Global Findex data reveal many opportunities to increase account ownership among the 1.7 billion adults who remain unbanked. The data also point to ways to leverage new products and technologies to boost the use of accounts among those who already have one. This chapter outlines opportunities focused on moving into accounts the transactions that people are already making in cash.

Shifting payments from cash into accounts can have benefits beyond expanding account ownership and increasing account use. Research suggests that digitizing payments can improve their efficiency by increasing the speed of payments and reducing the cost of disbursing and receiving them. It can also enhance the security of payments and thus lower the incidence of associated crime. And disbursing payments through digital channels rather than cash has been shown to increase transparency and reduce corruption. Moreover, by providing an important first entry point into the formal financial system, shifting to digital payments can lead to substantial increases in saving as well as the substitution of formal for informal saving.

For businesses and governments alike, however, the challenge is to ensure that digital payments are indeed better than the cash-based alternatives—safer, more affordable, and more transparent.

The landscape for digital payments

Mobile phones and the internet have given rise to a new generation of financial services. Using these services does not necessarily require sophisticated devices. In Sub-Saharan Africa relatively simple, text-based mobile phones have powered the spread of mobile money accounts. Similar services are available in other parts of the developing world. And smartphone technology is increasingly being used to make transactions through financial institution accounts in some developing economies.

But mobile phones and the internet can drive financial inclusion only if they are underpinned by the necessary infrastructure. Physical infrastructure—such as reliable electricity and mobile networks—is key. People will be less inclined to use digital payments if network outages or other technical problems undermine their dependability. Financial infrastructure is also needed. This includes both
an adequate payments system and a physical network to deliver payments to all corners of an economy—both urban and rural. While financial institutions might not find it cost-effective to open a brick-and-mortar branch in every place that has a large unbanked population, they can use agent banking—forming partnerships with post offices or retail shops to offer basic financial services to customers. People using digital payments need to be able to deposit and withdraw cash safely, reliably, and conveniently at cash-in and cash-out points, whether these take the form of a bank agent, a mobile money agent, or an automated teller machine (ATM). Ideally, people receiving digital payments would keep their funds in digital form and make purchases and pay bills electronically. But in many places digital payments are not yet widely accepted for everyday purchases at local retail stores and markets, especially in developing economies. So most people need to be able to cash out at least some of the money they receive through digital payments. Indeed, a reliable cash-out experience is key to the success of digital payments.

Technology and infrastructure are only part of the picture. To ensure that people benefit from digital financial services, governments need to ensure that appropriate regulations and consumer protection safeguards are in place. And regardless of the technology used, financial services need to be tailored to the needs of disadvantaged groups such as women, poor people, and first-time users, who may have low literacy and numeracy skills. Also important is to look at who has access to the digital technology needed to use the services—and who does not.

Creating an enabling environment

As this chapter shows, digitizing payments of wages and government benefits has the potential to increase both the ownership and use of accounts. Yet efforts to digitize such payments have suffered from shortcomings. A common complaint among those receiving government transfers as digital payments is that the payment products are difficult to use. Recipients have reported long lines at bank agents and said that they struggle to get help when they have a question or a problem with their payments. Others have reported being targeted for fraud. Putting in place consumer protection rules is critical to safeguard people from fraud and abuse. Such protections are especially important for women and low-income people, who are most likely to be financially inexperienced. This underscores the importance of targeted financial literacy and capability training, which can have a positive impact in such areas as increasing saving and promoting financial skills like record keeping. Also needed are regulations to facilitate financial inclusion, such as by introducing tiered documentation requirements, requiring banks to offer basic or low-fee accounts, and embracing opportunities to use new technologies to expand access to formal financial services.

Where lack of trust in financial institutions is an important barrier to account ownership, quality product design and strong consumer protection standards could potentially help increase financial inclusion. Distrust has many causes, including government seizures of banks, discrimination against certain
population groups, and past episodes of hyperinflation and bank failures. Individual financial service providers might not be able to address systemic causes of mistrust. But they can shore up trust in their own products by treating people fairly and providing quick, convenient, and effective redress in response to consumer concerns. Such efforts are critical in ensuring that newly banked adults benefit from financial inclusion.

Digital technology–based biometric identification cards provide another way of lowering barriers to account ownership. In India, where 90 percent of unbanked adults reported having proof of identity issued by the national government, recent research suggests that government-provided biometric identification cards were among the factors enabling a rapid decline in the number of adults without an account. Research in Malawi suggests that biometric identification has increased loan repayment rates among borrowers most at risk of default.

