FULFILLING THE PROMISE OF FINTECH:

The Case for a Nonprofit Vision and Leadership

nLIFT
Nonprofit Leaders in Financial Technology

THE ASPEN INSTITUTE

The nLIFT Manifesto

Autumn 2018

Nonprofit Leaders in Financial Technology (nLIFT) is a group of organizations with a shared goal of increasing financial inclusion through technology-driven platforms. nLIFT is comprised of seven nonprofit leaders in the fields of technology and financial inclusion: Commonwealth, Earn, The Financial Clinic, Mission Asset Fund, My Path, Neighborhood Trust Financial Partners, and National Federation of Community Development Credit Unions. As nonprofits, nLIFT members are driven by mission and impact before profits, uniquely positioning them to leverage technology to advance a fairer and more inclusive financial system. nLIFT members are joining forces to strengthen the efforts of each organization, and those of the communities and partners they serve, as well as to drive meaningful and lasting change at the intersection of technology and financial inclusion. nLIFT members have asked FIELD and the Financial Security Program at the Aspen Institute to serve as their convener as they pursue these goals.

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Too many Americans lead financial lives of quiet desperation. More of us must earn our income by cobbling together multiple part-time jobs which pay low wages, offer no benefits, and require us to work erratic schedules that create serious logistical and psychological stress. Secure salary-paying jobs increasingly require a college degree, an asset that recedes beyond more Americans' reach as tuition costs spiral out of control. Good jobs are also increasingly concentrated in a handful of cities where housing costs have, unsurprisingly, risen accordingly. All of these trends, decades in the making, reached the crisis point with the Great Recession of 2008. Those who were already the most financially vulnerable were the hardest hit, and 10 years later, that pain is still being felt. Low-income Americans suffer the most, but even middle-class Americans live too close to the financial edge: in one of the most disquieting research studies in years, the Federal Reserve found that almost half of all American adults would have a hard time scraping together even $400 in an emergency.[1]

nLIFT, or Nonprofit Leaders in Financial Technology, is a new consortium of leaders from nonprofit organizations around the country. We come from different regions and have different operating models but two things unite us. First, we are committed to working in our respective ways to build the financial security of low- and moderate-income households. Second, we see a unique and necessary role for the nonprofit sector to play in ensuring that fintech, or financial technology, innovations focus on those households' needs. We believe that such a focus is unlikely to happen on its own for a variety of reasons, mostly to do with fintech's existing incentive structures.

As mission-driven, tech-embracing nonprofits, we nLIFT member organizations already have successful fintech models in operation. These products include tech-driven tools that employ inclusive user experience designs, leverage key partnerships, and advance policy objectives, and they are serving hundreds of thousands of people across the country. nLIFT seeks to build on our own early experiences by working now in partnership with all stakeholders, private- and public-sector, to embed a true customer-centricity more broadly within the rapidly growing fintech sector.

This Manifesto sets forth nLIFT's vision, our values, and our theory of change. We acknowledge that fintech is still growing and evolving—indeed that is the very reason why we seek to influence its direction now. We also acknowledge that the best paths to fruitful collaborations between the nonprofit sector and fintech players remain to be charted, and may change over time. It is our hope that this document will inspire the kinds of productive, mutually respectful conversations by which those paths may ultimately be illuminated—and then followed.

This Manifesto, setting forth what we believe and why, is the starting point.

1 Larrimore, Jeff, Alex Durante, Christina Park, and Anna Tranfaglia. (May 2017) Report on the Economic Well-Being of US Households for 2016. United States Federal Reserve Division of Consumer and Community Affairs. Washington, DC. https://www.federalreserve.gov/publications/files/2016-report-economic-well-being-us-households-201705.pdf

01

Current state—and desired future state—of financial security in America

Financial security is a complex phenomenon, not only in terms of the factors that contribute (or detract) from it but even as a matter of definition. It is important to distinguish between subjective *feelings* of financial security and more objective standards. There are people (think: older Americans with a living memory of the Depression or World War II) who may own their homes free and clear, have significant savings and no debt, and yet still never quite shake off a feeling of impending financial doom. Others, whose financial magical-thinking runs in the opposite direction, may feel that they are prosperous so long as they *look* the part, and will act and spend accordingly, even if their actual situation is quite precarious and made worse by their choices.

The Federal Reserve's 2017 annual survey of U.S. household well-being[2] (the same survey that in 2016 found that 44 percent of adults could not cover a $400 emergency) includes self-reported data about financial well-being. More than one-fifth of those surveyed are not able to pay all of their current month's bills in full. More than 25 percent skipped necessary medical care in 2017 for financial reasons, too. The survey does include some good news: 74 percent of respondents reported that they were "doing okay" financially. That figure is 10 percentage points higher than it had been in 2013, the first year that survey was conducted, when the country was still dealing with the worst fallout from the global financial crisis. But obviously also, if 74 percent are "doing okay," that still means that more than a quarter of American households are, by their own reckoning, "not doing okay." It also begs some deeper questions about the disconnect, described above, between feelings and facts when it comes to money. For example, only 60 percent of the total 2017 respondents could readily meet that $400 hypothetical expense. So if 74 percent (14 percentage points *higher* than the percentage who could lay hands on $400) nevertheless describe themselves as "doing okay," it suggests that a sizeable cohort even of those who report that they are "doing okay" are in fact living close to the financial edge, possibly closer than they fully appreciate.

Although the survey does note some overall encouraging trends, it finds persistent socioeconomic, educational, racial, and ethnic disparities. The more educated still report greater financial security than those less educated. Urban residents are much more likely to describe their local economy as good or excellent than rural residents are. Although more than three-fourths of Whites said they were at least "doing okay" financially, less than two-thirds of Blacks and Hispanics did. And those whose incomes derive from part-time or erratic work report greater pessimism. In fact, so great is the stress among the 30 percent of American adults with variable incomes that three-fifths of such workers would prefer a hypothetical job with lower but stable pay over one with variable pay even if that variable pay ended up being higher.

2 Larrimore, Jeff, Alex Durante, Kimberly Kreiss, Christina Park, and Claudia Sahm. (May 2018) *Report on the Economic Well-Being of US Households in 2017*. United States Federal Reserve Division of Consumer and Community Affairs. Washington, DC.. https://www.federalreserve.gov/publications/files/2017-report-economic-well-being-us-households-201805.pdf

01 Current state–and desired future state–of financial security in America

nLIFT member organizations generally exist to serve the kinds of people most likely to describe themselves as "not doing okay:" working low-paying jobs with erratic schedules and incomes, under-insured, excessively rent-burdened, and more likely to face subtle or overt discrimination in hiring, credit, and other financially important decisions. We seek to serve customers who have been historically left out of the financial mainstream through a variety of means *(see pages 11-14)* with access to safe, affordable, and responsible financial products and services.[3] Because of that focus, our work can accurately be described as relating to *financial inclusion*.

3 We recognize that this is not the only perspective on financial inclusion (e.g., other definitions stress the importance of access to a *full range* of safe, affordable, and convenient financial services).

Our definition of financial security: A state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow enjoyment of life.

Adapted from Consumer Financial Protection Bureau

And now an important word about means versus ends. nLIFT member organizations all work to expand *financial inclusion*, but we do so as a first step, an essential on-ramp, toward helping those same customers build *financial security* —which is the ultimate goal.

As noted earlier, financial security is a complex phenomenon. As important as it is to have safe and responsible financial services, people need many other things to achieve financial security: a job or other reliable source of income, safe and affordable housing, reliable and affordable transportation, and affordable health care, to name a few. Financial security can require the ability to navigate through a sophisticated and sometimes confusing financial landscape. It can require heroic resistance to a powerful and all-pervasive consumer culture that glorifies living beyond one's means and other financial behaviors historically understood to be injurious.

A recent MetLife Foundation/Gallup study[4] found little correlation between financial inclusion and financial security. That result reflects what nLIFT members believe based on our long years of first-hand observation: being banked isn't enough. Merely having a bank account is not the same thing as true financial inclusion, and will not by itself bring about financial security. The United States, after all, is 95 percent "banked" yet two-thirds of the MetLife/Gallup study's U.S. respondents were either "stretched" or outright insecure. nLIFT believes that this reality underscores the importance of financial inclusion efforts aimed at those who have historically been ill-served or outright excluded from the financial mainstream, efforts to truly meet their needs with thoughtfully designed products, services and supports.

Although nLIFT recognizes that financial inclusion is only one piece of financial security, we hold that it is quite an important piece. For one thing, part of what it means to be low-income is that you have very little margin for error. Low-income Americans typically pay as much as 10 percent[5] of their total income just on fees for financial services. The lower the total number, the more it hurts to have 10 percent stripped away. Our financial inclusion work to connect low-income customers to safer financial products and to other vital services designed with their needs in mind (for example financial coaching) is thus a matter of urgency.

More profoundly, we believe that a powerful psychological shift takes place when people get tools that enable them to exert more control over their financial lives. Money is more than math. It affects, and is affected by, every important aspect of a person's life: their self-perception, their family relationships, their education, their job prospects, their ability to plan and imagine the future. All of these things have a complex dynamic interplay: change one, and the others change in response. But money connects them all, and having a sense of agency over your financial life means having a sense of agency over your life generally. We believe this in part because we have seen it in reverse: we have seen every day the corrosive effect that chronic financial stress has on our low-income customers, how difficult that stress makes it to focus on anything except the constant pressure of the moment. Having the tools to break out of that trap and start taking control of your financial life can be the break in the logjam that makes a future orientation possible—which in turn makes all the difference.

In sum, while we members of nLIFT acknowledge that financial inclusion is not the only necessary precondition for the ultimate goal of financial security, we hold that it is a critical element. It is one on which each of our organizations has keyed in and committed to, as a necessary building block toward financial security. It is where we believe that the fintech industry has a game-changing role to play. And it is in that intersection—of financial inclusion with fintech—that nLIFT sees a game-changing role for ourselves.

4 Gallup Inc. (May 2018) Gallup *Global Financial Health Study: A 10-Country Survey to Measure Financial Control and Security.* Washington, DC: Gallup Inc. with support from MetLife Foundation and Rockefeller Philanthropy Advisors. https://news.gallup.com/reports/233399/gallup-global-financial-health-study-2018.aspx

5 United States Postal Service Office of the Inspector General. (2014). *Providing Non-Bank Financial Services to the Underserved.* Arlington, Virginia: Office of the Inspector General of the United States Postal Service, January 27. https://www.uspsoig.gov/sites/default/files/document-library-files/2015/rarc-wp-14-007_0.pdf

The direction fintech will take depends on who designs it.

02

Current state—and desired future state—of fintech in America

Technological innovation in financial services, or fintech, creates a powerful opportunity to expand financial inclusion by delivering better-designed products at larger scale and lower cost. Fintech-enabled tools enable users to move money quickly and easily across time and place, to obtain credit almost instantaneously, to budget and manage money more effectively, to research financial issues or get quick answers to financial questions, to insure against a wide range of risks, and to save and invest (and monitor those savings and investments) more easily.

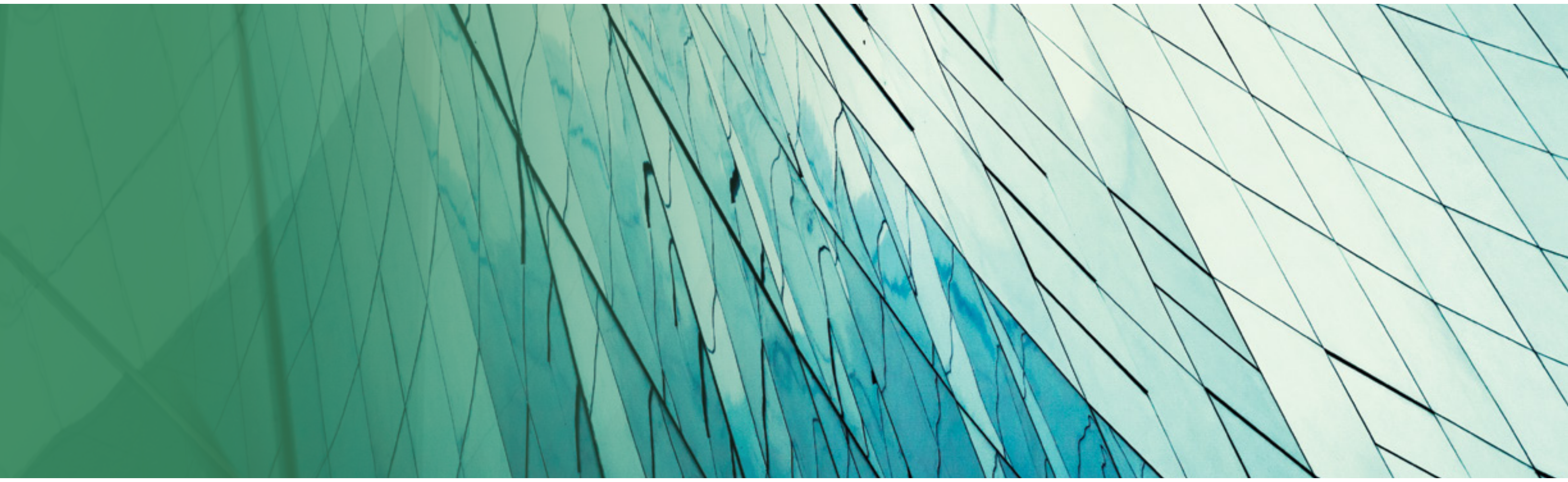
Fintech has generated excitement all over the world. Perhaps the best known example remains Kenya's M-Pesa, the mobile money service launched in 2007 which 10 years later—now that 96 percent of households have at least one M-Pesa account—is credited with lifting 2 percent of households out of extreme poverty, by facilitating small business growth and improved financial behaviors, especially easier and safer savings.[6]

But like any technology, the direction fintech will take depends on who designs it, for what purpose, and its creators' incentives, which in turn depend in large part on their operational and financial models and the broader policy structure. In the US, fintech investment topped $14 billion in the first half of 2018 alone, a 16 percent increase over the previous half-year.[7] According to Deloitte,[8] despite some recent increases in levels of private equity and debt financing, venture capital remains by far the primary source of funding for fintech startups in the US. Deloitte data also shows that a lot more activity has been coming from later-stage funding rounds, and that IPOs and acquisitions are also on the rise.

In short, the data shows a market that is maturing even as rapid growth continues, one in which fintechs are under considerable pressure to demonstrate resilient business plans and to point to real-world market results comparable to those of public companies. So perhaps unsurprisingly, in the US fintech remains largely focused on expanding choice and convenience for consumers who are already part of the financial mainstream. This seems to nLIFT a seriously missed opportunity, especially considering the success of fintech at expanding financial inclusion in emerging markets where there is some space for non-profit-maximizing models and where incentive structures can thus be very different.

nLIFT members believe that that space for alternative models must be encouraged in our own country. We are hardly alone in this view; it is shared not only among others in our nonprofit orbit but also by some of the world's best-known tech leaders. As PayPal CEO Dan Schulman wrote in a recent *Wall Street Journal* article "financial technology companies, governments, and social-sector organizations must work together to deliver innovative services that reduce costs, increase convenience, and strengthen spending power for people and businesses around the globe. If we do this, we all stand to profit from the growth and prosperity that will result."[9]

6 Tech Central. *How M-Pesa Transformed Kenya's Economy*. January 5, 2017. https://techcentral.co.za/how-m-pesa-transformed-kenya/70942/
7 KPMG. *The Pulse of Fintech*. July 31, 2018. https://home.kpmg.com/us/en/home/insights/2017/02/the-pulse-of-fintech-archives.html
8 Eckenrode, Jim and Sam Friedman. (2017) *Fintech by the Numbers*. New York, Deloitte. September. https://www2.deloitte.com/tr/en/pages/financial-services/articles/fintech-by-the-numbers.html
9 Schulman, Dan. "PayPal's CEO says most people around the world are underserved by the financial-services industry." *Wall Street Journal*, January 17, 2018. https://www.wsj.com/articles/dan-schulman-on-shifting-from-financial-inclusion-to-financial-health-1516201094



02 Current state–and desired future state–of fintech in America

We at nLIFT share a sense of urgency about getting on with this "working together" sooner rather than later. We are mindful that fintech is not immune to path dependence, which describes how the set of decisions an industry faces for any given circumstance is limited by its past decisions and experiences, even though past circumstances may no longer be relevant. More simply, as the old proverb puts it, we believe that as the twig is bent so shall the tree grow. Our view is that the longer fintech in the US remains exclusively or even primarily a means to make financial transactions marginally more convenient for affluent customers, the harder it will be to change course or expand to new purposes.

Fintech may be relatively new, but mission-driven finance is not. Indeed, history shows that whenever financial systems have advanced toward inclusion, nonprofits have been part of that expansion, extending products and services to excluded populations and influencing policies that improved the broader financial system. Consider, for example, the credit union movement's role in extending credit to rural communities and urban workers, the role of community development financial institutions in rebuilding local economies, and the launch of the global microfinance industry.

We are not opposed to profit per se. We note that many mission-driven financial players are in fact profitable (with the important difference that those profits are returned to members or used to grow the business) and, further, that history offers many examples, especially from the Information Revolution, of profit-maximizing businesses that have had major beneficial social impact. But we believe that ultimately, the mission makes the difference.

nLIFT seeks to build on the proud history of mission-driven finance and carry that work forward into the fintech era.

What does nLIFT mean by "fintech?"

Fintech, or technology innovations used to support or enable banking or financial services, can take many different forms. Much of the investment flowing into fintech is directed at blockchain. Fintech also describes the range of technology-enabled consumer-facing products and services (whether payments, savings, investments, insurance, or other product or transaction type). Fintech can also take the form of technology-enabled improvements to back-end systems that enhance operational efficiencies. nLIFT uses the term "fintech" in the most expansive sense. As described in section 05, our own fintech models include both customer-facing experiences and operational tools that improve our own operations, allowing us to serve our customers better.

03

How we get there from here?

The fintech and nonprofit sectors have much to learn from each other, but they don't necessarily share a vocabulary or worldview. nLIFT can be an effective interlocutor between those two cultures.

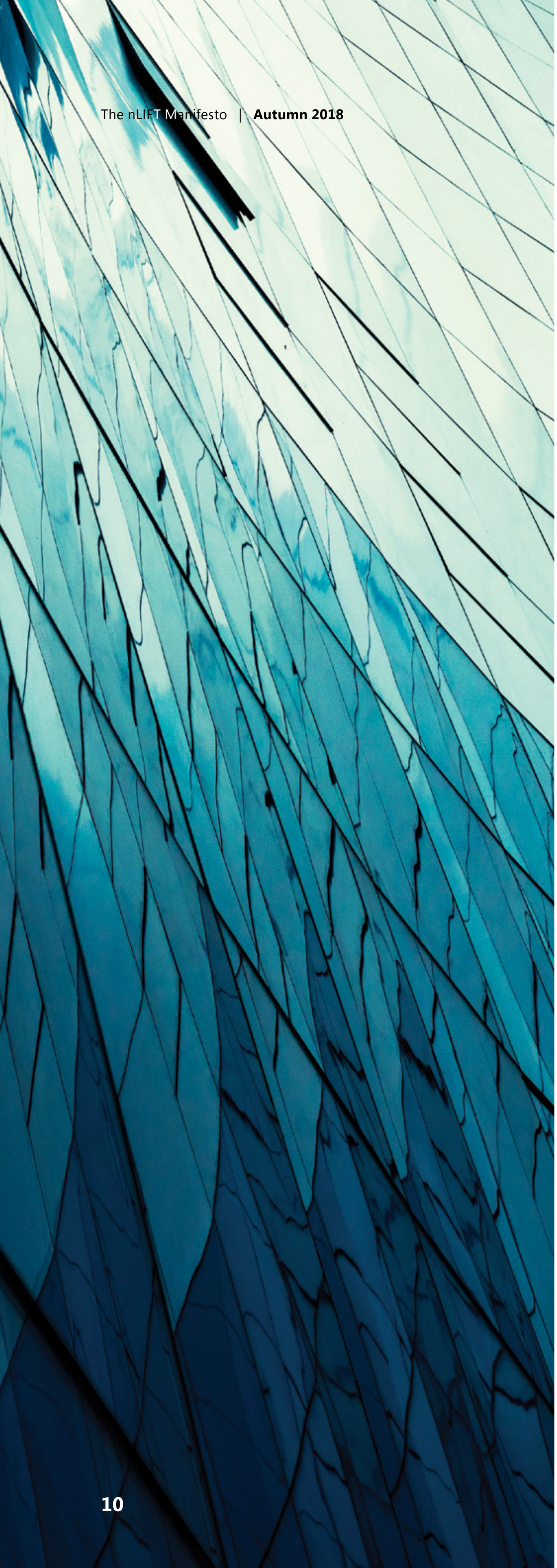
We start with a picture of the type of society and economy that we want: one in which every American can achieve a lasting sense of *financial security*, or what the Consumer Financial Protection Bureau calls financial well-being and defines as "a state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow enjoyment of life."[10] We then envision a technology landscape that increases access to financial services for people at all income levels. We envision that landscape as one that enables people to find appropriate products and services that meet their financial needs, to engage with financial coaches to help guide their decisions, and to build a stronger foundation of income and assets.

nLIFT imagines several ways to approach the important task of harnessing the power of fintech to advance financial inclusion. We want to work with the nonprofit sector to help it embrace technology effectively. Our own organizations have all pursued various fintech initiatives successfully *(see section 05),* and we have practical wisdom to share. We also want to work with the tech sector and share with them our deep understanding of the financial lives and needs of low- and moderate-income Americans. Field-wide conversations and "big data" will facilitate our vision for systems change: by promoting promising practices, informing and building products that meet the needs of low- and moderate-income people, and generating insights for the policies that will be necessary to build financial inclusion and security at scale. nLIFT members leverage data to identify obstacles, investigate solutions, challenge assumptions, and partner with stakeholders at all levels to create lasting systemic change.

