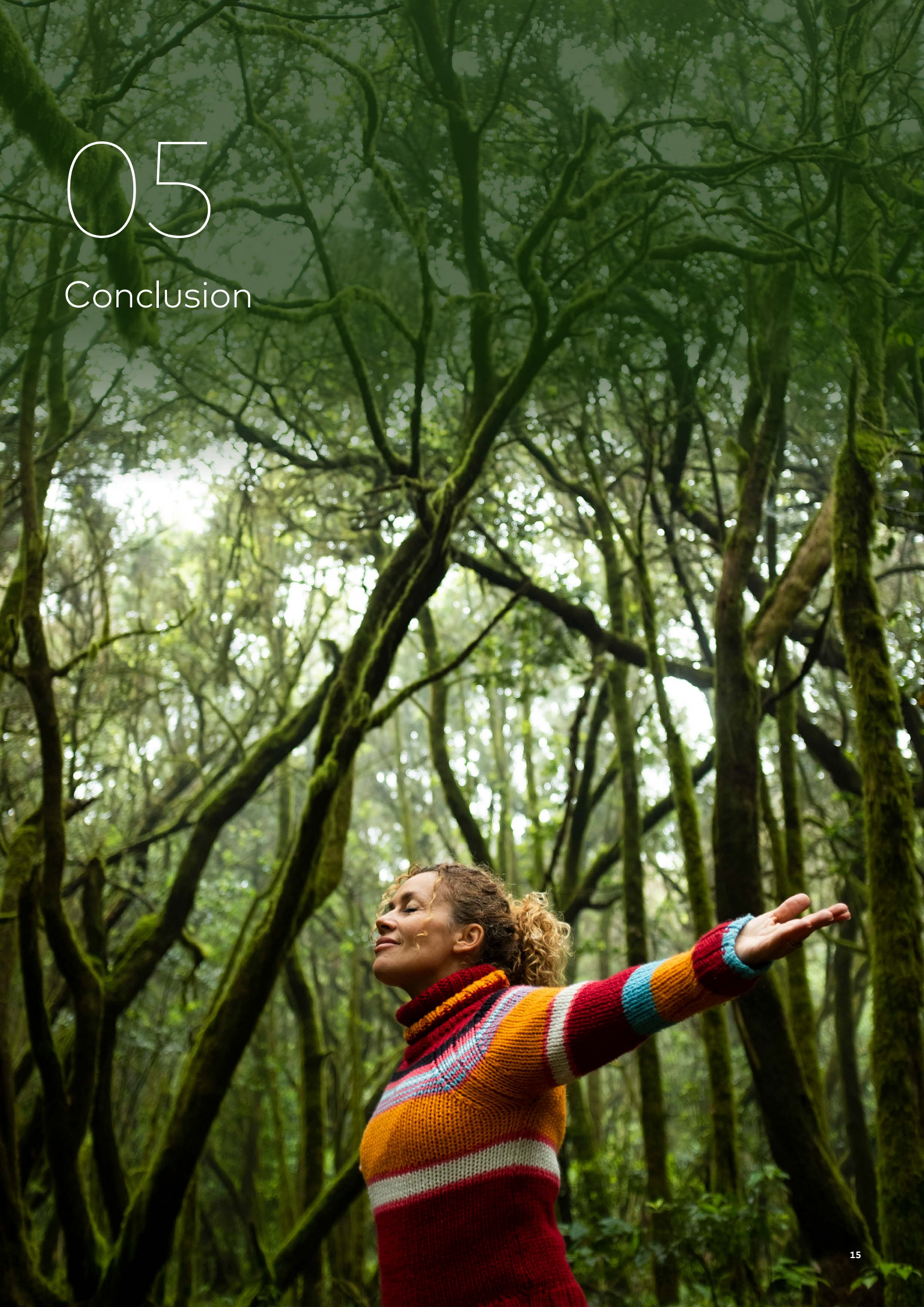
3. **Credit provisioning**
   - Soft credit scoring through data from regular incoming and outgoing funds, such as income and bill payments, and from behavioral data from mobile devices
   - More precise credit decisions allowing instant approval of micro loans, including paying by installments at the point of sale, which can in turn build credit histories

4. **Product comparisons**
   - Competitive marketplaces for comparisons of products such as loans, term-deposit accounts and credit cards
   - More competition allowing for easy account switching

5. **Account issuance**
   - Remote onboarding and know-your-customer (KYC) verifications

At the heart of all five should be individual privacy, security and protection as brand-new points of entry make financial services more inclusive and valuable for everyone.

05
Conclusion



Financial inclusion is not simply about using a mobile device to make or receive payments from a mobile money account. That is not to deny the tremendous benefits mobile money brings to people across world. Rather it is just to acknowledge that full financial inclusion demands a multi-faceted sustained effort that extends beyond just mobile devices to address infrastructural, experiential and educational considerations.

Open banking supports this effort by making it easier and more efficient to serve financially marginalized people. The result is an attractive proposition to financial service providers through increased customer acquisition and shared revenue between banks and companies operating in the fintech space — be they telco companies, payment service providers, tech giants or broadly any company adopting APIs.

Whether deliberately or coincidentally, this core role for open banking embraces the idea of "doing well by doing good" by creating more equal societies with better access for all.

As a trusted partner of banks and fintech companies, Mastercard supports open banking worldwide by setting governance, standards and business rules to ensure safe transfer of value between participants. Visit the Open Banking, Open Data practice page or contact us to learn how we can help your business profitably support financial inclusion.

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Further reading

A question of equity: Consumer finance embraces sustainability and social justice

What financial footprints mean for carbon footprints in an open-API ecosystem

Open, embedded, modular and on a platform: The opportunities of Banking as a Service

Europe's Open Finance push is more than Open Banking with a broader scope

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