Splicing Global Findex data with new data from the World Bank Identification for Development (ID4D) project reveals fresh insights into the relationship between account ownership and access to documentation. In developing economies 85 percent of adults without an account at a financial institution have government-issued identification. Yet in Sub-Saharan Africa, where those without a financial institution account were especially likely to cite documentation requirements as a barrier, only 56 percent of adults reported having government-issued identification.

Improving access to the government-issued identification required by know-your-customer (KYC) regulations often is not enough to increase account ownership, however, even where many people without a financial institution account cite documentation requirements as a barrier to opening one. One reason is that national identification does not always satisfy the documentation requirements. People often need to show local identification as well—such as a utility bill with a home address—and this can be hard to come by.

Leveraging digital technology among the unbanked

In many high-income economies debit and credit cards used at point-of-sale (POS) terminals dominate the digital payments landscape. In most developing economies, by contrast, few people have such cards. But many have a mobile phone, which could allow these economies to leapfrog directly to mobile payments.

Simply having a mobile phone can potentially allow access to mobile money accounts and other text- or app-based financial accounts. Having access to the internet as well expands the possibilities. Indeed, Global Findex data suggest that mobile phones and the internet could go a long way toward helping to overcome some of the barriers that unbanked adults say prevent them from accessing financial services. For example, digital financial services might shrink the distance between financial institutions and their customers. And by lowering the cost of providing financial services, digital technology might be helpful for
Global Findex data show that mobile phone ownership is widespread among the unbanked. Globally, about 1.1 billion unbanked adults—about two-thirds of all those without an account—have a mobile phone (map 6.1).

Mobile phone ownership among the unbanked varies across economies but tends to be high. Consider the seven economies that are home to nearly half the world’s unbanked adults (figure 6.1). Except in Pakistan, more than half of unbanked adults have a mobile phone, and in China the share is as high as 82 percent.

Unbanked women are less likely than their male counterparts to own a mobile phone. Globally, 72 percent of unbanked men have a mobile phone, compared with 62 percent of unbanked women—a gender gap of 10 percentage points. But this
gender gap differs among developing economies. In Indonesia and South Africa unbanked women are just as likely as unbanked men to have a mobile phone. Yet large gender gaps are found in Nigeria and Pakistan.

Among the unbanked in Sub-Saharan Africa, 54 percent of men have a mobile phone while 43 percent of women do—a gender gap of 11 percentage points. Yet in several economies in the region, including Mozambique and Senegal, unbanked women are about as likely as their male counterparts to own a mobile phone (figure 6.2). And in some economies, such as Botswana and Zimbabwe, unbanked women are more likely than unbanked men to have a mobile phone.

Notably, mobile phone ownership is also high among adults without a financial institution account who cited distance as a barrier: globally, 64 percent reported owning a mobile phone. The share is even higher in some economies with remote areas or remote islands where digital financial services could be especially effective. In Indonesia, for example, where 33 percent of adults without a financial institution account cited distance as a barrier, 69 percent of this group reported having a mobile phone. And in the Philippines, among the 41 percent citing distance as a barrier, 71 percent reported owning a mobile phone.

Not surprisingly, a smaller share of unbanked adults have both a mobile phone and access to the internet in some form—whether through a smartphone, a home computer, an internet café, or some other method. Globally, this share is about 25 percent. But there are big differences among major developing economies (figure 6.3). In Brazil nearly 60 percent of unbanked adults have access to both technologies. In South Africa about 33 percent do, in China 25 percent do, and in Indonesia almost 20 percent do. The share drops to about 10 percent in Bangladesh, Nigeria, and Pakistan.
Opportunities for expanding account ownership among the unbanked

Millions of unbanked adults around the world still receive regular payments in cash—for wages, from the government, for the sale of agricultural products. Digitizing such payments is a proven way to increase account ownership. Globally, 9 percent of adults—or 13 percent of account owners—opened their first account specifically to receive private sector wages, government payments, or payments for the sale of agricultural products. The share is higher in many economies (figure 6.4). In the Islamic Republic of Iran, Malaysia, and Zambia nearly 20 percent of account owners opened their first account to receive such digital payments. The same is true for about 25 percent of account owners in Argentina, Peru, the Russian Federation, and Turkey—and for about 40 percent in the Arab Republic of Egypt and Kazakhstan.

There is room to build on this progress. This section outlines opportunities to increase account ownership by moving regular cash payments into accounts.

Digitizing payments from government to people

Governments make several types of payments to people—paying wages to public sector employees, distributing public sector pensions, and providing government transfers to those needing social benefits. Globally, about 100 million unbanked adults receive such payments in cash (map 6.2). These include 60 million women as well as 55 million adults in the poorest 40 percent of households within economies. These numbers suggest the potential for increasing account ownership by moving these payments into accounts.