We believe that both sectors, fintech and nonprofit community-based organizations, have much to learn from each other, but they don't necessarily share a vocabulary or worldview. As mission-driven nonprofits who also have proven track records with fintech plays, nLIFT can be an effective interlocutor between those two cultures. We want to use the trust we have built with our low- and moderate-income clientele to ensure that their voices are heard: that the products, channels, messages, and metrics that mission-driven fintech develops will reflect *their* needs and *their* goals. We seek to ensure that fintech's promise is used to deliver to them what they really need and want, not what the supply-side players *assume* (absent any real demand-side market intelligence) that they need, or think they *should* want.

nLIFT also imagines working with impact investors and donors to shape smart and effective grant-making and program-related investment strategies. Finally, we want to work directly with policymakers to ensure that attention and resources are directed to our vision: making sure that fintech evolves in a way that benefits low- and moderate-income American households.

10 CFPB (September 2017) *Financial Well-Being in America*
https://s3.amazonaws.com/files.consumerfinance.gov/f/documents/201709_cfpb_financial-well-being-in-America.pdf (p 13)



04

nLIFT
Nonprofit Leaders in Financial Technology

THE ASPEN INSTITUTE

nLIFT: Who we are, what we do, why us, why now.

Nonprofit Leaders in Financial Inclusion, or nLIFT currently comprises seven of the most respected nonprofit organizations in the nation working in the fields of technology and financial inclusion. We have joined forces to ensure that the fast-growing fintech industry evolves in directions that benefit low- and moderate-income Americans. The Aspen Institute serves as nLIFT's host and convener.

COMMONWEALTH
Headquarters:
Boston, Massachusetts
Programmatic footprint: National
Year established: 2001 (as D2D Fund)

Collaborates with consumers, the financial services industry, employers, policymakers, and other mission driven organizations to build solutions that make wealth possible for everyone. Through innovations such as prize-linked savings, financial capability games and apps, tax time saving policies, and employee benefits tailored for low-income workers, Commonwealth's efforts have helped 500,000 Americans to save more than $750 million since 2001. ***buildcommonwealth.org***

EARN
Headquarters:
San Francisco, California
Programmatic footprint: National
Year established: 2001

EARN's savings technology and programs support working families in setting aside the savings they need to achieve financial security. EARN's flagship platform SaverLife.org combines financial rewards for saving with motivational digital financial coaching, to encourage a regular savings habit and help families build a financial cushion. SaverLife.org currently serves more than 100,000 members across all 50 states. ***earn.org***

THE FINANCIAL CLINIC
Headquarters:
Brooklyn, New York
Programmatic footprint: National
Year established: 2005

Pursues an integrated strategy combining direct service, capacity building with other nonprofits, and systems-level solutions and social innovations. To date, the Clinic has put nearly $80 million back in the pockets of more than 48,000 customers, supported more than 460 organizations in 42 states and districts to embed financial security actions into their program models, and successfully launched several policy campaigns in support of working poor families. ***thefinancialclinic.org***

MISSION ASSET FUND
Headquarters: San Francisco, California
Programmatic footprint: California, with collaborations with nonprofits nationwide
Year established: 2007

Helps low-income and immigrant communities build credit and pay down debt. With mobile, web, and SaaS apps, MAF clients can easily apply for zero percent interest, credit-building loans; track their FICO credit score; get updates about loan payments; and take financial education classes on the go. These technologies are the backbone for a nationwide network of more than 50 nonprofit organizations in 17 states and Washington, DC, that have enabled more than 15,000 people take their financial lives to the next level. ***missionassetfund.org***

MyPATH
Headquarters:
San Francisco, California
Programmatic footprint: National
Year established: 2011 (year spun off as independent entity from parent credit union)

MyPath puts low-income youth and young adults on a path to upward economic mobility by supporting them to bank, save, and build credit while they are earning their first paychecks. Leveraging technology, the power of peers, and personal goal-setting, MyPath's models support young people to transform their first income streams into personal and financial growth, creating first generation savers and credit-builders. The MyPath Money platform enables users to engage with interactive money management modules via desktop, tablet, or mobile phone, and supports MyPath partner site staff to plan, deliver, and track outcomes for MyPath Savings. ***mypathus.org***

NATIONAL FEDERATION OF COMMUNITY DEVELOPMENT CREDIT UNIONS
Headquarters: New York, New York
Programmatic footprint: National
Year established: 1974

Helps low and moderate-income people and communities achieve financial security and independence through the responsible products and services of community development credit unions. CU Impact is a specialized shared banking platform to scale the delivery of innovative products, create economies of scale, and increase operational capacity of locally-owned and -controlled financial institutions in low-income and underserved communities. The Federation works with its technology partner to customize the banking platform to support community development credit unions to advance their social missions targeting underserved consumers with innovative products and services. ***cdcu.coop***

NEIGHBORHOOD TRUST FINANCIAL PARTNERS
Headquarters: New York, New York
Programmatic footprint: National
Year established: 1997

Empowers workers to take control of their finances and achieve financial health. With more than 20 years of financial counseling experience, Neighborhood Trust blends trusted financial guidance with innovative technology solutions and actionable financial products to help workers' paychecks go further. Partnering with more than 50 financial institutions, employers, business associations, fintechs and community-based organizations to embed its services where workers get paid, access financial services and make financial decisions, Neighborhood Trust reaches more than 10,000 low- and moderate-income workers across 29 states annually. ***neighborhoodtrust.org***

05

Mission-Driven Fintech: Some Examples

nLIFT members are already leading innovative work to apply the power of fintech for the benefit of low- and moderate-income Americans. Our members average 17 years of working directly in low- and moderate-income communities. We place those communities at the center of our work and we understand their needs and how they engage with financial products and decision-making. Some examples of our fintech work involve user experience (UX) design, where nLIFT members draw upon decades of experience working with marginalized consumers to deliver tech-enabled financial resources that meet their needs. Other examples include tech-enabled B2B partnerships or data mining and analysis to advance understanding of financially vulnerable people and their priorities.

COMMONWEALTH

UX: "Ramp It Up" app

Commonwealth assembled a panel of low-income teen advisors to help design a game to promote financial readiness for college. The resultant app, Ramp It Up, has proven popular, with nearly 80 percent of young users saying they would recommend it to a friend. Ramp It Up has also demonstrated positive impact on players' knowledge and confidence about how to pay for college, results that appear consistent across gender, race, and ethnic lines.

B2B: Scaling through Industry Partnerships

Commonwealth and prepaid innovator BankingUp collaborated to launch Rainy Day Reserve, a groundbreaking web and mobile feature designed to help prepaid card users build and use emergency savings. Eighteen months after launch, more than 7,100 BankingUp cardholders (16.5 percent) were using the feature - despite no financial incentive and little marketing. Commonwealth also worked with WalMart and Green Dot to design another emergency savings tool, drawing on years of prize-linked savings research. WalMart MoneyCard holders saved more than $600 million in the first year after Prize Savings was introduced, and overall use of the underlying saving tool (the Vault) soared 274 percent.

PHOTO FROM EARN.ORG

EARN

UX: Relaunching "Starter Savings Program" as "SaverLife Community"

Early data from the 2016 launch of the "Starter Savings Program" showed a puzzling trend: tens of thousands of the target low-income demographic had signed up but were not saving. Further research and analysis revealed that the appeal of the program was strong and that even people who were not yet ready to save wanted to be part of a community that supported that aspiration. EARN rebranded Starter Savings Program as the SaverLife Community and added a wider range of information and resources to support and encourage customers at different points of the financial journey. After the relaunch, conversion rates of enrollees to actual savers increased by more than 300% (from 14% to 58% of total enrollees) in just six months.

Data: Big Data on Small Savings

Data aggregation technology enables EARN's online savings platform to generate a unique dataset from more than 100,000 SaverLife members: economic, demographic, and psychosocial datapoints and real-time transactional data. Along with providing a solid basis for future product development, EARN's data drives important research efforts, including a monthly insight series called Big Data on Small Savings that unearths rich insights into the financial lives of low-income households and provides data-driven perspectives on what works in helping individuals develop financial security.

THE FINANCIAL CLINIC

Partnership: Urban Institute and Consumer Financial Protection Bureau

Through its Change Machine digital financial coaching platform, The Financial Clinic provided the data that formed the basis for a landmark study commissioned by the Consumer Financial Protection Bureau and carried out by the Urban Institute. Using the Clinic's data, the study found that low-income people, even those on fixed incomes, are able to save ($1,721 on average for those that the Clinic coached) and that financial coaching correlated with less debt ($1,009 less on average for those coached by the Clinic). This study is widely regarded as having put financial coaching on the map as a credible intervention and as having set performance standards for other practitioners.

Policy: Refund529

Change Machine data provided strong evidence that innovations that enabled people to save at tax refund time created multiple positive outcomes, including reduced debt loads and improved credit scores. Confident that low-income households could benefit from a direct tax refund toward education savings, the Clinic proposed and advocated for a "right place, right time" savings program. New York governor Andrew Cuomo signed Refund529 into law in 2016, allowing New Yorkers to direct-deposit a portion of their refunds directly into a 529 college savings account. An estimated 280,000 filers will contribute more than $6.5 million by 2021.

PHOTO FROM THEFINANCIALCLINIC.ORG

MISSION ASSET FUND

UX: Digitizing informal lending and savings circles

Many recent immigrants to the US participate in the kinds of small informal neighborhood lending circles that are widespread throughout Africa, Asia, and Latin America. Such groups are a way for trusted friends and neighbors to borrow and lend small amounts to each other, and have helped hundreds of millions of people all over the world to pursue financial goals. MAF's innovation was to create a platform to formalize the time-honored practice by having clients sign promissory notes, keeping digital records, and reporting financial transactions to credit bureaus, thus helping participants build credit scores so that they can access other financial services.

PHOTO FROM TMISSIONASSETFUND.ORG

Partnership: Philanthropic and immigrant organizations (multiple)

For years, MAF has provided zero-interest loans to young immigrants eligible for Deferred Action for Childhood Arrivals, or DACA, status to help them pay the $495 application fee. When the Trump Administration announced termination of DACA, hundreds of thousands of youth had just a month to renew and to cover a large unexpected expense. MAF quickly built partnerships with multiple philanthropic and immigrant organizations to convert the loans to grants and to increase dramatically the number of people it could serve with the clock ticking. MAF's technology infrastructure allowed it to create the new grant-based product, announce the campaign, and launch a website within days of the Administration's announcement, and to disburse $4.1 million to more than 10,700 young immigrants nationwide in a single month.

MAF

MyPATH

my path

UX: MyPath Money

MyPath engaged low-income youth as ongoing design partners and beta testers in designing MyPath Money, a digital platform that combines goal-setting, savings, and credit building for youth earning their first paychecks. The youth engaged in the design phase shared everything from how they preferred to access it (online versus mobile) to how to introduce money management practices in a way that would resonate with their peers. Because of its youth-centered design process and integration of youth-friendly accounts and direct deposit, the tool has enjoyed high engagement and strong impact. An outside study demonstrated 95 percent of youth open accounts, and 85 percent of MyPath Money participants meet their savings goals, saving an average of 30 percent of income.

Policy: Workforce Investment and Opportunity Act

MyPath's banking, saving and financial confidence outcomes data (from a quasi-experimental design study published by the Journal of Consumer Affairs and the Federal Reserve Bank of San Francisco) and the engagement of young adult participants in an advocacy effort drove public agencies, including the United States Department of Labor (DOL), the United States Department of Treasury, and the Consumer Financial Protection Bureau, to take a look at youth banking and savings and its integration into youth employment systems. Ultimately, the DOL included a new financial literacy requirement in the reauthorization of the Workforce Investment and Opportunity Act, thereby incentivizing the integration of banking access standards and financial capability programming into youth employment initiatives across the country.

ILLUSTRATION FROM CDCU.COOP

NATIONAL FEDERATION OF COMMUNITY DEVELOPMENT CREDIT UNIONS

UX: Designing a mobile banking app for low-income and underserved consumers

Working with end users and staff from its member credit unions, the Federation explored the challenges for low-income consumers in adopting mobile banking technology. They found that for many of the end users who stood to benefit from this time-saving tool, "fear of getting it wrong" held them back: information overload and multiple options for products and transactions overwhelmed them. In the redesigned app, the user interface is streamlined and the most common transactions and needs are prioritized. Consumers in the beta test are providing important insights into its ease of use.

Data: CU Impact and efficiencies of scale

The Federation's customized shared core platform, CU Impact, provides member credit unions with robust back-office accounting, processing, and compliance support as well as data analytics to better understand and report on low-income and credit-challenged borrowers' progress. Armed with the enhanced data, credit unions can provide incentives and supports to improve their customers' financial security. Moreover, data analytics can more readily identify the products and services that build greater financial well-being and can target those facing challenges with outreach for counseling and support.

NEIGHBORHOOD TRUST FINANCIAL PARTNERS

UX: Trusted Advisor

Trusted Advisor is a workplace-based employee benefit that blends financial guidance, a user-centric technology platform, and innovative products to help workers reduce debt and save. After launching the product in 2012, Neighborhood Trust learned over time that the true customers for the product were each workplace's HR department, and that the barriers to uptake largely involved those departments' operational challenges—not lack of end-user demand. So Neighborhood Trust invested heavily in the technology needed to deliver a lighter-touch model that reduced the operational burden, solved for pain points, and worked around clients' busy schedules. The result is a more nimble, tech-enabled service, customizable for a range of settings and industries, which launched in 2017. Trusted Advisor now serves 38 customers in 29 states, and is working with fintechs Flexwage and SelfLender to link counseling to products.

Partnerships: Pathways to Financial Empowerment

Delivered as a partnership between Neighborhood Trust and the National Federation of Community Development Credit Unions, Pathways integrates financial counseling into credit union operations. Pathways trains credit union staff to provide best-in-class, data-driven financial counseling, ensuring that low- and moderate-income families' goals are linked to safe and relevant financial products that can improve financial health. Over the last three years Pathways has reached nearly 4,500 customers via 16 credit unions in 12 states, and reduced $2 million in consumer debt.

06

Where do we go from here?

We believe that now is the moment for sustained and intentional collaboration. nLIFT envisions all stakeholders—nonprofits, fintechs, donors, investors, policymakers, opinion leaders, the general public, and customers, especially low- and moderate-income customers—coming together now, in focused and fruitful dialogue and cooperation, to ensure that we fully leverage fintech's tremendous untapped potential to expand financial security. All of us have roles to play.

> Technology costs money. The task should be to figure out how to raise it, not how to get nonprofits to do without it, or low-income consumers to settle for less.

Building technology that tackles big social problems and honors millions of financially vulnerable people requires not just new operating models but also bold new financing and investment models. Fintech finance requires a patient and long-term strategy, with significant investment to develop the model, test and refine it, and then take it to scale. Consumer-facing products require constant maintenance and frequent upgrades. All of this takes money.

That is true whether the target market is low- to moderate-income or more affluent. We believe that underserved communities need and deserve high quality, non-predatory and well designed products whose functionality, security, and user experience are as robust as those aimed at more affluent customer segments. Yet nLIFT's experience is that nonprofits must often try to develop robust fintech models for our clientele, and take those models to scale, without the resources required.

So nLIFT envisions a market-making and level-setting role for donors. That role is essentially the same role that donors played, via CGAP and other multilateral consortia, for mission-driven financial services in developing countries starting in the 1990s. The task is to fund research and development, define and promote industry best practices, and set expectations. This starts by acknowledging that technology costs money, and that the task should be to figure out how to raise it rather than how to get nonprofits to do without it, or low-income consumers to settle for less.

We also see a key role for socially responsible impact investors. Most impact investors pursue a "double bottom line," seeking not just financial but also social return on investment. Financial returns are easy to measure; social returns, less so—but as the saying goes, what matters gets measured. Much work is already underway to develop meaningful metrics for social returns in a variety of sectors, including fintech, so that both halves of the double bottom line can actually be measured. Here, too, we believe that nLIFT can bring its collective wisdom to bear. Our fintech platforms and programs are generating successful outcomes and creating significant, measurable change for the communities we serve.

nLIFT members are integrating technology into our mission-driven work to provide services to low-income consumers and to identify and solve problems that may never be solved otherwise—not by the private sector, other social service actors, or even by government. We believe this uniquely positions nLIFT to put forth this call to action to all stakeholders to work together to ensure that fintech lives up to its historic potential. The possibilities are truly transformative. The task is urgent. The time is now.


nLIFT
Nonprofit Leaders in Financial Technology
THE ASPEN INSTITUTE

Where possible, we have provided URLs where interested readers can download the works cited in this Manifesto. Please note that URLs were valid at the time or writing. We regret that we cannot be responsible for any links that may break or decay over time, nor can we ensure that downloads are or will remain free of charge.

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nLIFT Manifesto:
Five Core Beliefs

1. We believe that financial security—a state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future and is able to make choices that allow them to enjoy life—benefits not just the individual but society as a whole.

2. We believe that greater financial inclusion—connecting more consumers who have been historically left out of the financial mainstream to safe and responsible financial products and services—is a necessary precondition for financial security.

3. We believe that fintech—technology innovations used to support or enable banking or financial services—is a powerful means to the end of financial inclusion, and thus by extension to the greater end of financial security.

4. We believe that fintech's potential to expand financial inclusion and to improve the security of historically marginalized or excluded people is unlikely to be realized without sustained, intentional, and expert participation from entities that serve such people every day.

5. We believe that we, the members of nLIFT, can play that expert role and that we have an obligation to do so.

FULFILLING THE PROMISE OF FINTECH:

The Case for a Nonprofit Vision and Leadership

The nLIFT Manifesto

Autumn 2018

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https://www.aspeninstitute.org/programs/nlift/

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nLIFT
Nonprofit Leaders in Financial Technology

THE ASPEN INSTITUTE

THE ASPEN INSTITUTE FINANCIAL SECURITY PROGRAM

CONSUMER INSIGHTS **COLLABORATIVE**

SHORT-TERM FINANCIAL STABILITY: A FOUNDATION FOR SECURITY AND WELL-BEING

April 2019

THE ASPEN INSTITUTE

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THE ASPEN INSTITUTE FINANCIAL SECURITY PROGRAM

ABOUT ASPEN FSP

The Aspen Institute Financial Security Program's (Aspen FSP) mission is to illuminate and solve the most critical financial challenges facing American households and to make financial security for all a top national priority. We aim for nothing less than a more inclusive economy with reduced wealth inequality and shared prosperity. We believe that transformational change requires innovation, trust, leadership, and entrepreneurial thinking. Aspen FSP galvanizes a diverse set of leaders across the public, private, and nonprofit sectors to solve the most critical financial challenges. We do this through deep, deliberate private and public dialogues and by elevating evidence-based research and solutions that will strengthen the financial health and security of financially vulnerable Americans. **To learn more, visit AspenFSP.org or follow @AspenFSP on Twitter.**

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CONSUMER INSIGHTS COLLABORATIVE

WHO IS THE CONSUMER INSIGHTS COLLABORATIVE?

The Aspen Institute Financial Security Program convenes the Consumer Insights Collaborative, an effort across nine leading nonprofits to collectively understand and amplify data for the public good, specifically about the financial lives of low- and moderate-income households. The Collaborative's vision is that data-driven insights will prompt a wide variety of actors to develop programs, products, and policies that help more people achieve financial security—and that the insights inspire more organizations to put their data to use for good.

commonwealth

Strengthens the financial security and opportunity of financially vulnerable people by discovering ideas, piloting solutions, and scaling innovations.
www.buildcommonwealth.org
Boston, MA

EARN

Leverages financial technology and economic inclusion to empower low-income Americans to save and take charge of their financial lives.
www.earn.org
San Francisco, CA

Family Independence Initiative

Provides a technology platform for low-income families to strengthen social networks, record progress towards goals, and unlock dollars to accelerate their mobility.
www.fii.org
Oakland, CA

The Financial Clinic — Creators of Change Machine

The Financial Clinic's mission is to build working poor people's financial security through an ecosystem of strategies that includes direct service, capacity building, and systems-level solutions fueled by financial technology.
www.thefinancialclinic.org
New York, NY

inclusiv

Promotes financial inclusion by providing capital, building capacity, and developing innovative products and services for community development credit unions (CDCUs).
www.inclusiv.org
New York, NY

LIFT

Builds relationships with parents to set and accomplish family career and financial goals, connecting them to the resources and networks that make those dreams a reality.
www.whywelift.org
Washington, DC

MAF

Creates a fair financial marketplace for hardworking people by building on what they have through financial products, coaching, and technology.
www.missionassetfund.org
San Francisco, CA

mypath

Equips young people of color growing up in financial deserts with the knowledge and financial tools they need to build wealth and get on the path to economic mobility.
www.mypathus.org
San Francisco, CA

NEIGHBORHOOD TRUST FINANCIAL PARTNERS

Helps everyday people take control of their finances through expert counseling linked to safe and goal-oriented financial products and delivered in convenient settings.
www.neighborhoodtrust.org
New York, NY

EXECUTIVE SUMMARY

Many programs and policies supporting financial well-being for consumers rightly prioritize long-term security. However, short-term financial stability provides the foundation from which financial security, and eventually economic mobility for the next generation, is built. This report shines a light on the central role that short-term financial stability plays in a person's ability to reach broader financial security and upward economic mobility, a measurement of whether an individual moves up the economic ladder over one's lifetime or across generations.

Short-term financial stability means having enough of a financial cushion, broadly defined, to cope with everyday financial shocks, while still progressing towards financial goals. In this report we focus on four types of financial cushions: routinely positive cash flow (income that exceeds expenses), liquid savings (such as cash and money held in checking and savings accounts), access to high-quality credit, and strong social networks.

Short-term cushions are key to longer-term financial security and well-being.

While it's intuitively clear that the availability of such resources can prevent immediate material hardship, it may be less broadly understood that short-term cushions are also key to longer-term financial security and well-being. Stability promotes security because financial buffers protect consumers from shocks that would detract from progress toward their long-term goals, act as material foundations for growing assets, and reinforce the financial actions that move people towards broader well-being.

The insights presented in this report draw primarily on evidence provided by members of the Consumer Insights Collaborative (CIC), a group of nine leading nonprofits across the United States convened by the Aspen Institute Financial Security Program. These diverse organizations offer a window into the financial lives of the low- and moderate-income individuals they serve. Together, their data highlight barriers to financial stability, the strategies that consumers use to boost short-term stability on their own, as well as the external supports that CIC members, through their front-line work, know can increase the success of consumers' own efforts.

Table 1 summarizes these barriers, consumer strategies, and external supports. These strategies are not exhaustive but rather highlight the main methods that CIC members' data insights indicate can boost household financial stability. Descriptions and examples of these strategies follow in the full report.

Across the United States today, financial security and upward economic mobility are out-of-reach for far too many low- and moderate-income households. As we document in this paper, individuals deeply value and know the importance of saving and go to lengths to try to build financial cushions. Having more routinely positive cash flow is a foundational need, along with savings tools and supports to boost savings cushions and general financial stability. The reality, however, is that despite individuals' best efforts to become more financially stable, for many it is a near impossible challenge to get there. In order to move the needle on Americans' financial security, program and product designers and policymakers must acknowledge the barriers that households face in trying to build financial cushions, and the added difficulties that these barriers pose for people of color and those with few resources, in particular.

Individuals draw on many creative strategies to improve their financial stability, but external help and support can accelerate and augment these efforts. Evidence presented in this report implies that nonprofit, for-profit, and public organizations – especially those wanting to bring long-term financial security to people at scale – can achieve success by removing barriers to short-term stability for the individuals and families with whom they engage. A diverse set of actors including, for example, employers, governments, banks and credit unions, benefits administrators, workforce development services, or even early childhood centers, interact with consumers, and each has a role to play in this effort. We invite readers of this report to use it in two ways: apply our insights about stability and security in your own work, and expand on our insights with the consumer data uniquely available to you.

TABLE 1: BARRIERS TO AND STRATEGIES TO SUPPORT SHORT-TERM FINANCIAL STABILITY

FINANCIAL CUSHIONS	BARRIERS TO SHORT-TERM FINANCIAL STABILITY	CONSUMER STRATEGIES TO BOOST STABILITY	EXTERNAL SUPPORTS TO BOOST STABILITY
Routinely positive cash flow	• **Income that is regularly too low or expenses that are regularly too high.** • **Temporary financial shocks** can also prevent positive cash flow.	• **A better-paying primary job** can boost financial stability. • **Regular entrepreneurial activities** improve positive cash flows on average. • **Ad-hoc income generation** manages instability in the moment.	• **Government benefits** have traditionally aimed to boost income or subsidize expenses. • **Nonprofits can also infuse cash** to create stability. • **Investments in earning capacity** can create lasting financial stability.
Liquid savings	• Building and replenishing savings is hard without **routinely positive cash flow.** • Consumers struggle to save when they **do not have a bank account.** • **Asset limits** for public benefits disincentivize savings.	• People put up **barriers to block access** to their savings. • **Compartmentalized funds** keep savings goals top of mind. • **Self-imposed rules** can facilitate savings.	• **Commitment devices** can make it easier for consumers to stick to their goals. • **Savings incentives** can motivate people to save more. • **Opportunities to seize new income** help consumers save when they can. • **Financial coaching** can encourage savings habits.
Access to high-quality credit	• Without a **decent credit score**, high-quality credit is unavailable. • Without **access to high-quality credit,** consumers turn to low-quality, often expensive options.		• Some tools **directly provide high-quality loans.** • Other tools indirectly open access by **improving credit scores.** • **Financial coaching** can improve credit scores.
Social capital		• People exchange **cash** to boost stability. • **In-kind resources** make up a big part of informal exchanges.	

1. INTRODUCTION

Financial security opens doors and protects against the unexpected. It allows people to freely pursue the lives they want today and in the future. Yet Americans are finding it increasingly hard to be financially secure or economically mobile.[i] This report shines a light on the central role that short-term financial stability plays in a person's ability to reach broader financial security and well-being,[1] and eventually, become upwardly mobile.

Our evidence draws largely on anonymized data from members of the Consumer Insights Collaborative (CIC). The CIC is a group of nine leading nonprofits across the United States with significant data assets on the financial lives of their customers, each working in different ways to build up the financial security of low-income and underserved communities. Information on each member is available on page 2.

About the Consumer Insights Collaborative

Collectively, CIC members have provided financial empowerment services and solutions to over 325,000 consumers across the United States.[2]

Some, like EARN and The Financial Clinic, aim to reach a broad swath of the population. Others focus interventions on specific demographics, like LIFT which works mainly with parents of young children, Mission Asset Fund (MAF), which has some programs targeted to immigrant clients, and MyPath which focuses on financial capability for working youth and young adults. These organizations also differ in mission, with goals related to a mix of providing financial products, coaching, and designing interventions. Outreach to low- and moderate-income families unites the CIC, which means that all CIC members also usually work with a disproportionately large group of people of color.

CIC members are also unified by a drive to refine an understanding of how to best serve their constituents. The CIC has come together to develop and share insights about the financial aspirations, preferences, challenges, and actions of the consumers they reach. Each organization has an arsenal of insights from their daily work, which brings them face-to-face with low- and moderate-income families.

About this Report

Combining evidence from CIC members, this report draws attention to short-term financial stability through an often-missing consumer perspective. Our research process began with a set of workshops to articulate a common understanding of short-term financial stability. We then explored the consumer experience around it by collecting existing insights and developing new ones with CIC members. Results here are grounded in both qualitative and quantitative data, a range of analysis strategies, and diverse samples and demographics.[3] They land on strikingly similar conclusions about the centrality of short-term financial stability for consumers' ability to build long-term financial security and upward economic mobility for this generation and those to come.

This report is a culmination of the above efforts, drawing the connection from the barriers to financial stability that low- and moderate-income individuals and

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[1] The Consumer Financial Protection Bureau defines financial well-being as "a state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow enjoyment of life." For more information on this definition, see the Consumer Financial Protection Bureau. "Financial Well-Being: The Goal of Financial Education." January 2015. https://files.consumerfinance.gov/f/201501_cfpb_report_financial-well-being.pdf.

[2] In addition, Inclusiv's network of community development credit unions (CDCUs) serves eight million residents of low-income urban, rural and reservation-based communities. For more, see https://www.inclusiv.org/about-us/.

[3] Evidence presented here rests on a wide range of analyses conducted by CIC members or their research partners. They span from internal calculations to external evaluations; from fielding qualitative surveys to scrutiny of large transactional data sets; and from running cross-tabs and regressions to participation in randomized control trials.

families face to the various approaches that consumers and supporting organizations employ to combat these obstacles to short-term stability, and ultimately, financial security and economic mobility.

In Section 2, this report presents evidence on the links between stability and financial outcomes in the long-run. Section 3 describes drivers of instability, Section 4 the strategies that consumers use to boost short-term stability on their own, and Section 5 the tools that CIC members, through their front-line work, know can increase the success of consumers' own efforts. Section 6 concludes with four recommendations for public, private, and nonprofit actors seeking to apply our insights and methods in their own work, to improve financial stability and security at scale.

2. WHY SHORT-TERM STABILITY MATTERS

Long-term financial security is a common goal for American consumers and the public and private stakeholders that serve them. Accordingly, many financial products and policies focus on helping people become secure.

Still, national evidence suggests that people have trouble reaching goals like homeownership and a comfortable retirement, two typical examples of financial security. Growing income and expense volatility, the high cost of housing, health care and other basic needs, and rising student loan and other consumer debt also keep consumers from investing in their security.[ii]

A common characteristic links the groups that face barriers to long-term security: They have insufficient financial buffers to weather short-term shocks. The Consumer Financial Protection Bureau (CFPB) finds that financial well-being, a measure that reflects financial security, is most strongly associated not with income or education, as some might expect, but with "savings and financial cushions."[iii] Furthermore, an Urban Institute analysis demonstrates that even small cushions can make a big difference in maintaining financial stability: Families with a small amount (defined as $250-$749) in nonretirement savings are less likely to miss a housing or utility payment, be evicted, or receive public benefits when financial shocks occur.[iv] And our own analysis of Federal Reserve Board data indicates that people of any income level are significantly less likely to tap retirement accounts when they have a savings buffer of at least $400.[v]

Here, we propose that short-term financial stability is central to achieving long-term financial security. This report defines the concept of short-term financial stability as having the resources to cope with everyday financial shocks, while still progressing towards financial goals.[4] Stable families have sufficient financial cushions, broadly defined, to keep typical finances under control. Cushions may take the form of liquid savings - as in the data points above - but may also include income that routinely exceeds expenses (routinely positive cash flow), access to high-quality credit, or family and friends that can be relied upon for informal support (strong social networks). While it's intuitively clear that the availability of such resources can prevent immediate material hardship, it may be less broadly understood that short-term cushions are also key to longer-term financial security.[5]

FIGURE 1. THE PATH FROM FINANCIAL INSTABILITY TO SECURITY

The diagram in Figure 1 describes the relationship we see. When people become financially stable in the short-term, they are on a path to reaching financial security in the long run. As will be described in more detail throughout this report, financial instability results from a number of systemic factors such as lack of access to

[4] We see everyday financial shocks as distinct from more extreme events. An everyday shock might include an unexpectedly high bill, a job loss, or a family emergency. More extreme events might include permanent disability or economy-wide downturns.

[5] For an example of how financial cushions reduce material hardship, see Despard, Matthiu R., Shenyang Guo, Michal Grinstein-Weiss, Blair Russell, Jane E. Oliphant, and Anna deRuyter. "The Mediating Role of Assets in Explaining Hardship Risk among Households Experiencing Financial Shocks." *Social Work Research*, Volume 42, Issue 3, 1 September 2018, Pages 147–158, https://doi.org/10.1093/swr/svy012.

jobs with a living wage, affordable opportunities to save, or high-quality credit. The movement from instability to stability and ultimately security depends on the removal of these barriers, the availability of useful opportunities and supports, and consumers' own ingenuity and action. Building and maintaining financial cushions can thus be a difficult challenge for many individuals and families.

Short-term financial stability makes financial security more likely

Financial cushions allow people to keep working toward their long-term goals, are material foundations that boost people towards longer-term goals such as building assets, and reinforce financial behavior that leads to positive outcomes in both the short and long term.

1. **Financial cushions protect people from shocks that would detract from progress toward their long-term goals.** While stable households may be exposed to the same risk of shocks as others, their buffers allow them to withstand financial shocks without turning all resources towards the present and away from the future. A financial buffer can prevent people from withdrawing retirement savings to deal with immediate hardship and can help college students avoid dropping out of school. For example, LIFT has given ad-hoc cash grants to stabilize its members. Thanks to five $50 childcare fees paid by the nonprofit, their client, a working mother and full-time student, was able to study for finals in peace, which was key to her maintaining a B average and ultimately earning a bachelor's degree, an investment which unlocks career opportunities with family-sustaining wages.

2. **Financial cushions serve as a foundation for reaching long-term goals.** The stability that comes with financial buffers provides a material basis to invest in broader financial security. Tools like Individual Development Accounts (IDAs), a matched savings product, put this principle into practice by encouraging consumers to save a small amount that gets directly channeled into asset purchases.[6] Another example comes from a MyPath client who turned a new savings habit into $35,000 for a down payment on a home. She took out a $500 loan to build her credit, repaying it using an auto-debit feature that drew $43 from her paycheck every month. In 12 months, she'd improved her credit score and unlocked access to the $500. She added more and more to this account as she earned consecutive raises, transforming an emergency cushion into a substantial asset that, along with her improved credit, will provide her with a home and the broader financial security that comes with it.[vi]

3. **The same financial behavior leads to both short- and long-term outcomes in a virtuous cycle.** Consumers' habits are more likely to move them towards long-term well-being when they have a stabilizing cushion. Furthermore, the process of building a small buffer acts as a behavioral engine, reinforcing actions that can also create long-term financial security. For example, one The Financial Clinic client worked hard to save $136 for his young child's birthday party. The creation of a personalized and specific, self-identified goal encouraged him to meet and then save beyond his short-term savings goal. Furthermore, achieving this small feat empowered him to define himself as a "saver," building his confidence that those same habits can help him accumulate longer-term cushions.[vii] On the other hand, some consumers find it more motivating to focus first on larger life goals. The process of working towards such goals can also result in smaller buffers that help stabilize in the short-term. Whether consumers prioritize short-term or broader life goals, achieving one makes the other more likely.

For these three reasons, people with short-term stability are more likely to become financially secure in the long run. From this premise, we now turn to explore the dimensions of stability: How do consumers experience instability? What strategies do they use to build cushions and get stable? And how can external interventions make a difference? By unveiling the consumer experience from the CIC's nonprofit perspective, we aim to inspire a range of actors to sharpen their focus on the pathway to financial security that flows directly from short-term financial stability.

[6] For more on IDAs, see the Center for Social Development, Brown School, Washington University in St. Louis, https://csd.wustl.edu/ida/

3. DRIVERS OF INSTABILITY

CIC members observe that consumers experience financial instability because of a lack of financial cushions — especially positive cash flows, liquid savings, and access to high-quality credit. Each of these three cushions' availability is related to systemic forces that disadvantage people with few resources and people of color. They also reinforce each other: Just as the availability of one financial cushion can improve the likelihood of having others, the reverse is also true: when one cushion is missing, others get further out of reach. For these reasons, despite individuals' best efforts to become more financially stable, for many it is a near impossible challenge to get there.

Lack of Routinely Positive Cash Flow

If household income consistently covers expenses with room to spare — a state of positive cash flow — then the extra income can act as a cushion to manage everyday shocks and maintain stability. It also opens the door to savings and affordable credit. On the other hand, consumers lose stability when income doesn't cover consumption, or barely does. Many low- and moderate-income families find themselves in this situation. On the income side, living wages are hard to come by because of low minimum wages and jobs that pay low or unstable wages, including contract and contingent work.[viii] On the expense side, cost of living is rising across the country. Together, low income with rising expenses create instability. A 2018 report found that no state, county, or city provides a sufficient minimum wage to cover rent on a two-bedroom apartment through 40-hour work weeks.[ix] Additionally, an important distinction is that people can lack positive cash flow (a state in which income exceeds expenses) either consistently or during temporary, or episodic, shocks.

Despite individuals' best efforts to become more financially stable, for many it is a near impossible challenge to get there on their own.

- **Consistent non-positive cash flow exists when consumers' income is regularly too low or expenses are regularly too high.** These circumstances characterize the case of a The Financial Clinic client who came to his first coaching session paying more than 80 percent of income towards rent. He earned too much to qualify for most benefits that might help, and he had no credit score, which affordable housing applications required. As a result, the consistently high rent bill kept him underwater and unable to build the cushions he desperately needed.[x] Similarly, EARN found that 74 percent of SaverLife members reported that their yearly spending is greater than or equal to their yearly income. This mismatch between expenses and income makes it harder to consistently make ends meet, with only 24 percent of members reporting that they were able to pay all their household bills on time in the last year.[xi]
- **Temporary shocks prevent positive cash flow.** National research studies find that income dips and expense spikes happen frequently for low- and moderate-income consumers, even when they earn more than they spend on average.[xii] These ups and downs can create mismatches that make it difficult to plan and save. Echoing these results, the average income for EARN's clients either spikes or dips in three out of every four months. During dips, income typically drops $1,200 below average – a substantial hit for this group with a median annual income of $20,000.[7] A different analysis, commissioned by Commonwealth using a nationally representative survey, points to the common experience of expense spikes: Sixty-two percent of low-income people surveyed had experienced at least one "financial emergency" in the previous year, the most expensive costing over

[7] EARN defines a spike or dip as monthly income 25 percent above or below the previous two months' average income. See EARN. "Income Swings: A Monthly Rollercoaster." April 2018. https://www.earn.org/wp-content/uploads/2018/05/Big-Data-on-Small-Savings-Income-Swings.pdf

$500 for the majority of families and over $1,000 for 41 percent of respondents.[xiii] Meanwhile, Neighborhood Trust sees that among its clients, even a single unexpected overdraft fee can put cash flows in the red.[8] Excessive banking fees, as well as government fines and bail, are usually levied on people with low- and moderate-incomes. Moreover, these individuals tend to have little to no slack between income and expenses, meaning that these additional fines and fees make positive cash flow even less likely.[9]

Difficulty Building Up Liquid Savings

Saving becomes possible when income regularly exceeds expenses. Cash savings is an important financial buffer to help people stay stable, yet consumers have trouble building them up. For instance, four of every five coaching clients at The Financial Clinic report less than $500 in liquid savings when they first meet their coach – and over half report having no assets at all.[xiv] Similarly, at sign up, 50 percent of EARN's savers report that their short-term savings could only cover two weeks or less of their normal expenditures. An income shock or expense shock can, and does, push consumers like this into the red when they have to dip into their minimal short-term savings to meet an immediate need.[xv]

Positive cash flow is the most fundamental piece of short-term financial stability.

It is easy and incorrect to write off low savings as a problem of consumer behavior. However, many structural obstacles stand in the way of saving. Historically, racially biased asset-building policies have helped white families build assets through homeownership, preventing many people of color from passing down accumulated wealth to future generations.[xvi] Other systemic savings barriers include non-positive cash flows as described above, restricted access to bank accounts and financial products that are designed to protect assets, and asset limits on public benefit programs.

- **Building and replenishing savings is hard without routinely positive cash flow.** Positive cash flow is the most fundamental piece of short-term financial stability because when income exceeds needs, consumers have money left over to build savings cushions or investing in wealth-building activities. Without a regular income buffer, savings cannot grow. Even when income is enough on average, frequent income or expense shocks can force people to draw down on existing funds. One CIC member, LIFT, heard from its clients that saving money was a slow and often infeasible effort without making more money. As a result, the nonprofit evolved its model to focus on combined career and financial coaching with the expectation that career moves would boost savings through higher income and that building strong financial behaviors would set up families to manage any increased income effectively. Among families who do manage to keep money saved without positive cash flow, many use costly coping tools like high-interest credit cards, as observed by Neighborhood Trust.[xvii]
- **Consumers struggle to save when they do not have a bank account.** Formal accounts can help people build financial cushions by blocking immediate access to cash, and by distinguishing savings from spending money. They also lower the risk of losing cash by theft or accident.[10] It seems logical that everyone should use this kind of tool, but systemic barriers keep certain groups from doing so. For one, many accounts impose monthly or yearly fees and minimum balance requirements that push "financially-stretched" people away, keeping them from finding value in formal banking.[xviii] Another example is ChexSystems, a database of supposedly risky consumers that some banks use to deny account access.[xix] Furthermore, individuals without formal banking accounts often face fees associated with accessing their income, such as through check cashing or paying prepaid card fees, which eat away at resources that otherwise could be saved.

  In addition, MyPath sees that young people are kept from formal banking when banks do not accept alternative identity and address verification

[8] Based on internal data from Neighborhood Trust. According to The Pew Charitable Trusts, the typical overdraft fee is $35. For more on overdraft fees, see King, Thaddeus. "Overdrafts Have Grown; Now They Need to Grow Up." The Pew Charitable Trusts. August 23, 2018. https://www.pewtrusts.org/en/about/news-room/opinion/2018/08/23/overdrafts-have-grown-now-they-need-to-grow-up.