Indeed, Global Findex data show that digitizing government payments has already had an effect in increasing account ownership. Among adults around the world who already have an account, roughly 80 million opened their first account to collect public...
sector wage payments, including 35 million women. About 140 million account owners opened their first account to receive government transfers—including 80 million women as well as nearly 75 million adults in the poorest 40 percent of households. And about 120 million adults opened their first account to receive a public sector pension.14

Digital payments of public sector wages alone have spurred big increases in account ownership in some developing economies. In Uzbekistan 17 percent of adults with an account opened their first account to collect public sector wages; in Jordan 10 percent did so.

Digital payments of government transfers have had a similar impact. Among adults in Argentina who have an account, about 11 percent opened their first account to receive government transfers. In Thailand 14 percent did so.

Women and poorer adults may benefit disproportionately when governments digitize transfer payments. Among women with an account in Brazil, about 10 percent got their first account to receive government transfers. In Argentina nearly a quarter of account owners in the poorest 40 percent of households opened their first account for the same reason—and in Thailand 17 percent did so.
Digital payments of public sector pensions have also increased account ownership. In Egypt about 14 percent of account owners opened their first account to receive such payments, as did roughly 10 percent in Russia and Turkey.

Important opportunities remain to increase account ownership by moving government payments into accounts. In Vietnam 12 percent of unbanked adults receive such payments in cash; the share is similar in Ethiopia and Uzbekistan and twice as high in Russia (figure 6.5). In the Philippines digitizing government payments could reduce the share of unbanked adults by up to 16 percent and the share of unbanked women by up to 20 percent.

Governments in East Asia and the Pacific could potentially bring millions of unbanked adults into the formal financial system by distributing transfers through digital payments rather than in cash. In Vietnam nearly 4 million unbanked adults receive government transfers in cash—and in Indonesia and the Philippines about 6 million do. In Europe and Central Asia digitizing public sector pension payments could have a big impact. In Russia and Ukraine about a quarter of unbanked adults receive such payments in cash. In Romania about a third do.

Many unbanked adults receiving government payments in cash—whether government transfers or public sector wages or pensions—have the basic technology needed to receive these payments in digital form. Of the 60 million unbanked adults worldwide who receive government transfers in cash, two-thirds have a mobile phone. Among the 4 million in Vietnam, 72 percent have a mobile phone. And among the 6 million in the Philippines, 58 percent do.

**Digitizing payments from businesses to people**

Just as for governments, Global Findex data show that businesses could boost account ownership by paying their unbanked employees through accounts rather than in cash. Globally, 13 percent of unbanked adults—about 230 million people—receive private sector wage payments in cash, including 80 million women as well as 100 million adults in the poorest 40 percent of households within economies (map 6.3). And 78 percent of these wage earners have a mobile phone.

Moving payments of private sector wages into accounts has already proved to be effective in increasing account ownership. Globally, about 200 million adults...
opened their first account to collect wage payments from a private sector employer. These include 85 million women as well as 50 million adults in the poorest 40 percent of households.

Digitizing private sector wage payments could reduce the number of unbanked adults by up to a fifth in Argentina, Colombia, and Egypt and by up to almost a third in Indonesia and the Philippines. In Indonesia alone, that would mean expanding account ownership to up to 25 million unbanked adults. Large shares of these wage earners already have a mobile phone that could help facilitate electronic wage payments (figure 6.6). In Nepal, among the 20 percent of unbanked adults who receive private sector wage payments in cash, 70 percent have a mobile phone. In some developing economies mobile phone ownership among this group is considerably higher—about 90 percent in Argentina, Egypt, and Vietnam.

Source: Global Findex database.
Note: Data are not displayed for economies where the share of adults without an account is 5 percent or less or where the share receiving private sector wage payments is 10 percent or less.
Digitizing payments for agricultural products

Another opportunity to increase account ownership is in digitizing payments for the sale of agricultural products. About 235 million unbanked adults in developing economies receive such payments in cash, among them 110 million women as well as 125 million adults in the poorest 40 percent of households (map 6.4).

But many other people have received agricultural payments into an account. In developing economies about 40 million adults with an account opened their first one to receive payments for the sale of agricultural products.

Yet there is room to do much more. Digitizing agricultural payments could cut the number of unbanked adults by up to a quarter or more in Mozambique, Nigeria, and Vietnam; by up to roughly a third in Burkina Faso and Sierra Leone; and by up to half or more in Ethiopia (figure 6.7).