[9] People making less than $30,000 a year are nearly twice as likely to pay overdraft fees. For more, see The Pew Charitable Trusts. "Overdraft America: Confusion and Concerns about Bank Practices." May 2012. https://www.pewtrusts.org/~/media/legacy/uploadedfiles/pcs_assets/2012/sciboverdraft20america1pdf.pdf.

[10] In an anecdote from Inclusiv's study of very-low-income consumers, one interviewee had hidden savings in a mattress that his wife unwittingly threw away. Inclusiv. "From Distrust to Inclusion: Insights into the Financial Lives of Very Low-Income Consumers." January 2015. https://www.inclusiv.org/wp-content/uploads/2015/01/Insights-Into-the-Financial-Lives-of-Very-Low-Income-Consumers-Jan-30-2015.pdf

documents — many young people don't have state IDs or utility bills — or when they require an adult co-signer to open accounts for anyone under 18 years old. Because of these rules, teenagers who could particularly benefit from savings accounts cannot use them. They include young people in the foster care system, and those whose parents are unbanked, undocumented, or in ChexSystems.[xx]

Even when young people have banking accounts, out-of-network ATM fees can eat into savings when there is a shortage of in-network ATMs in the neighborhoods where they live. MyPath found that 63 percent of fees paid by youth participants in San Francisco were for out-of-network ATM fees. Further analysis showed that the young people paying the most out-of-network ATM fees were concentrated in low-income neighborhoods of San Francisco lacking in-network ATMs. These neighborhoods correlate with those historically excluded from financial services, including through the practice of redlining.[xxi]

- **Some public benefits disincentivize savings.** In 2016, at least 42 states used the amount families had saved up to determine their eligibility for certain public benefits including Temporary Assistance for Needy Families, SNAP (formerly food stamps), and energy assistance.[xxii] As a result of these policies, individuals who rely on these benefits to help make ends meet may opt not to save even when they can, or to save in less effective ways like savings in cash at home which is easier to spend or lose, and is more susceptible to theft, fire, or natural disasters. Such deterrents for saving in formal mechanisms—such as checking and savings accounts—may further undermine the financial well-being of these families by discouraging savings in interest-bearing accounts, which can increase holdings for individuals, or in investment vehicles. Additionally, in some cases, households are forced to spend down holdings prior to receiving public assistance, eliminating savings that could be used to weather financial shocks.

Low Access to High-Quality Credit

Without routinely positive cash flow or savings, many families borrow to cope with everyday shocks. In this sense, access to high-quality credit is a cushion that can promote short-term financial stability, at least for consumers facing temporary setbacks.[11] Low- and moderate-income individuals using credit to bridge volatility often find themselves in a difficult position when credit terms set them up for failure.[xxiii]

- **Without a decent credit score, high-quality credit is unavailable.** Low- and moderate-income consumers tend to have low credit scores. Indeed, data from EARN demonstrates this: When asked to rate their credit scores, the vast majority (76 percent) of EARN savers rate their credit score as "fair" or "poor," while only 6 percent believe their credit score is "excellent" or "very good." Another complication for these households is that low- and moderate-income individuals are far more likely to enter the credit reporting system not through formal loans but by having debts in collection, which starts them off with limited access to high-quality credit when they need it. Another set of problems face those that have taken out loans, especially financially vulnerable people who may be prone to over-borrowing. Neighborhood Trust's clients who borrow most often end up being denied for additional loans because their overuse brings their credit scores down. In addition, certain groups face major hurdles to finding high-quality credit because they are credit invisibles — i.e., they have no credit history.[12] Inclusiv and Neighborhood Trust both see this pattern in immigrant communities coming from countries with a cash-based economy, while MyPath sees the same among the young people it serves.[xxiv]

- **Without access to high-quality credit, consumers turn to low-quality options.** Being turned down for standard loans usually doesn't keep unstable consumers from borrowing when needs arise. Rather, they use expensive alternatives that put them deeper in debt. This is especially problematic for people who are already highly indebted. The Financial Clinic's data show that as one's debt-to-income ratio increases the probability that they will reduce debt by any amount decreases.[xxv] For EARN's savers, a similar trend exists, in reverse: Over two-thirds (68

Without routinely positive cash flow or savings, many families borrow to cope with everyday shocks.

[11] For more on the definition of high-quality credit, see Center for Financial Services Innovation. "Compass Principles: The Compass Guide to Small-Dollar Credit." April 2014. https://cfsinnovation.s3.amazonaws.com/CompassGuideToSDC.pdf.

[12] For more information on being credit invisible, see The Federal Deposit Insurance Corporation. "FDIC National Survey of Unbanked and Underbanked Households." October 2018. https://www.fdic.gov/householdsurvey/2017/2017report.pdf?mod=article_inline.

percent) of successful savers report their debt load as manageable or nonexistent, compared to just 38 percent of those who have struggled to save.[13] In the end, high debt burdens get in the way of short-term financial stability because their high costs strain savings cushions and turn cash flows negative. The Consumer Insights Collaborative has insights on two particular types of expensive debt:

- ***Payday loans.*** High-interest, short-term loans may seem like the only option for some consumers trying to make ends meet or to meet a sudden expense. Inclusiv's data shows how certain lenders aggressively target particular communities: In one community, a single payday lender received an average of $50,000 in payments each month from just 75 consumers. CIC members see that consumers have a mixed view of these loans. For instance, Neighborhood Trust clients will often make remarks about payday lenders such as, "even though they're a loan shark, they really helped me out of a jam..."[xxvi] Despite some gratitude, consumers certainly understand the risks of payday borrowing. Borrowers in one Inclusiv survey say they knew "they [were] getting a bad deal, trapped in a cycle" that gave at least one of them "a 'second [class] citizen feeling.'"[xxvii]

- ***Non-loan debt.*** Some people take on expensive debt not through loans, but by accumulating unpaid bills, fines, or fees.[14] Among EARN's clients, putting off bill payments is a common strategy to cope with income or expense shocks.[xxviii] Another example is bank overdraft charges, which can end up looking like interest fees on predatory loans. In one instance, a Financial Clinic customer had his driver's license suspended due to unpaid child support, making it nearly impossible to get to work and putting his job in jeopardy.[xxix] Government fines, too, including bail, come with large financial and human costs especially for people of color and those with low incomes.[xxx] The late fees and interest tied to non-loan debt add up, ultimately making cash flows less positive and straining savings cushions.

[13] Successful savers are defined as saving at least 4 out of 6 months, whereas struggling savers saved zero to three months. For more, see EARN. "There is More to Savings than Savings." October 2018. https://www.earn.org/wp-content/uploads/2018/11/EARN_BigDataonSmallSavingsProject_ReportTemplate_October2018_R2c.pdf.

[14] Non-loan debt is on the rise in the U.S. For more, see Aspen Institute. "Consumer Debt: A Primer." March 2018. http://www.aspenepic.org/wp-content/uploads/2018/03/Consumer-Debt-Primer.pdf

4. CONSUMER STRATEGIES TO ACHIEVE SHORT-TERM STABILITY

Facing the array of barriers described in the previous section, families put forth significant effort to build foundations of financial stability. The CIC sees consumers successfully create financial cushions on their own through income generation, self-imposed savings rules, and leveraging social networks.

Generating More Income

Individuals deeply value saving and go to lengths to try to build savings cushions, but realistically, more routinely positive income is a foundational need, along with savings tools and supports, to boost savings cushions and general financial stability. Specifically, consumers counter instability at its root when they generate more income to create positive cash flows. Some work to find better-paying primary jobs, while others engage in regular entrepreneurial activities or seek out ad hoc supplemental income by having a yard sale or helping neighbors with odd jobs. Tech platforms make it easier for many people to supplement income by, say, driving for a ride-share company — though these new opportunities can also put workers at risk by pushing down compensation, reducing access to employer-sponsored benefits, and increasing income volatility.[xxxi]

- **A better-paying primary job can boost financial stability.** A key barrier many LIFT parents face in reaching financial goals is that they lack family-sustaining jobs. Parents often cite credentials or post-secondary education as obstacles between them and jobs that pay higher than the minimum wage. As a result, LIFT parents tend to set goals to both build a financial cushion and advance their careers, often by upskilling with community college or other certification-yielding programs. As parents invest in themselves by securing credentials, they remove a key barrier to higher paying, higher stability employment. With more regular and higher income, parents are then able to pay down burdensome debt, build rainy day funds for the inevitable ups and downs in life, and boost their financial stability.
- **Regular entrepreneurial activities improve positive cash flows on average.** Family Independence Initiative (FII) tracks its families' income sources over time, giving a unique lens into entrepreneurial behavior. It sees that at least a quarter of the program's families with businesses have traditional employment income as well. For some in this group, businesses bring in extra income consistently from month to month. They appear to be a strategy to keep income positive on average by supplementing employment. The business owners among FII's families indeed tend to be better off than others.[xxxii] MAF also sees that about a third of clients engage in entrepreneurial activities including self-employment, participation in the gig economy, and odd jobs. These ventures are often small, local, and informal in scale and help families improve their cashflow while pursuing their passions.[xxxiii]
- **Ad-hoc income generation manages instability in the moment.** Another group of FII families with business income tend to use it less regularly. But when these businesses bring in income, it makes up over half of monthly household earnings. The pattern suggests that this group generates additional income to stay financially stable in the months when their other income sources drop substantially. It reflects a national study showing that people use income from technology labor platforms to "offset" dips in other income.[xxxiv] And it lines up with another FII finding that most of its business-owner families place a high value on flexible hours.[xxxv]

Creative Savings Strategies

In some cases consumers use self-imposed rules or restrictions to help build up savings cushions.

- **People put up barriers to block access to their savings.** Savings are more likely to accumulate when people have trouble accessing them. Consumers understand this, like Neighborhood Trust clients who delete their banking apps or un-link their savings and checking accounts.[xxxvi] Some put savings at a different or far-away bank or hold money in a relative's account to create an extra barrier to accessing it.[15]

- **Compartmentalized funds keep savings goals top of mind.** EARN's clients are more successful savers when they put money in a savings account instead of keeping it in a single checking account. Savings accounts create a separate compartment of money for clients to monitor, one that encourages more deposits by clearly indicating their savings progress.[xxxvii] People without formal accounts do the same with cash. One consumer interviewed by Inclusiv described how she kept at least $500 in two separate places at home, one for emergencies and one called a "Happy fund."[xxxviii]

- **Self-imposed rules can facilitate savings.** Some consumers reward themselves for saving or punish themselves for spending too much. For example, Inclusiv interviewed someone who forced herself to replace any cash she removed from a change jar with double the amount taken out. This rule helped her accumulate $700 in one year.[xxxix]

Social Capital and Networks

Many people rely on their family and friends to improve financially stability. LIFT members with higher levels of social supports are more likely to report an increase in income and net savings over time – both important financial cushions.[16] Informal networks can sometimes help in direct response to instability: For EARN's clients, the most common reaction to cash flow shocks is to ask family or friends for help.[xl]

But informal exchanges don't always coincide with shocks. The months when FII families receive this kind of support do not align with months when their incomes dip. Instead, these consumers appear to build and maintain social relationships over the long term.[xli] And exchanges go both ways in a web of reciprocity. For example, an Inclusiv analysis shows how very-low-income consumers will prioritize helping people in their networks "even at their own expense."[xlii] Despite these findings, these social networks can play an important role in helping family and friends to become financially stable.

- **People exchange cash to boost stability.** Friends and family help each other by directly giving money, whether it's considered a loan or a gift. Most respondents to MAF's survey of people who received grants to cover DACA application fees reported then giving funds to their family to help with monthly bills.[17] Commonwealth's nationally representative survey showed that borrowing cash from networks is common in the face of an emergency, especially for people without savings set aside.[xliii]

- **In-kind resources make up a big part of informal exchanges.** When FII families give or receive help informally, it is not always cash, but rather in the form of goods or services. The nonprofit asks them to put a value on this "social capital," finding that the average family values this non-cash assistance at $422 per month. And nearly half of MAF's DACA grant survey respondents said they support family members without a driver's license by giving them rides. Sometimes, in-kind exchanges lead to cash buffers: FII families whose social networks helped them find work ultimately increased their monthly incomes by $633 on average.[18]

Many people rely on their family and friends to improve financially stability.

Through a patchwork of creative efforts, many consumers pull together their own resources to become financially stable in the short term. They generate extra income, use self-prescribed savings rules, and turn to informal social networks. People who use a mix of independent strategies show great ingenuity, and sometimes successfully overcome the lack of formal opportunities for stability.[19] On the other hand, limitations to stability persist. Savings rules work best when consumers' income

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[15] For example, the Financial Diaries sample included a woman who saved at a bank branch an hour's drive away from home. See Morduch, Jonathan and Rachel Schneider. "The Financial Diaries How American Families Cope in a World of Uncertainty." 2017. https://press.princeton.edu/titles/10920.html.

[16] Based on internal LIFT data. LIFT members who reported high levels of social support when they started working with the nonprofit were 1.8 times more likely to improve their net savings and debt over time.

[17] DACA stands for Deferred Action for Childhood Arrivals, an immigration policy that enables work permits and defers deportation for people brought to the United States illegally as children. In 2017, people with DACA status were given a tight deadline to renew it for a fee of $495. MAF helped over 5,000 clients by providing direct grants to cover the fee. For more, see Gopal, Ramya and Aparna Ananthasubramaniam. "DACA's multiplier effect." Mission Asset Fund. 6 April 2018. https://missionassetfund.org/dacas-multiplier-effect/.

[18] Income increased only $151 among those that didn't receive such help. Based on internal FII data.

[19] Mission Asset Fund sees a pattern of clients pulling together a range of resources to find stability, from informal insurance to building social capital to using bank accounts and public benefits when they're available. See Quiñonez, José. "Latinos in the Financial Shadows" in *What It's Worth: Strengthening the Financial Future of Families, Communities, and the Nation.* http://www.strongfinancialfuture.org/essays/latinos-in-the-financial-shadows/

routinely exceeds their expenses. Social capital can only help so much, especially in communities where most people struggle financially. And while opportunities for flexible income generation have grown with the entry of online platforms, the income they can provide tends to be highly volatile and can still be out of reach for people lacking time, childcare, or internet access.[xliv] For these reasons, we now turn to describe three types of external tools that CIC data have shown to help consumers achieve more with their own efforts to become stable.

5. EXTERNAL SUPPORTS THAT BOOST SHORT-TERM STABILITY

When people lack short-term financial stability, it is rarely through lack of effort. Consumers want to be self-reliant, and act accordingly to combat everyday cash flow shocks. Their efforts are significant, and sometimes lead to stability on their own. Yet just as we should understand and value families' own strategies to create short-term stability, we must acknowledge that these may be insufficient to help low- and moderate-income consumers become financially stable at scale.

This reality points to a clear opening to expand the set of tools that make it easier for consumers to create their own financial stability. On-the-ground insights from the CIC indicate how to do this, with a focus on opportunities for positive cash flow, liquid savings, and high-quality credit. Some tools described here may work well on their own. Others have been shown to have a bigger impact in tandem with financial coaching. MyPath sees how coaching may hold a particularly high value for young people who don't have strong financial role models. Many who completed MyPath Credit continue to reach out to their MyPath coach as their financial situations and goals evolve. All CIC members note, however, that the context for these interventions matters, and that there is no one-size-fits-all solution.

Cash Infusions to Boost Stability and Earning Capacity

Raising income and lowering expenses are two straightforward ways to address financial instability, complementing consumers' own income generation strategies. With more of a buffer between income and spending, people can both overcome current instability and be set on a trajectory to financial security.

- **Government benefits have traditionally aimed to serve this function.** Public cash assistance, unemployment insurance, SNAP (formerly food stamps), and the Earned Income Tax Credit all provide extra cushions in the budgets of families who receive them. Unemployment insurance especially targets instability, filling income dips that result from job loss. Public-sector transfers tend to make a difference, providing a critical foundation to household finances and greater ability to make progress toward stability. The Financial Clinic, for example, finds that coaching clients who receive food, utility, housing assistance, or Medicaid or Medicare subsidies, are more likely to reduce their debt from one session to another.[xlv]

With more of a buffer between income and spending, people can both overcome current instability and be set on a trajectory to financial security.

- **Nonprofits can also infuse cash to create stability.** Recall LIFT, which helped one of its clients by covering several $50 child care fees so she could study for exams and ultimately finish college. LIFT provided about $50,000 to its families in the 2017-18 fiscal year to encourage sustained engagement in LIFT's coaching program, in addition to supporting clients with progress on their career and financial goals. That funding may include the cost of covering childcare, paying off burdensome debt, or paying an electric bill during the winter. Similarly, families that partner with FII also earn small grant dollars by sharing information around the initiatives they are taking to improve the well-being of their family and community. Most applicants use FII investments for education, housing, or financial health, though FII doesn't classify how they use the grants too specifically.

Both FII and LIFT operate on the philosophy that families understand how to most efficiently use extra funds, which FII's and LIFT's data supports. Those who receive FII's grants look more financially stable 12 months out: Their annual income goes up by over $5,500 on average, while balances increase in their checking, savings, and retirement accounts.[xlvi] As a final example, MAF stepped in to help clients manage the destabilizing expense spike of the nearly $500 DACA application fee. In the words of one person, "It's really hard to save $495 while having rent, utilities, veterinarian costs, and other bills to pay. I am also saving for college and my medical expenses."[xlvii] Grants from MAF covered the fee for nearly 8,000 DACA applicants, helping them stay financially stable.

Cash infusions can improve income over time when people use them to invest in small businesses, or to stay in school.

- **Investments in earning capacity can create lasting financial stability.** Cash infusions can improve income over time when, for example, people use them to invest in small businesses, or to stay in school. FII surveyed consumers to learn that most respondents would prefer business income to employment income, possibly because it represents better long-term prospects than low-paying traditional work.[xlviii] Another investment in sustained earning capacity is career coaching as offered by LIFT, with the aim of getting people into better paying jobs. Organizations focused on workforce development and quality jobs also have a role to play in ensuring consumers can bring in routinely positive cash flows.

Savings Products and Services

Short of directly infusing cash, some tools can minimize the energy consumers spend creating and sticking to their own savings rules. The CIC sees up close which strategies work well for the individuals and families the members serve.[20]

- **Commitment devices can make it easier for consumers to stick to their goals.**
    - ***Automatic savings transfers*** are a simple type of commitment device. For example, MyPath's participants typically save over $500 by the end of MyPath Savings, which includes a series of behavioral nudges like signing a savings contract and setting up automatic transfers from participants' paychecks into savings accounts. One said, "I really liked auto-deposit. It would have been way too much work to save without it."[xlix] One MyPath study showed that when young workers have access to split and direct deposit, they save a substantial portion of their earnings towards their savings goals. The data show that MyPath youth deposited an average of 40 percent of their paychecks directly into their savings accounts for the duration of their employment programs using this automatic feature.[l] The Financial Clinic sees the impact of automatic deposits among coaching clients, too. One consumer initially approached the Clinic with $1,500 of credit card debt in collections. She used auto-deposits to build a savings alternative to the card, ultimately accumulating over $1,000.[li]
    - ***Club savings accounts*** exploit consumers' instincts to compartmentalize their money, while restricting access so users can most easily access it only at designated times. Offered by some banks and credit unions, club accounts attach labels to the funds in them. One example is known as Christmas Club accounts. Consumers save in these accounts throughout the year and withdraw from them in time for the holidays. Inclusiv has found a particular demand for these among very-low-income consumers. Unbanked people interviewed in a study by the nonprofit said they would be more encouraged to save at a formal institution if it offered accounts tagged for specific needs like "a car, Christmas, [or a] Quinceañera."[lii]
    - ***Fintech nudges*** interact with consumers to help them reach savings goals. Commonwealth has developed one example of these, a "savings pocket" attached to prepaid cards which users access online or through a mobile app. The interface prompts people to save there automatically or manually when funds are available, and each time users ask to withdraw it gives an option to reconsider. An evaluation found that the tool effectively helps consumers "address immediate needs and stabilize their financial lives" because it strikes a balance between structured savings and flexible access. The product also reduced reliance on expensive loans, another indicator of its stability-enhancing impact.[liii]

[20] The strategies outlined here may not be appropriate for all low- and moderate-income families but highlight promising solutions for certain households. For example, automatic transfers may not be ideal for all consumers, especially those with volatile cash flows. For some, "setting and forgetting" options can also lead to unintentional overdraft fees that exacerbate instability. In addition, low- and moderate-income individuals can find it hard to take advantage of some seemingly simple nudges. nLIFT, a coalition of nonprofits, is pushing fintech companies to design tools to increase financial inclusion with this group in mind. For more information on nLIFT, see https://www.aspeninstitute.org/programs/nlift/.

- **Savings incentives can motivate people to save more.** Savings products can formalize the rewards and punishments that consumers create for themselves. For example, IDAs incentivize people to save by matching deposits up to a certain amount.[liv] Prize-linked savings (PLS) accounts are another incentive tool, treating each deposit as a chance for account-holders to win prizes.[lv] Commonwealth pioneered PLS from small pilots in the mid-2000s, and accounts reach millions of consumers today.[lvi] EARN has developed a similar product, called SaverLife, that rewards users with $10 every month that they save $20. The nonprofit's incentive increases clients' savings cushion by an average of $760 in six months.[lvii] In addition, removing asset limits, a disincentive to savings, in public benefit programs may spur savings.

- **Opportunities to seize new income help consumers save when they can.** The tools in this category help consumers save at the time of financial windfalls—such as when consumers receive new or larger paychecks or when they receive their yearly tax refunds—to immediately capture these additional funds into savings. For example, MyPath uses this principle to automatically deposit a portion of young people's first paychecks (based on the pre-commitment memorialized in their Savings contract described above) into a youth-friendly savings account. Relatedly, Commonwealth is exploring design features to translate employees' raises into financial security-building opportunities.[lviii] Commonwealth has piloted tools to help people save tax refunds, just as it has for the other two types of savings products described in this section. Since 2013, Commonwealth has partnered with VITA sites across the country to pilot SaveYourRefund to offer cash prizes to tax filers who use IRS Form 8888 to save a portion of their tax refund. Since its inception, 9,000 tax filers have saved more than $7.5 million.[lix] More recently, Commonwealth has partnered with EARN to combine tax-time saving opportunities with saving incentives. Their SaversWin program asks filers to pledge to save their refund, entering pledgers into a lottery for both small weekly $100 drawings and one $5,000 prize. Among those who followed through with a pledge to save, savings cushions remained high: Their account balances stayed $600 above their pre-tax-time levels for at least three months.[lx]

- **Financial coaching can encourage savings habits.** Financial coaching targets overall financial well-being for its clients by working with them to tailor solutions to individual situations and client-identified goals. A randomized experiment that The Financial Clinic participated in found that this pursuit of client-defined goals has an acute impact on clients' savings cushions. The average consumer with access to financial coaching saved more often and ended up with a higher balance than the control group, without such access, did.[lxi] Other data from The Financial Clinic suggests that for clients who meet with a coach at least three times, one-third of any income increase they experience ends up as savings.[lxii] Other research suggests that repeated, detailed discussions about saving plans boost clients' savings.[lxiii] Savings buffers may also grow in part because coaching helps clients to pay fewer late fees: They are more likely than a control group to pay bills on time, and less likely to have paid a late fee in the previous two months.[lxiv]

Access to High-Quality Credit

Besides cash assistance and savings products and services, opportunities to access high-quality credit also improve short-term financial stability.

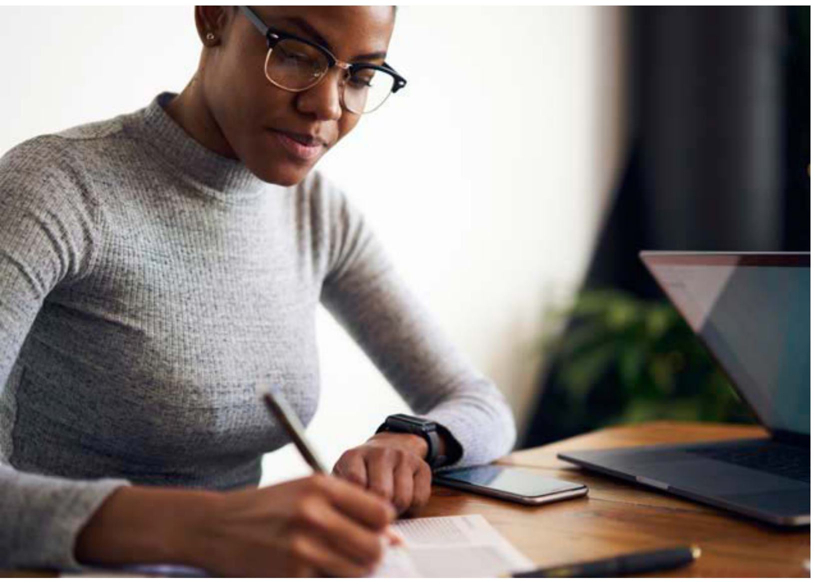
- **Some tools directly provide high-quality loans.** Community development credit unions (CDCUs) extend loans to low- and moderate-income consumers with more flexible underwriting and no increase in delinquency. Through an analysis conducted by Inclusiv of 97 CDCU loan portfolios, the nonprofit estimates that CDCUs issued $8 billion in consumer loans to people with low or no credit scores in 2017 – people who would typically be denied credit at other institutions.[lxv] Though the CDCU model is perceived as higher risk, community-oriented credit unions are responsible lenders and have a consistently higher return on assets than other credit unions.[lxvi] Most borrowers starting out with a low credit rating improve it through their credit union relationship.[lxvii]

- **Other tools indirectly open access by improving credit scores.** Though credit scores aren't immediate cushions themselves, consumers recognize that they're an important element of accessing the loans that are. MAF's clients are most drawn to its Lending Circle product primarily because it gives them a chance to improve their credit scores.[lxviii] And the Lending Circle product works: Compared to a comparison group, participants with low scores were almost twice as likely to increase scores by 20 points or more.[lxix] Alternatively, MyPath and Neighborhood Trust connect clients to credit-builder loans provided by partner credit unions. These loan products hold a small sum of $500 in escrow for clients and block access to it until borrowers have fully paid it off in installments reported to credit bureaus. A formal evaluation shows the credit-building effectiveness of MyPath's Credit program, and a Neighborhood

Trust analysis shows similarly impressive results.[21] Tools like these have the added benefit of leaving consumers with a $500 savings buffer in addition to improved credit access.

- **Financial coaching can improve credit scores.** Financial coaching is associated with consumer access to high-quality credit, in addition to its impact on savings cushions. A randomized evaluation of access to financial coaching found that people with access ended up with higher credit scores and lower reliance on payday loans.[lxx] Similarly, almost 6 in 10 coaching clients in the Pathways program run by Inclusiv and Neighborhood Trust improve their score, with an average increase of 38 points.[lxxi] Coaching's credit impact, as with its savings impact, also appears to rest on a strong coach-client relationship. The Financial Clinic explains that "coaches can help customers put debt reduction in the context of their other financial goals," and that they "can be critical in helping customers take the action necessary" to improve credit access.[lxxii] A study of MyPath's approach of combining credit-building tools with financial coaching for working young adults showed the combination significantly boosted their credit, as well as their savings and financial confidence.

Cash infusions, savings products, and products that make high-quality credit accessible can all help consumers do more with their own efforts to reach short-term financial stability.



[21] Within six months, MyPath youth who had low credit scores (defined for this study as a FICO score of less than 680) improved their scores an average of 23 to 30 points. In addition, 53.7 percent of participants moved into the good credit category (a FICO score of 680 and above), including many individuals that began the program without credit scores, as credit "invisibles" or "thin file" individuals without enough credit history to generate a credit score. For more information on the MyPath Credit program and the results from its two-year pilot study, see MyPath. "Not Getting Enough Credit: Exposing Credit Needs among Opportunity Youth, and Introducing an Innovative Trust insights based on internal data. https://mypathus.org/wp-content/uploads/2014/09/MyPath-Not-Getting-Enough-Credit-Brief.pdf.

6. CONCLUSION

Many programs and policies rightly prioritize long-term well-being for consumers. Financial security represents freedom for people to reach their life goals, whatever those may be. However, to have financial security in the long run, short-term financial stability is a prerequisite. In other words, financial stability provides a foundation from which financial security, and eventually, economic mobility, is built. People with financial stability are surrounded by a robust scaffolding of financial cushions. Their income exceeds expenses through some combination of living wages or effective public benefits; they use cash flow buffers to build liquid savings, possibly in tools that incentivize deposits and protect funds; and in a pinch they have access to affordable loans which might be made in the more flexible underwriting model of CDCUs.

This report draws on direct insights from the CIC to show the importance of routinely positive cash flow, liquid savings, and access to high-quality credit. Having these cushions, along with social capital and other creative buffers, defines short-term financial stability and makes financial security more likely. They protect consumers from everyday financial shocks, jump-start the accumulation of longer-term assets, and reinforce the financial behaviors that lead to larger assets and longer-term well-being.

We invite readers of this report to use it in two ways: apply our insights about stability and security in your own work, and expand on our insights with the consumer data uniquely available to you.

Apply These Insights In Your Work

Evidence here implies that nonprofit, for-profit, and public organizations – especially those wanting to bring long-term financial security to people at scale – should focus on removing barriers to short-term stability. A diverse set of actors interact with consumers, and each has a role to play in this effort. These include, for example, employers, governments, banks and credit unions, benefits administrators, workforce development services, or even early childhood centers.

Practitioners in any sector can advance stability with three guiding principles:

1. **Think diagnostically about the consumers your work touches.** Do they have cushions available to combat everyday financial shocks? Are you in a position to improve their cash flow, liquid savings, or access to high-quality credit? As the CIC members do, you can apply curiosity to your data to better understand the behaviors, attitudes, and challenges of the consumers your work reaches.

2. **Incorporate learnings into the design of your work.** The CIC does not stop at understanding the consumer experience. Rather, members use insights to develop products, services, and policy recommendations that fit on-the-ground needs. Once your organization sees its opportunities to enhance peoples' stability, it should act on them.

3. **Reach out for advice and collaboration.** Collectively and individually, CIC members have a trove of knowledge about which tools work best to improve stability – and more generally about how to learn from the people they interact with. Others wanting to develop and apply insights about short-term financial stability should consider the CIC members a ready and willing resource.

Expand On Our Findings

Insights presented here, while robust, do not shed light on all key aspects of short-term financial stability. We invite both practitioners and other researchers to contribute to this learning process.

All sectors have rapidly growing access to consumer data. Using it responsibly, your organization can seize the opportunity to add to the field's knowledge from your unique consumer touch points. Working together, we can build a more granular picture and mosaic of the everyday financial lives of consumers, and then use it to advocate for interventions that make a real difference. We see avenues for continued research on at least five fronts:

- **Treat short-term stability as a main outcome of interest.** New analyses should consider how to best measure short-term financial stability. Thoughtful advances here will allow for a better understanding of both its prevalence and the factors that that affect it.

- **Seek out a fuller picture of consumer financial behavior.** Some actors may be able to tap into an individual's full set of transactional accounts, which fills in missing pieces to help explain consumer choices. Others have an advantage in unveiling informal, social interactions that impact family finances.

- **Use longitudinal data to track long-term impacts.** The field needs more sustained data collection to articulate the links between the short and long term. While CIC members have many outcome metrics at their fingertips, they have a harder time tracking the same consumers long enough to measure how those translate into impacts on broader financial security. Those with access to sustained data about the same set of consumers have an opportunity to contribute to this knowledge.

- **Explore behavioral links between the short and long term.** CIC members intuitively understand that positive financial actions reinforce themselves over time, propelling people from stability to security. More evidence is needed to map out how this process practically works.

- **Appreciate the diversity of consumer experiences.** Any advances in our knowledge about short-term financial stability must recognize that the same intervention can have a range of impacts depending on whom it reaches. Research should help build the field's intuition for this diversity. Qualitative data and consumer stories have an important role to play in this effort.

This report is an invitation to all sectors to build financial stability and our understanding of it, taking advantage of your consumer touch points to do so. We all have an opportunity to move forward with intention in the name of expanding short-term financial stability in the United States - and ultimately the opportunities that come from having long-term financial security.

ENDNOTES

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- Insight2Impact – Mexican Customer Research Blog

DFS use among digital Kenyans

Insights built on privacy

mastercard foundation *Partnership for* FINANCE *in a* DIGITAL AFRICA

Caribou Data

About

About the partnership

Partnership for FINANCE in a DIGITAL AFRICA

The Mastercard Foundation Partnership for Finance in a Digital Africa (FiDA) aggregates and synthesizes knowledge, conducts research to address key gaps, and identifies implications for the diverse actors working in the digital finance space. In collaboration with our partners, FiDA strives to inform decisions with facts and accelerate meaningful financial inclusion for people across sub-Saharan Africa. Additional information and resources can be found at financedigitalafrica.org.

About Caribou Data

Caribou Data's unique privacy-preserving approach provides deep insights into the digital lives of consumers in emerging markets.

Using only anonymous data, we develop granular insights on app, network, content, and transactional behaviors, all structured and protected within our GDPR-compliant differential privacy layer.

The appendix contains further details on these methods.

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Notes

The views presented in this report are those of the authors and do not necessarily represent the views of the Mastercard Foundation or Caribou Digital.

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For questions or comments, please contact us at ideas@financedigitalafrica.org.

i Introduction

In this section

We describe Caribou Data's research methodology, and introduce "digital Kenyans"—the target population from which we draw our sample of 1,000 individuals over three months.

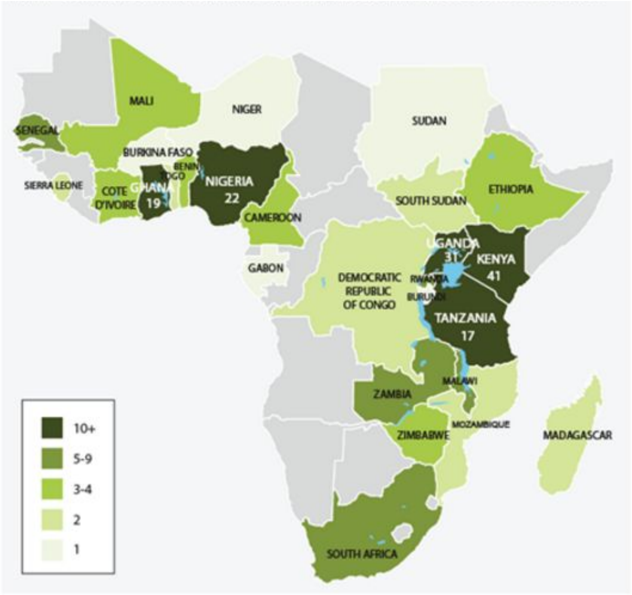
Exploring digital consumer behaviors in Kenya to provide new insights on how people engage with digital financial services

The digital financial services sector is seeing phenomenal innovation and growth worldwide. And the epicenter of it all arguably remains in Kenya, where deep penetration and early cultural acceptance of M-Pesa has led to a pioneering market for digital financial services. As both consumers and service providers become more sophisticated in their offerings, new innovations in instant credit, micro-insurance, and savings are taking root. Understanding Kenya, therefore, helps to understand the near future of DFS in similar markets worldwide.

Methods from Caribou Data deliver new forms of behavioral insights on the activity of digitally connected Kenyans, using anonymous, device-level data to see transactional activity in the context of the digital ecosystem.

Intended for practitioners, investors, and donors, these insights complement surveys and other self-reported research studies with actual behavioral data.

Distribution of applicants to CGAP funding program, showing dominance of Kenya



Source: [Figure] CGAP, 2017

Data directly from the device is more reliable and inherently contextual within the day-to-day experience of the individual

This research by Caribou Data provides a new perspective on understanding consumer behavior around digital financial services.

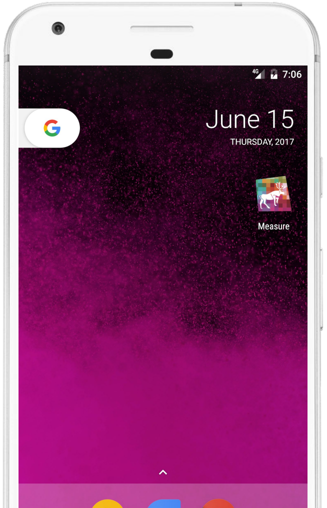
Unlike studies relying on self-reporting, this data comes directly from log files on the device, and as such represent actual behaviors captured in the context of an individual's day-to-day life.

Participants are paid a monthly stipend to anonymously share passive data from their device.

The resulting aggregate data shows patterns in how people use their devices for communications, entertainment, and financial transactions.

Caribou Data employs the highest standard in respectful treatment of data, including differential privacy techniques that ensure effective anonymity.

For example, data is anonymized and encrypted before leaving the device, and data queries are always aggregated—there are no individual records. See the appendix for full details.



Panelist apps can be installed on both Android smartphones and Symbian smart and feature phones

We draw our sample from the population of "Digital Kenyans," who represent the near-future slope of the adoption curve for DFS behaviors

Kenya boasts some of the highest rates of mobile, internet, and financial services usage in Sub-Saharan Africa. An estimated 78% of Kenyan adults own a phone, with a third of those a smartphone.[1]

We focus on what we call the "digital Kenyan" segment, defined as those adults who have a data-enabled device for connecting to digital services.

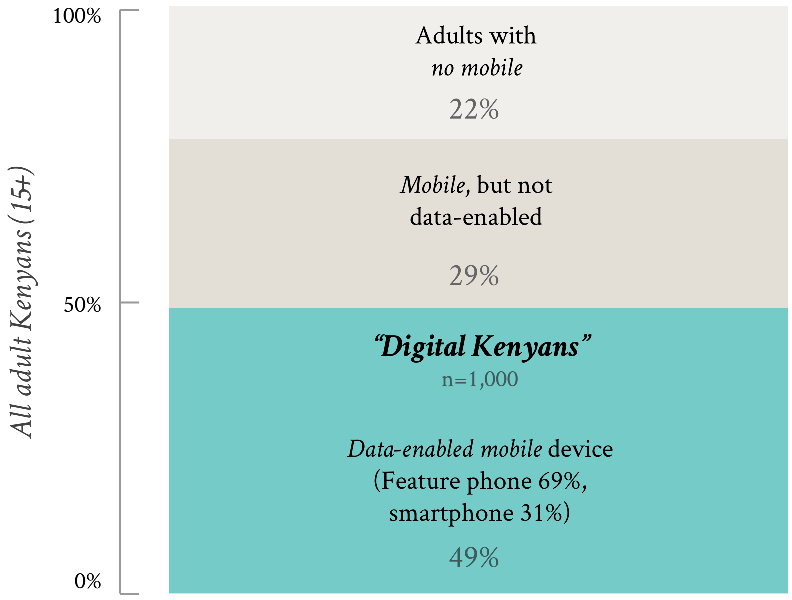
Our sample consists of 1,000 digital Kenyans, with 3 months of data from Q3 of 2017.

The digital Kenyan segment is not representative of the national population, and is skewed toward (though not exclusively comprised of) wealthier, urban, educated individuals, so we have to be careful in how we interpret the findings.

However, digital Kenyans represent the current and near-future slope of the adoption curve for DFS, and are therefore an important bellwether of behavior and responses to market activity.

Our 1,000-personal panel represents "Digital Kenyans"

Q3 2017 Caribou Data • *insights built on privacy*



Sources: [1] Intermedia, Financial Inclusion Insights 2016; Communications Authority of Kenya; GSMA Intelligence (2016)

Panelists are recruited via face-to-face enrollment and online channels, and reflect the basic demographic splits shown by Kenyan census

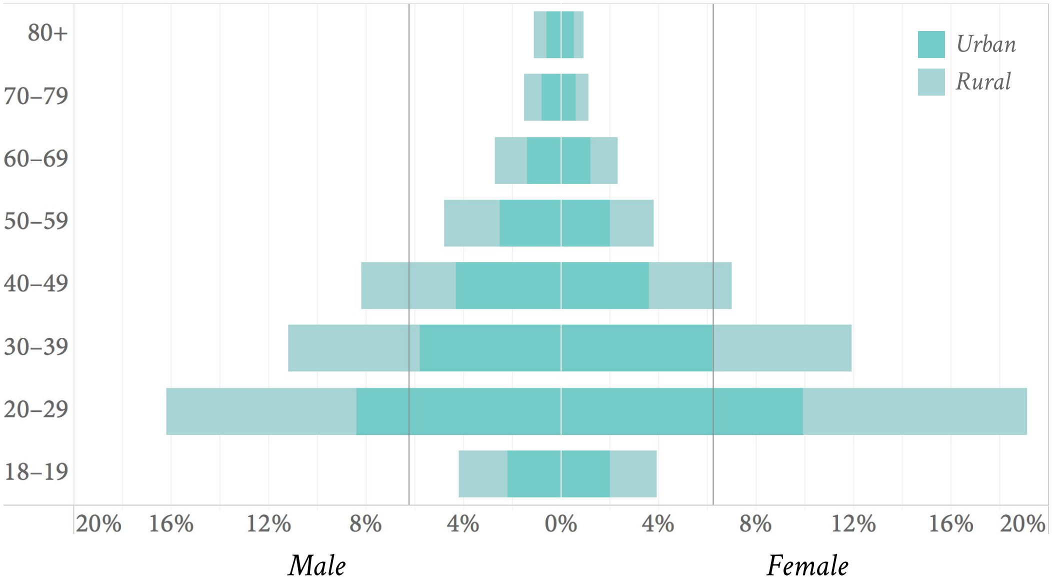
Since our app installs on Android or Symbian devices, our sample population of "Digital Kenyans" is comprised of Kenyan adults with a data-enabled mobile phone.

We recruited to match interlocking quotas for gender, age, and urban/rural locations, derived from the 2009 population census[1] and rebased for the 18+ adult population. The panel thus reflects the national population on these three dimensions: 51% female, 63% rural, and 67% under 40 years of age.