Making agricultural payments through mobile phones could be especially helpful for unbanked farmers living in remote rural areas—many of whom have access to a phone. Among unbanked adults receiving agricultural payments in cash, 59 percent have a mobile phone. In Ethiopia and Sierra Leone only about 33 percent do. But the share is nearly twice as large in Côte d’Ivoire and Nigeria.

MAP 6.4
About 235 million unbanked adults receive agricultural payments in cash
Adults without an account receiving payments for agricultural products in the past year in cash only, 2017

Source: Global Findex database.
Note: Data are not displayed for economies where the share of adults without an account is 5 percent or less or where the share receiving payments for agricultural products is 10 percent or less.
Digitizing domestic remittances and formalizing saving

The common practice of sending money to friends or relatives in another part of the country also offers opportunities for increasing account ownership. In developing economies 260 million unbanked adults—16 percent of all those without an account—send or receive domestic remittances in cash or using an over-the-counter (OTC) service such as Western Union (map 6.5). That number includes about 140 million unbanked women. Domestic remittances are most common in Sub-Saharan Africa, where they are sent or received in cash or using an OTC service by roughly a quarter of unbanked adults—about 90 million in all.

Moving domestic remittances into accounts could be an especially effective way to increase account ownership in several economies (figure 6.8). In Nigeria 37 percent of unbanked adults use domestic remittances; similar shares do so in Côte d’Ivoire, the Philippines, and South Africa.

The most common method for sending or receiving domestic remittances varies across economies. In the Philippines and South Africa unbanked adults are more likely to use an OTC service. But they are more likely to use cash in Nigeria as well as in Egypt and most other economies in the Middle East and North Africa. Compared with those who use cash for remittances, people who use OTC services represent a potentially easier opportunity to increase account ownership. Because these people are already comfortable with digital payments, they might find it easier to make the transition to using an account—while those who have never made digital payments might be skeptical about entrusting their money to a financial service provider. But the challenge will be to design a product that can compete with an OTC transaction on costs: one reason that people rely on an OTC service rather than an account to send domestic remittances electronically is that using an OTC service can be less expensive.

Unbanked adults also use varied methods of saving. Among those who save semiformally, some entrust their money to a person outside the family. Many, particularly in Sub-Saharan Africa, rely on a savings club. One example is a rotating savings and credit association, which typically operates by pooling members’ weekly deposits and disbursing the entire amount to a different member each week. Many people who choose to save semiformally may be drawn to the social
aspect of savings clubs. But using an account might be an attractive option if financial institutions offered free or low-cost interest-bearing savings products requiring little or no minimum balance. And moving semiformal saving into accounts represents an important opportunity to increase financial inclusion.

In developing economies about 150 million unbanked adults—nearly 1 in 10—save semiformal (map 6.6). In Sub-Saharan Africa alone,
up to 65 million unbanked adults save semiformally, including 35 million women. Moving semiformal saving into accounts could reduce the number of unbanked adults by up to 23 percent in Nigeria and by up to 32 percent in Ethiopia (figure 6.9). Semiformal savings methods are also widely used in some economies outside Sub-Saharan Africa—including by almost a fifth of unbanked adults in Pakistan and nearly a quarter of those in Indonesia.
Opportunities for increasing the use of accounts among the banked

Although financial inclusion starts with having an account, its benefits come from actively using that account—for saving, for managing risk, for making or receiving payments. Just as there are opportunities to increase account ownership, so are there opportunities to help people who already have an account make better use of it.

Most people do take advantage of their accounts: globally, only 20 percent of adults with an account reported that it was inactive, with no deposit or withdrawal in the past year. Yet Global Findex data suggest several ways to further increase the use of accounts among all account owners. This is not simply a matter of account owners choosing to use accounts rather than cash. Financial service providers need to offer safe, affordable, and convenient products that make using accounts more appealing than using cash.

How governments choose to make payments to people also matters. Many governments already use digital payment channels to pay public sector employees and distribute social benefits and public sector pensions. But in some economies opportunities remain to strengthen governments’ use of digital payments. Globally, 2 percent of account owners—90 million adults who have an account—receive government transfers, public sector pensions, or public sector wages in cash. The share is as high as 12 percent in Ethiopia and 14 percent in the Philippines.

Businesses generally lag behind governments when it comes to using digital payrolls. About 300 million account owners worldwide work in the private sector and get paid in cash, including 90 million in India. Indeed, India is one of several major developing economies where 10 percent or more of account owners receive private sector wage payments in cash; the share is almost twice as large in Indonesia, Myanmar, and Nepal (figure 6.10).