For the 2017 panel, we assume a linear relationship between the population distribution and phone ownership, and align these figures with industry estimates for mobile subscriber penetration (56%) and smartphone adoption (31%).[2]

Our panel of "*Digital Kenyans*" by age, gender and location

Q3 2017, n=1,000 Caribou Data • *insights built on privacy*



Sources: [1] Kenya National Bureau of Statistics, "Population and Housing Census, Volume 1C" (2009); [2] GSMA Intelligence (2016)

ii Kenyan digital lives

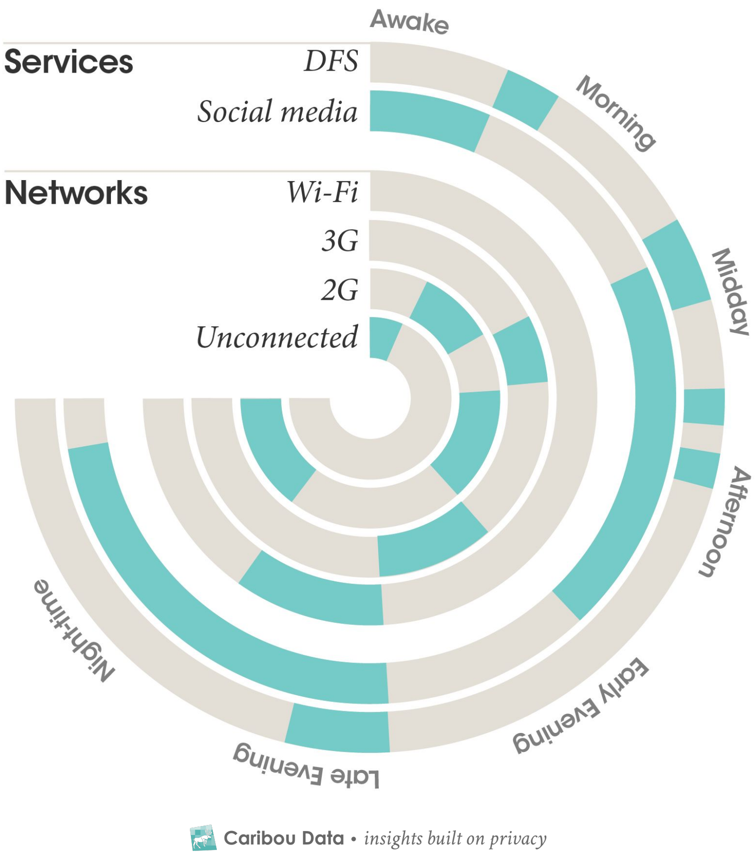
In this section

Context is everything. An understanding of how individuals use digital financial services requires an understanding of the broader digital environment in which people live.

Understanding “digital Kenyans” means going beyond adoption metrics to see the nuance and diversity in how regular people use digital devices and services in their day-to-day lives

Despite the high-level metrics on M-Pesa adoption and new digital products launching in the Kenyan market, there is tremendous diversity in how any given “user” engages with digital products and services on a daily basis.

As we found in our 2015 Digital Lives in Ghana, Kenya, and Uganda[1] study, users move in and out of coverage zones, have (and then spend down) airtime and data credits, switch between entertainment and livelihoods activities, and use their phones in many different ways, each day. DFS is only one thing that users do.



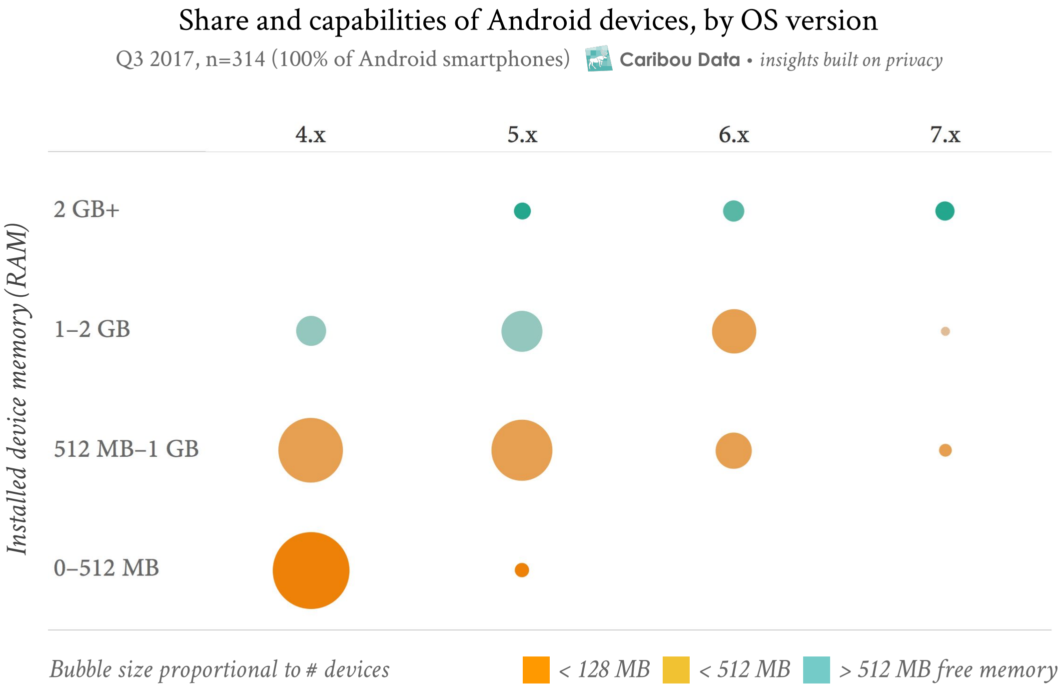
Source: [1, Figure] Caribou Digital (2015) “Digital Lives in Kenya, Ghana, and Uganda”

Most smartphones in our sample are older/outdated, underpowered or nearly full—each of which is a detriment to the user experience

Although many reports focus on the share of smartphones vs other devices, in practice this distinction is less useful than it implies. Like smartphones, many feature phones have large screens, access the internet, and run apps.

At the same time, the most common specs for a smartphone in our sample were *barely* capable, and far from ideal: most run old Android OS versions, had low installed memory and/or little free memory to spare.

37% of Android devices in our 2017 panel ran on version 4.x or lower; globally, that figure is only 13% (as of July 2018)[1]; more than 25% of devices in our panel had less than 128 MB available—for reference, the standard Facebook app requires well over 100 MB alone to run.[2]



Sources: [Figure] Caribou Data; [1] Android Developer Dashboard; [2] Uptodown blog, 2016

Urban users take advantage of 3G and Wi-Fi coverage, while rural users spend the majority of their time under slower 2G signals

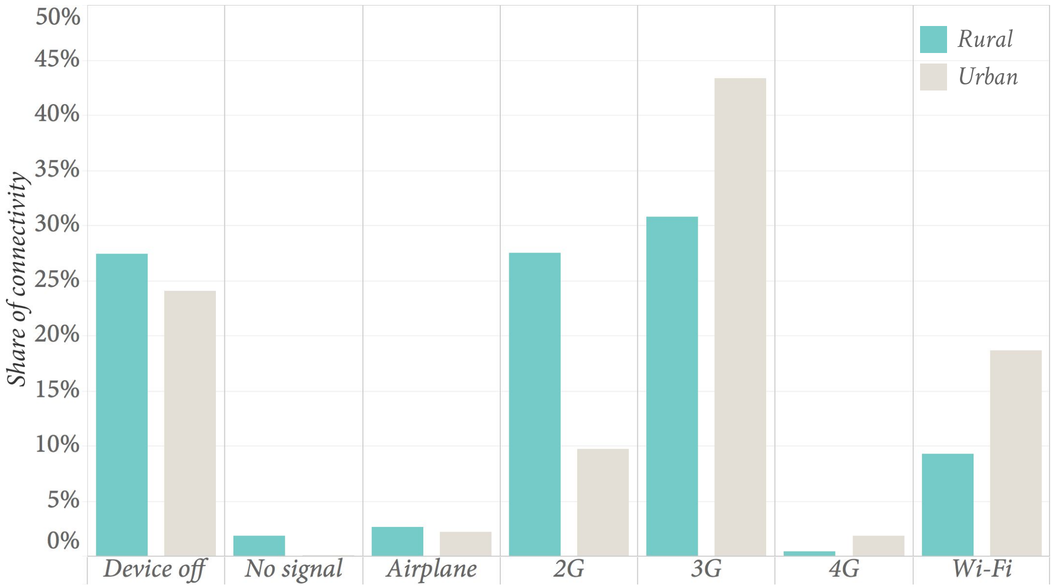
Although many Kenyans enjoy relatively robust network coverage, access to higher speed signals is not evenly distributed. About 30% of all time connected was spent on slower 2G networks, the vast majority of that by rural panelists, whereas urban users were predominantly on 3G or higher-speed connections.

The relatively high share of Wi-Fi use in urban areas is likely due to the growth in low-cost community Wi-Fi networks such as Poa Internet, which can offer a more affordable alternative to GSM for some users.

Finally, we can see the common practice of using “airplane” mode in order to force disconnect from all networks and thus prevent data consumption (especially background processes).

Time spent connected to each network modality

Q3 2017, n=1,000 Caribou Data • *insights built on privacy*



Source: Caribou Data

A “metered mindset,” plus uncertain income streams, lead many users to top up data in small amounts

Most users closely monitor their data consumption, displaying a “metered mindset”[1] about data consumption.

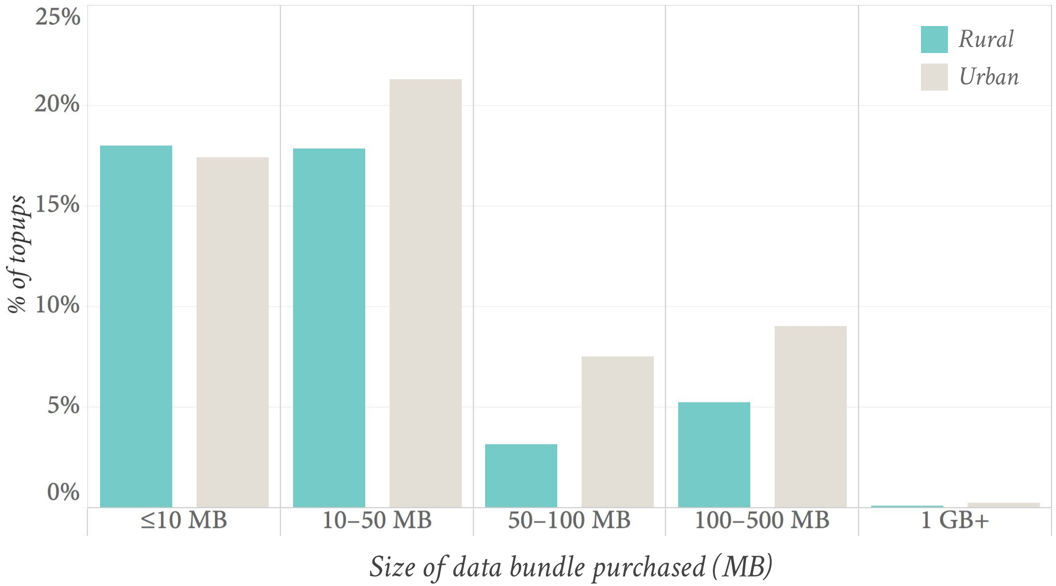
The vast majority of bundles purchased are quite small, <10MB or between 10 and 50 MB.

Bundles were smaller amongst rural users.

This form of interaction with the internet is more like “sipping and dipping” than “browsing or surfing,”[2] and limits discovery, reliability of contact, and deep engagement with digital resources.

Share of data bundles purchased

Q3 2017, n=1,000 Caribou Data • *insights built on privacy*



Sources: [Figure] Caribou Data; [1,2] Donner ‘After Access’ 2015

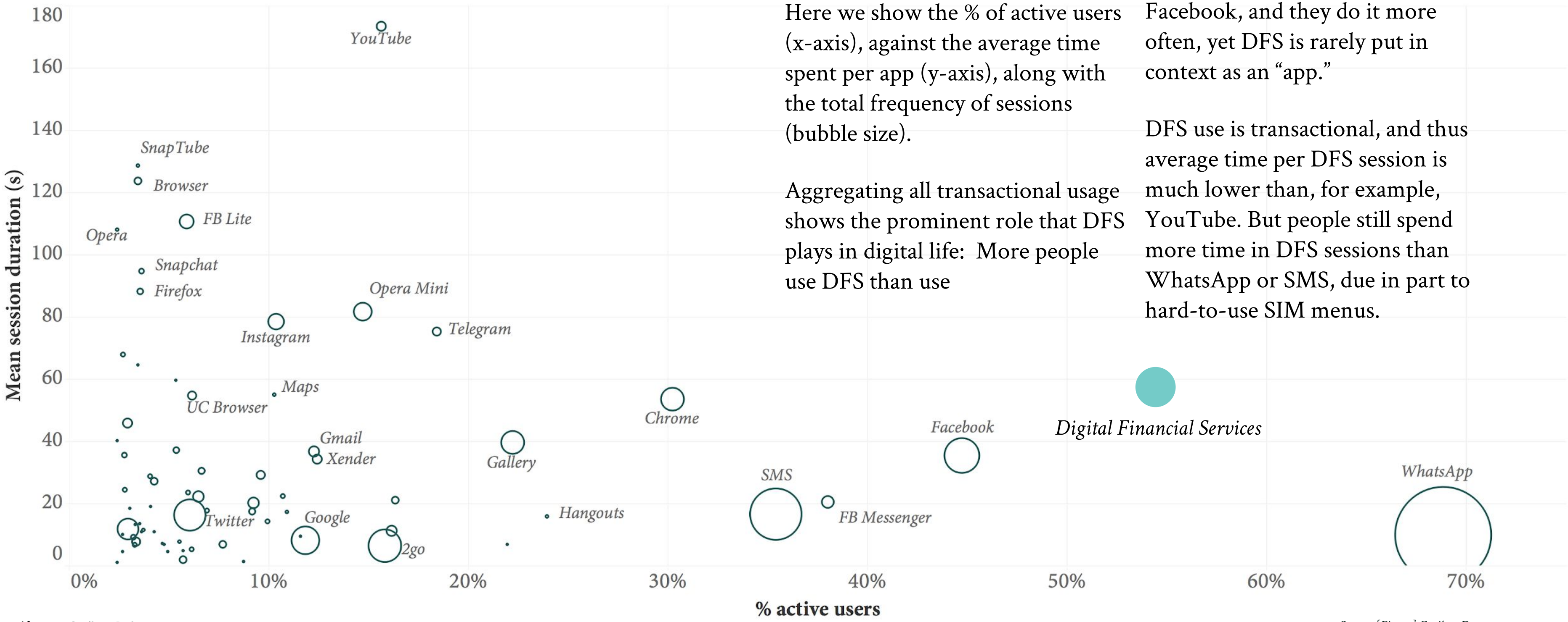
Thinking of financial transactions as an “app” reveals how prominent a role they play in digital life

Q3 2017, n=1,000 Caribou Data • *insights built on privacy*

Here we show the % of active users (x-axis), against the average time spent per app (y-axis), along with the total frequency of sessions (bubble size).

Aggregating all transactional usage shows the prominent role that DFS plays in digital life: More people use DFS than use Facebook, and they do it more often, yet DFS is rarely put in context as an “app.”

DFS use is transactional, and thus average time per DFS session is much lower than, for example, YouTube. But people still spend more time in DFS sessions than WhatsApp or SMS, due in part to hard-to-use SIM menus.



Source: [Figure] Caribou Data

Note: bubble size is proportional to # sessions (WhatsApp 415,000, YouTube 2,500)

iii Digital financial services use

In this section

We break down the big numbers to understand the detailed composition of the digital financial services sector in Kenya, exploring not only what digital services are being used, but also who is using them, and how these services fit within the broader context of people's digital activity.

Our data reaffirms and reflects existing observations: not everyone in Kenya is an active DFS user

Going beyond simple adoption metrics reveals important patterns in DFS usage.

From our panel of 1,000 data-enabled phone users, only 54% recorded any DFS activity in the 90 days. Drilling down further, we find that only 14% of the panel engaged in either borrowing or saving activity.

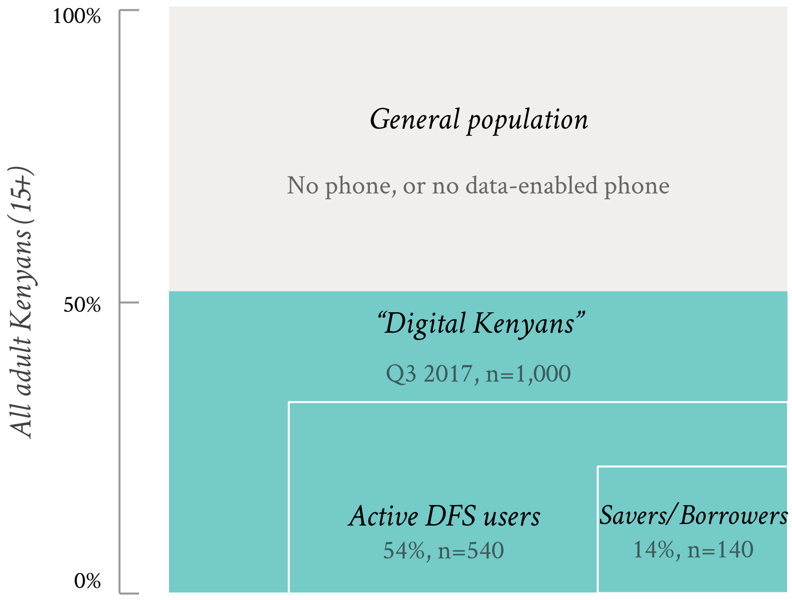
This quick narrowing of the "funnel" is in line with other research: Intermedia found that while 67% of Kenyan adults had a registered mobile money account, only 60% of those were active on a 90-day basis.[1] FinAccess reported only 12% of Kenyans use DFS at least daily.[2]

In terms of loans, FSD Kenya estimates 27% of Kenyan adults have taken at least one digital loan, of which about 2/3 have had a loan within last 90-days.[3]

In general, DFS use skews towards urban users and patterns of early adoption.[4] This is is most pronounced in advanced services. For example, digital borrowers tend to be male (55%), urban (55%) and relatively highly educated.[5]

Share of DFS users within our panel

Q3 2017 Caribou Data • *insights built on privacy*



Sources: [1] Intermedia Financial Inclusion Insights, 2016; [2] FinAccess; [3,5] FSD Kenya; [4] FiDA Snapshot 4, 2017

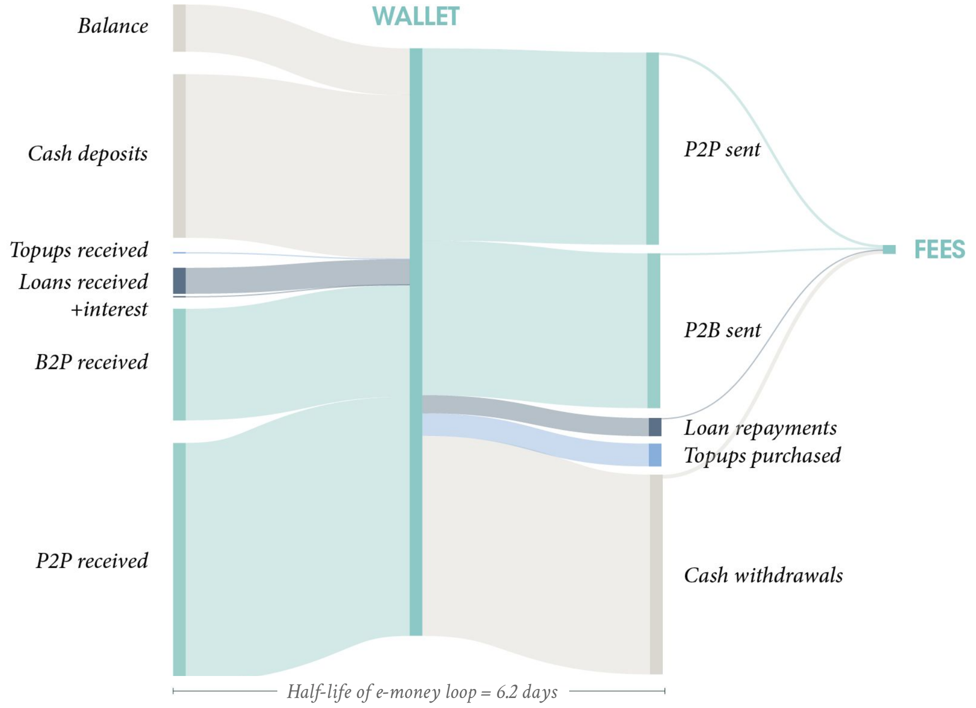
Cash flow dashboard: A complete accounting of value transfer in and out of the digital wallet

The chart offers an original analysis into aggregate value transfer into and out of users' digital wallets, providing a unique window into the relative share of value of each key DFS activity.

Inflows include "cash in" deposits, various transfers from other users, loan principal, and interest on savings.

Outflows include "cash out" withdrawals, various transfer to other users, airtime and data topups, interest and principal payments on loans, and other fees.

The relative shape of these flows help illustrate how some users "keep cash digital"[1] while others may be quicker churners.



Q3 2017, n=540 Caribou Data • *insights built on privacy*

Sources: [Figure] Caribou Data; [1] FiDA Partnership, Snapshot: 4 How can users begin to keep value digital, longer? 2017.

DFS products face challenges in changing behavior—even for smart-phone users, the SIM menu remains most popular interface for payments

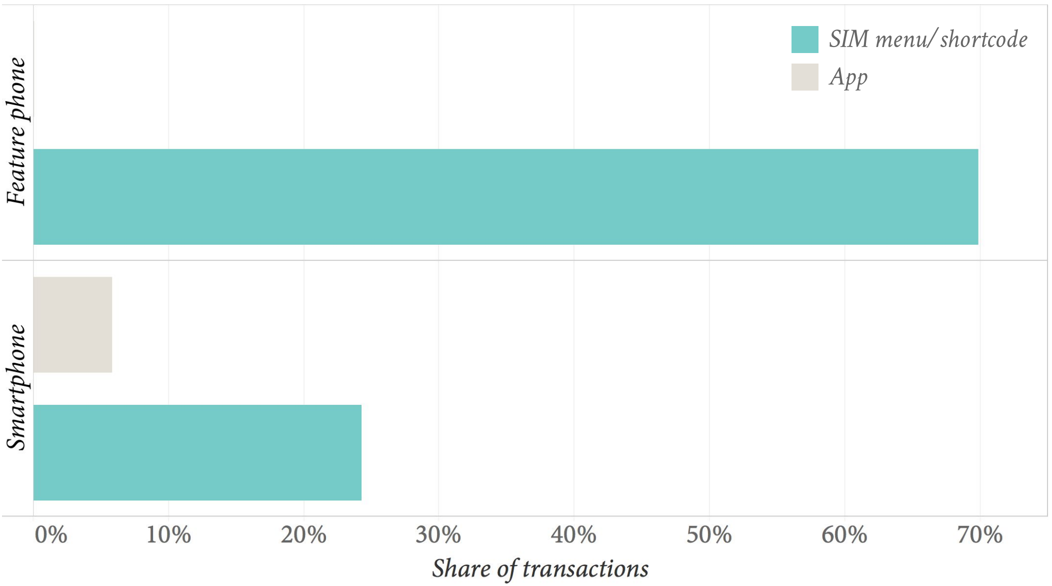
This pattern—with mobile money users electing short codes instead of apps—is worthy of additional exploration by product designers.

Our initial impression is that this should be interpreted as evidence of the extent to which certain "DFS" behaviors have become a form of muscle memory, entwined into daily life.

These behaviors can (and will) change as new in-app functionality and integrations are deployed. But they will likely change more slowly than some might expect, even among users of "smart" phones.

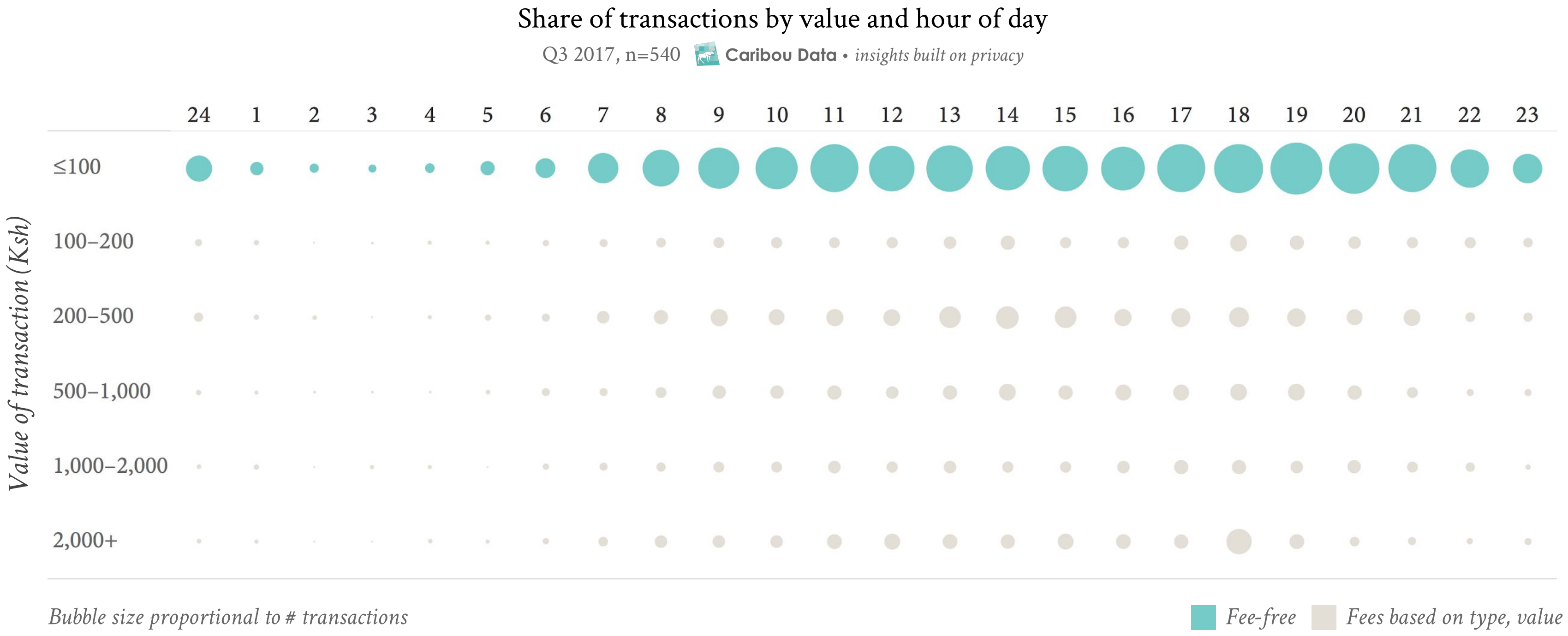
Share of transactions by app vs SIM-based menu

Q3 2017, n=540 Caribou Data • *insights built on privacy*



Source: Caribou Data

The peak of transactional activity is from 9am to 9pm, comprised primarily of low-value (67% ≤100 Ksh) transactions which incur no fee



Source: Caribou Data

Both the average frequency and value of financial activity is highest in the 30–39 age group

We suspect—although this could be tested further—that this reflects the intersection of two trends: that many young people aren't earning enough to have a major footprint, and that older people often are not heavy/daily users.

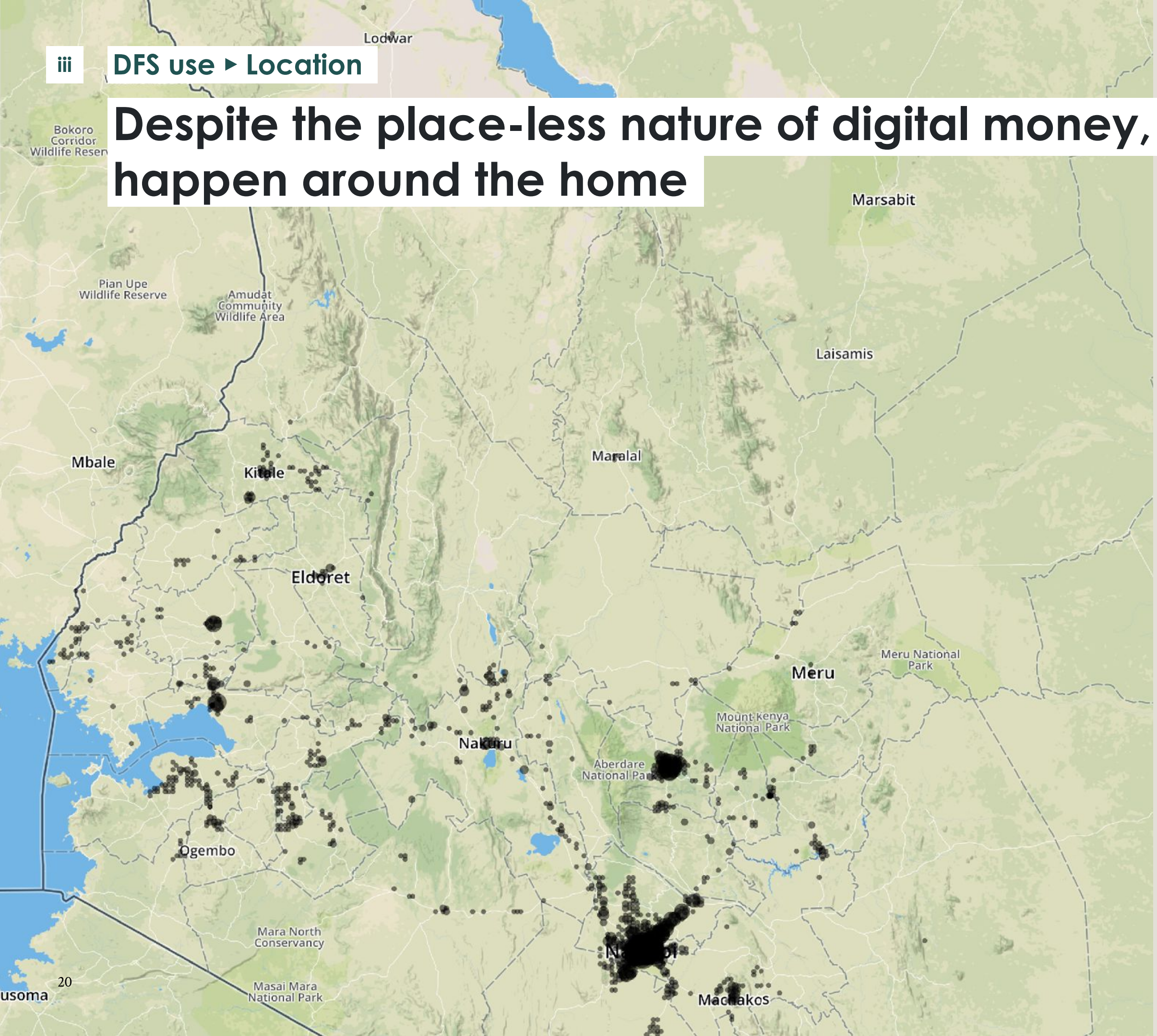
Therefore there appears to be a sweet spot for DFS volume/frequency amongst digital Kenyans which might be older than many would anticipate.

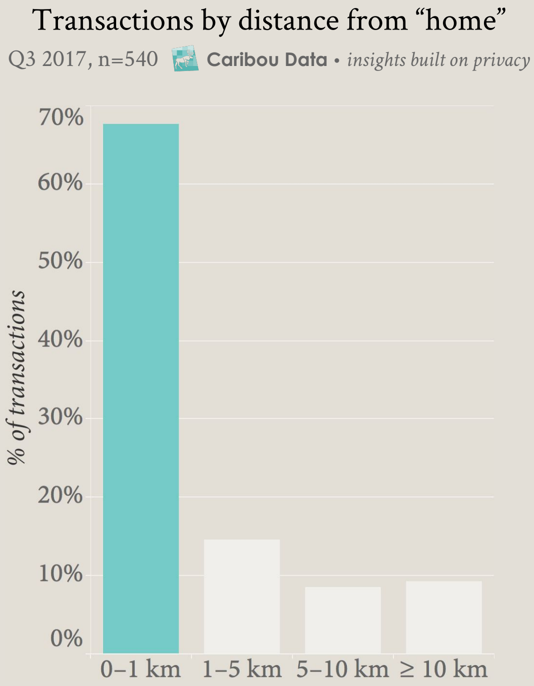
Distribution of transaction activity, by age

Q3 2017, n=540 Caribou Data • *insights built on privacy*

Source: Caribou Data

Despite the place-less nature of digital money, many transactions happen around the home





Source: [Figure] Caribou Data

iv Exploring advanced DFS use

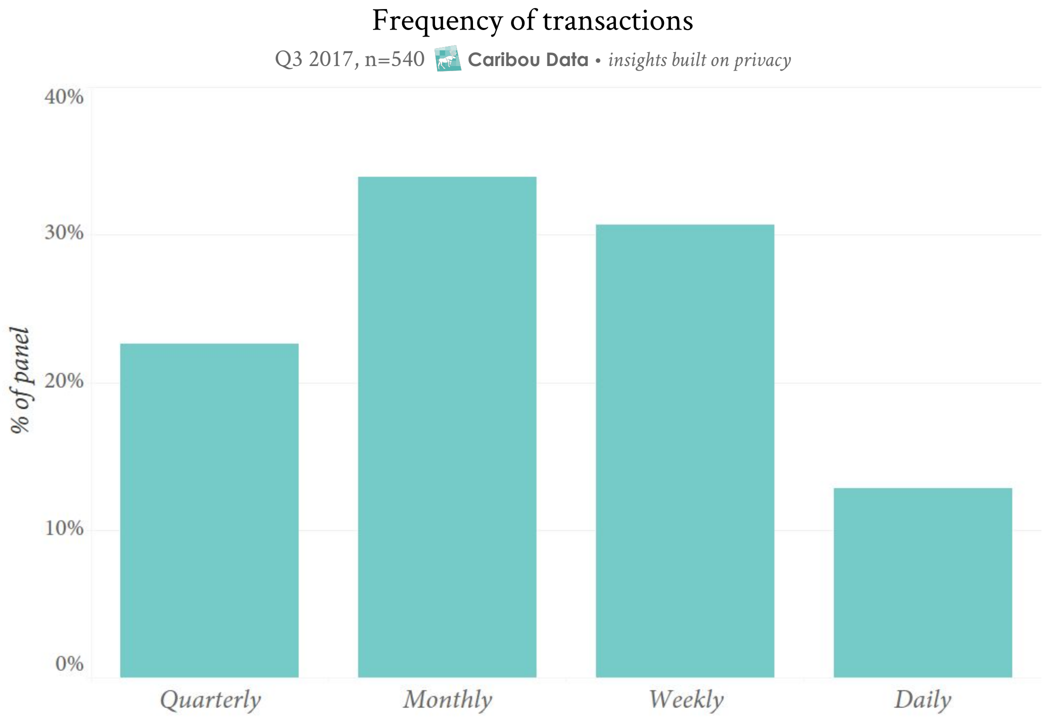
In this section

An illustrative behavior-based "segmentation" focused on differentiating advanced DFS users from casual ones, and linking that to other behaviors and demographics.

While 54% of our full panel were 90-day active DFS users, only 13% of those active users registered any kind of transaction on a daily basis

The metric of *"active users"*—typically defined in the mobile industry as having activity within the previous 90 days—hides significant variation in actual usage rates. Among our active users, the number of monthly transactions ranged from <1 to over 200.

Our overall rate of active users, at 54%, is roughly in line with other estimates, e.g., in its household survey Intermedia estimated that 40% of adults were 90-day active. Unlike our panel, that study included individuals without data-enabled devices, so we expect the active user rate to be lower.



Source: [Figure] Caribou Data

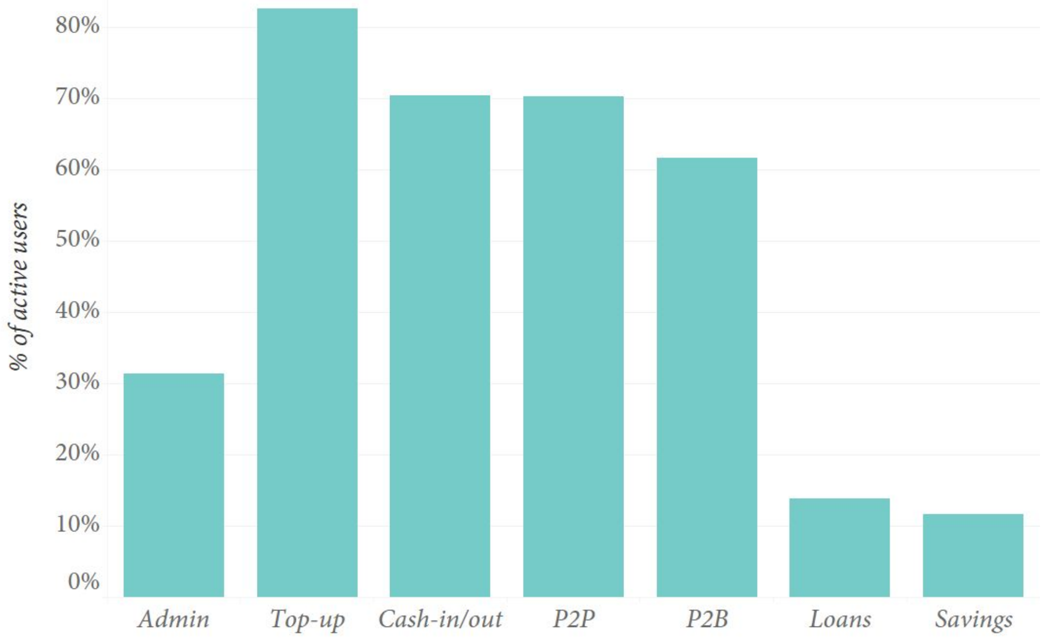
Active users have very different transaction profiles. Top-ups, P2P, and cash-in/out are common, but savings and loans are much rarer

Traditional services continue to constitute the bulk of activity by active users, with more than two-thirds of users topping-up airtime and data, sending person-to-person (P2P) payments, and depositing and withdrawing cash.

Newer products and services do appear in the data. In the P2B category, which includes bill pay (e.g. utilities) and merchant payments (e.g., supermarkets), we see a number of new betting services and community Wi-Fi providers.

% of active users utilizing each transaction type

Q3 2017, n=540 Caribou Data • *insights built on privacy*



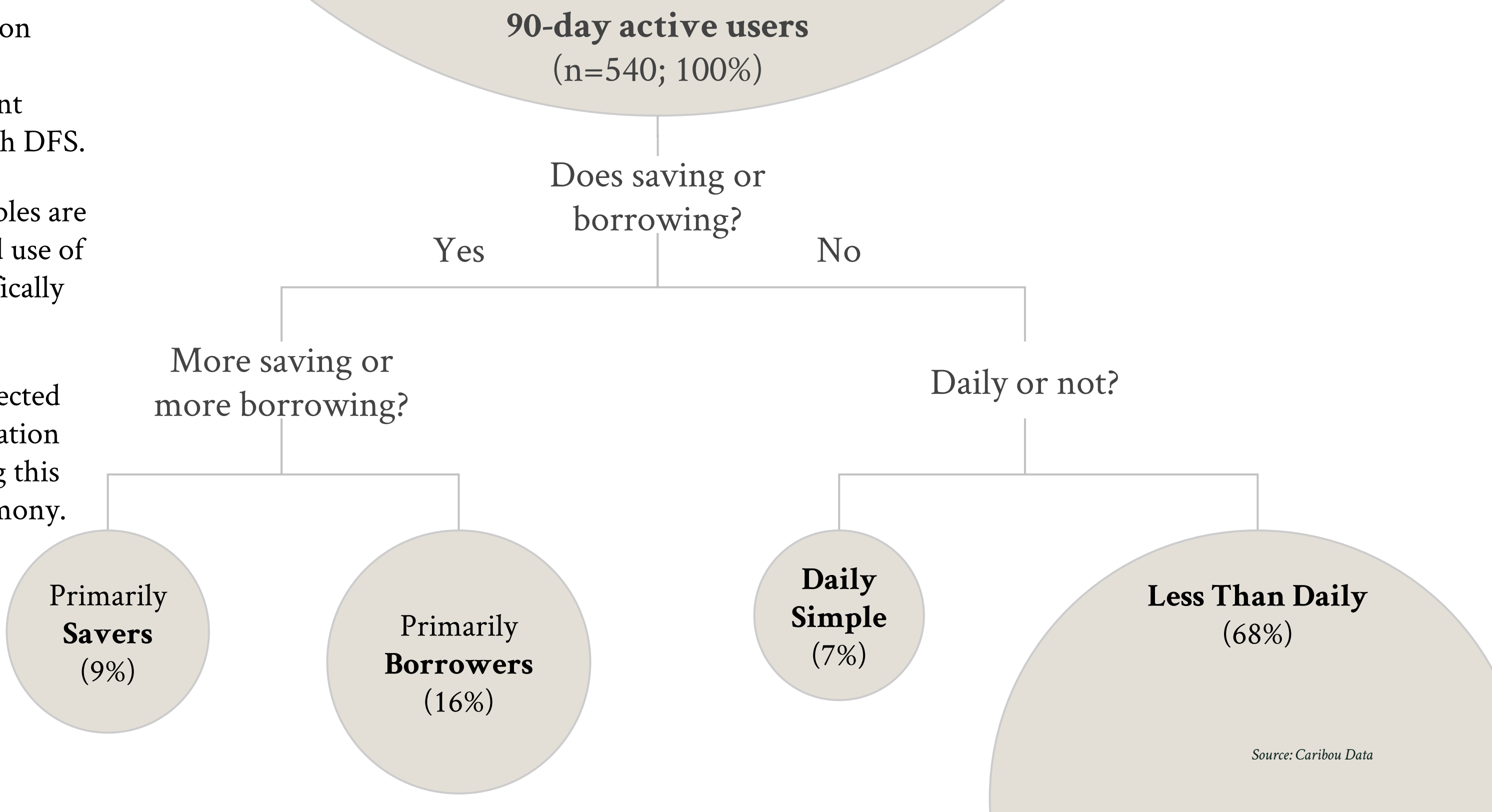
Source: [Figure] Caribou Data

A behavioral segmentation of our 90-day active user base, designed to contrast advanced DFS behaviors and relative frequency

We created a segmentation designed to identify use patterns amongst different levels of engagement with DFS.