Large numbers of account owners receive cash payments for the sale of agricultural products—roughly 275 million in developing economies, including 15 million in Bangladesh and 80 million in China. The share of account owners receiving agricultural payments in cash is about 25 percent in Bangladesh, Uganda, and Uzbekistan—and 54 percent in Ethiopia (figure 6.11). Digitizing agricultural value chains offers multiple opportunities for increasing the use of accounts, not just through payments for the sale of agricultural...
products but also through important related payments, such as for purchases of crop insurance and agricultural inputs.

Globally, at least 145 million adults with an account receive payments from self-employment exclusively in cash. These include nearly 12 million account owners in Brazil and about 15 million in Indonesia. Digitizing these payments, and thus increasing their transparency, could provide financial service providers with information needed to extend and deepen access to financial services for both retailers and customers. Extending digital payments throughout the value chain of the consumer goods businesses that supply many small, self-employed merchants would also benefit distributors by improving the efficiency of payment collection and help to reinforce the use of digital payments throughout supply chains. Yet increasing the digitization of retail payments involves challenges, including the need to ensure that using digital payments for retail transactions is an attractive option for both merchants and customers.  

Arguably the single best way to increase account use would be to more fully digitize payments for water, electricity, and other utility bills. Globally, 1 billion adults with an account still pay utility bills in cash (map 6.7). In some economies people have the option of paying utility bills digitally but choose not to because of high fees, lack of proof of payment, or other concerns. If more utilities offered an attractive option for digital payments, efficiency could be improved on both sides. While about a quarter of account owners worldwide pay utility bills in cash, the share is higher in many major developing economies. About a third of account owners pay utility bills this way in China, Ethiopia, South Africa, and Turkey, and more than twice that share do so in Thailand and Vietnam. In Egypt 81 percent of account owners pay utility bills in cash (figure 6.12). And in both Brazil and Indonesia about 25 million women with an account still use cash to pay utility bills.

Digital technology could offer an alternative to cash for utility payments. Globally, about 910 million adults pay utility bills in cash despite having an account as well as a mobile phone. And roughly half a billion adults pay utility bills in cash even though they have an account, a mobile phone, and access to the internet. In Brazil, China, Peru, and Turkey about 60 percent of account owners who pay utility bills in cash have access to both a mobile phone and the internet. The shares are larger in Colombia and Vietnam, smaller in Egypt and South Africa.
Domestic remittances also offer potential for increasing the use of accounts. About 280 million account owners in developing economies use cash or an OTC service to send or receive domestic remittances. In Algeria and the Philippines roughly a quarter of account owners use one of these methods to do so (figure 6.13).

Formalizing saving is yet another way to increase account use. In developing economies 160 million account owners save semiformaly, such as by using a savings club or savings collector to make regular savings payments, but not formally (by using an account at a financial institution). Semiformal saving is particularly widespread in Sub-Saharan Africa. About 25 percent of account owners save semiformaly (but not formally) in Burkina Faso and Côte d’Ivoire, while about 33 percent do so in Cameroon and Uganda (figure 6.14). Elsewhere, in Indonesia and Pakistan about a fifth of account owners use semiformal (but not formal) savings methods.

Finally, wider acceptance of mobile payments could encourage greater use of accounts for retail transactions. This is especially true in economies where account owners are much more likely to have a mobile phone than a debit card, putting them in a position to leapfrog to mobile payments. In India about...
100 million adults with an inactive account have a debit card, while nearly 2.5 times as many—240 million—have an inactive account plus a mobile phone. In both Russia and Thailand about 4 million adults have an inactive account and a debit card, while roughly twice as many have an inactive account as well as a mobile phone. Already equipped with an account and a mobile phone, these people might be inclined to use mobile payments if given attractive opportunities to do so.
Notes

1. For an overview, see Better Than Cash Alliance (2016); Demirgüç-Kunt, Klapper, and Singer (2017); and Klapper and Singer (2017).
2. Wright and others (2017).
4. See Karlan and others (2016).
5. See Klapper and Singer (2017).
7. See Zimmerman and Baur (2016); and Stuart (2016).
10. For a discussion of regulations to facilitate financial inclusion, see Claessens and Rojas-Suarez (2016).
13. Data on indicators that are part of the World Bank ID4D project were collected in collaboration with Gallup, Inc., and, like the Global Findex data, were collected only in economies where Gallup, Inc., conducts face-to-face interviews. This means that the data are available primarily for developing economies. In 13 high-income economies included in the 2017 Global Findex database, however, Gallup, Inc., conducts face-to-face rather than phone interviews, and in these economies data were collected for the ID4D indicators. Conversely, no data are available for the 4 developing economies included in the database where Gallup, Inc., conducts interviews by phone.
14. People may receive more than one type of government payment.
17. See Zetterli and Pillai (2016).