Our primary input variables are frequency (intensity) and use of advanced services (specifically credit and savings).

For this analysis we inspected several possible segmentation solutions before selecting this one for clarity and parsimony.



Source: Caribou Data

Segmentation summary

Less Than Daily

Less than Daily users are likely the bulk of DFS users in Kenya in 2017-2018. They are the “default” by which other segments can be differentiated. They limit their DFS activities to airtime topup, cash in/cash out, P2P transfers, and an occasional P2B transfer. A higher proportion of their balances are cashed out, albeit slowly.

They use the least data, bought in the smallest increments, of any segment.

Daily Simple

Daily Simple users may be rare, but they are engaged! Skewing male, younger, and urban, we expect many of them are daily traders, integrating basic DFS into their livelihoods.

They pay 245 Ksh on average in mobile-money related fees each month, more than any other segment.

Proportionally, more of them gamble than in any other segment, which may contribute to the daily nature of their use.

Savers

Compared to other segments, *Savers* are more likely to be rural and to be female.

They top up in bigger increments and consume 10× the data of the *Less Than Daily* users.

They are good customers, on a fee basis. Some even over-provision for data, using less than they buy each month.

Borrowers

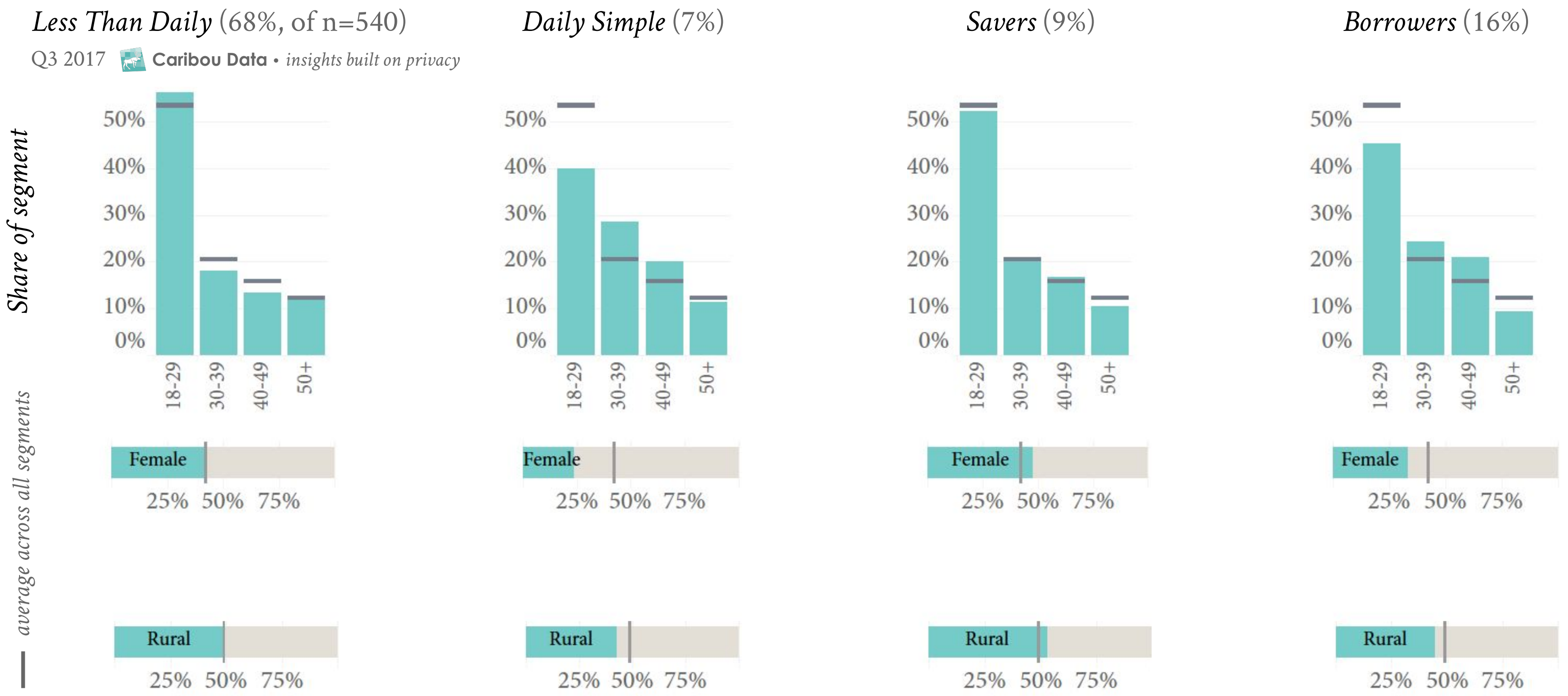
Borrowers are, perhaps, the most lucrative segment for MNOs, combining the high fees of the *Daily Simple* users and the high data consumption of the *Savers*.

Trending (but not all) male and urban, they are frequent, efficient money movers—topping up more frequently (in smaller values) than *Savers*.

More of them (nearly 40%) are on smartphones than any other segment.

Nearly half of this segment (47%) gambles.

Borrowers and *Savers* show demographic differences, with borrowing activity skewing older, male, and urban



Source: [Figure] Caribou Data

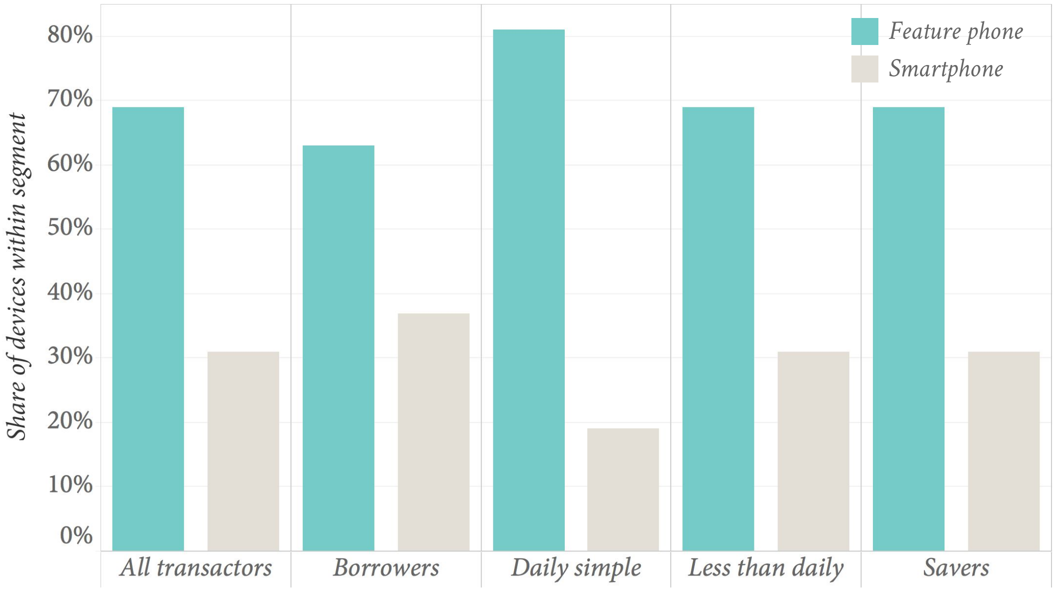
Don't look at smartphone adoption as the proxy for advanced DFS use—a higher number of transactions still originate on feature phones

No segment has left feature phones behind.

But *Borrowers* have the highest concentration of smartphone users. The opportunities to leverage smartphone capabilities to deliver credit will continue to rise.

Share of smartphones within each segment

Q3 2017, n=540 Caribou Data • *insights built on privacy*

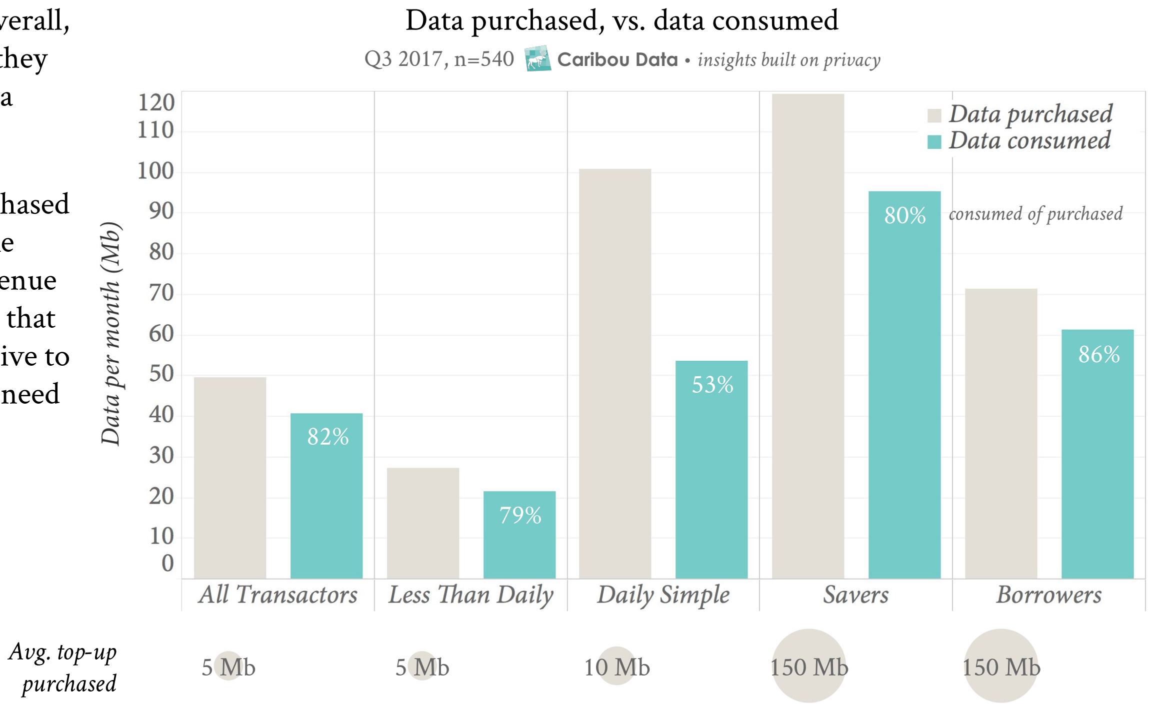


Source: [Figure] Caribou Data

Savers and *Borrowers* purchase larger data bundles upfront, while the average transactor opts for micro-topups

Savers consume the most data per month overall, while *Borrowers* make the most of the data they pay for, consuming the highest share of data purchased.

It is remarkable how much of the data purchased by our panel went unused. Unused data, like unused gift cards, is a notable source of revenue for MNOs. It's even more striking, though, that even savers might be over-purchasing relative to need. If so, they are paying more than they need to, per MB.



Source: [Figure] Caribou Data

Even if you turned off loans, borrowers would still be your best customers—“frequent users of everything”

Not all users are equally valuable.

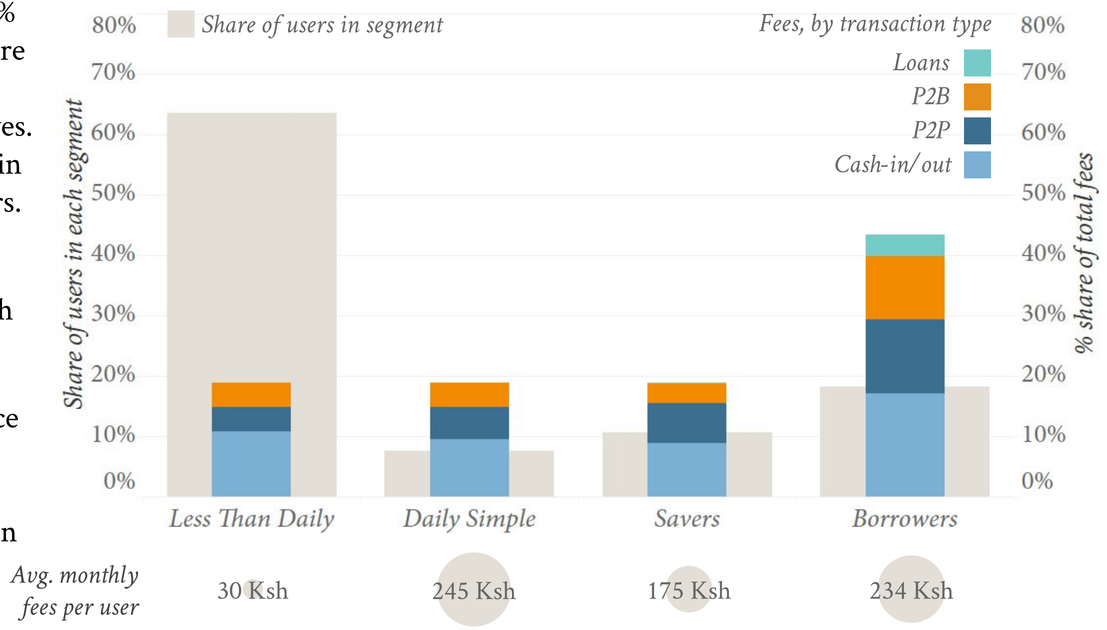
Our *Borrowers* segment comprises less than 20% of active users, yet as a segment contribute more than 40% of total fees. However, only a small portion of those fees are due to loans themselves. On a per-user basis, *Borrowers* pay 8× as much in monthly fees compared to *Less Than Daily* users.

On a per-user basis, *Daily Simple* users are also high-volume, generating an average of 245 Ksh per month in fees.

What proportion of the innovation in the space is going towards further activating the borrowing and high-use segments instead pulling in less frequent users and activating non users?

Share of total fees

Q3 2017, n=540 Caribou Data • *insights built on privacy*



Source: [Figure] Caribou Data

DFS transactions are "sandwiched" by automatic AND user driven messaging behaviors

What else happens on the phone "during" mobile money transactions?

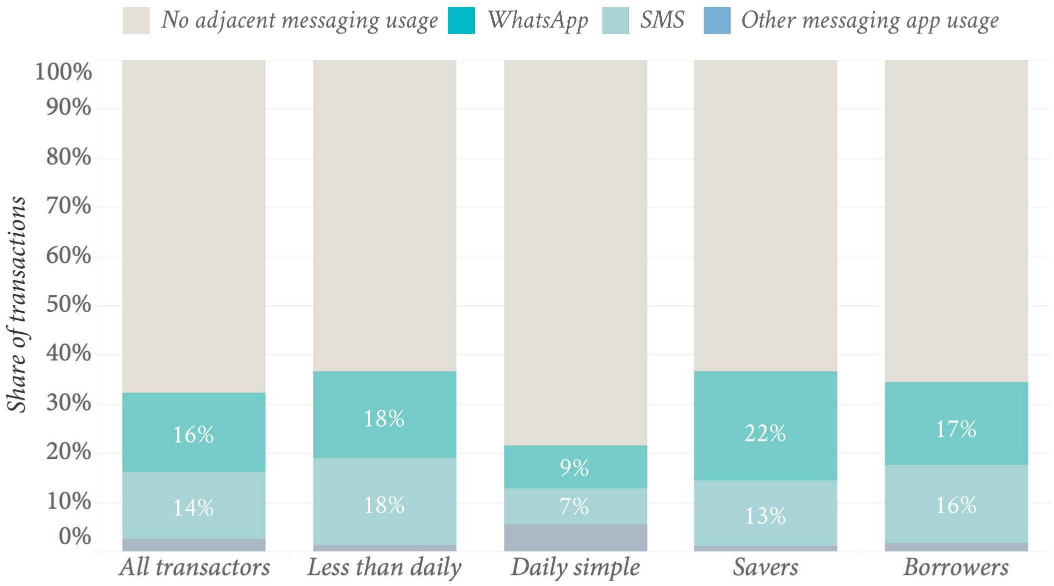
This figure captures adjacent SMS activity (within ±60 seconds) explained by the automatic delivery of transactional 'receipts,' often driving users to dismiss or 'mark as read' these messages.

But note how, across each segment, there is a similar or greater amount of WhatsApp activity immediately before or after mobile money transactions.

Daily Simple users are the most distinctive group here. Our hypothesis, though untested, is that more of their transactions are commercial, performed face-to-face.

Share of transactions preceded by, or following, messaging app usage

Q3 2017, n=540, adjacent= ±60 seconds Caribou Data • *insights built on privacy*



Source: [Figure] Caribou Data

Gambling is widespread, but the *Daily Simple* and *Borrowers* segments have higher ratios of gamblers, and more frequent gambling activity

Mobile sports gambling is widespread in Kenya,[1] although an accurate estimate of the proportion of Kenyans who gamble remains rare.

Amongst our sample, gambling is concentrated in the *Daily Simple* and *Borrowers* segments. Those segments represent 23% of active DFS users in our sample, but 75% of the bets, and 72% of the value wagered. These segments are the ones that are the most male and urban of the four.

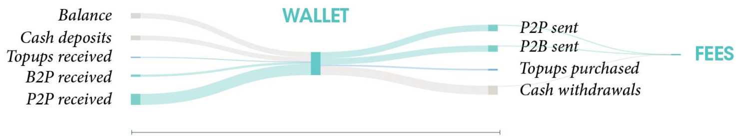
Perhaps gambling can be seen as one of several modalities of interacting with DFS, as engagement becomes more frequent and more advanced. It is important to explore this in more detail.

Source: [Figure] Caribou Data; [1] Owuor 2018;

Which segment keeps cash digital?

Less Than Daily

68% of all DFS active users Caribou Data • *insights built on privacy*



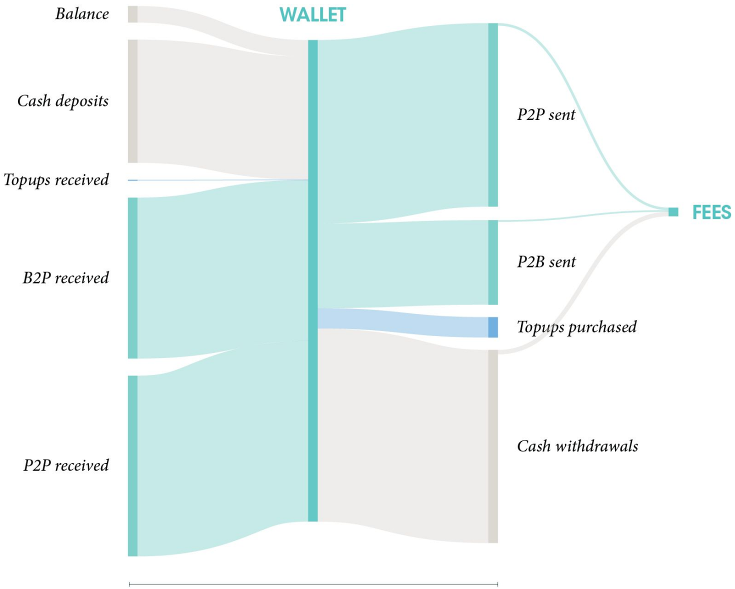
Half-life of e-money loop = 10.5 days

Here we show the visualised cash flow of an average user's wallet, for each of our segments. The height of the wallet in these figures is proportional across all four to the total value of all transactions passing through.

Daily Simple users move a lot of money though their wallets, relatively quickly. *Less Than Daily* users move just a little, more slowly, leading to a longer "half-life" of their stored value in the system.

Daily Simple

7% of all DFS active users Caribou Data • *insights built on privacy*



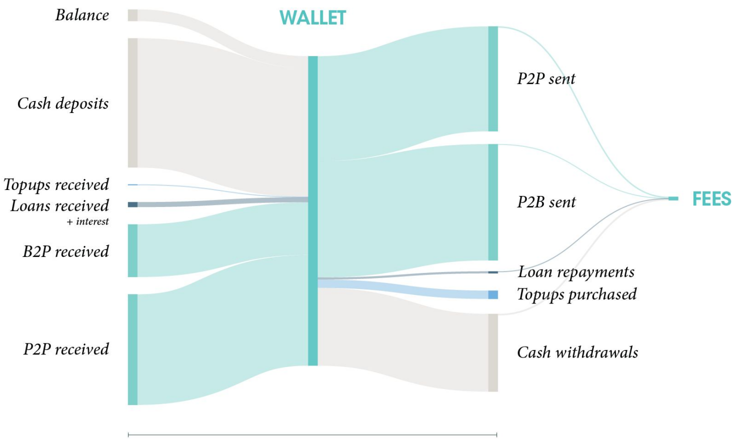
Half-life of e-money loop = 3.6 days

Source: [Figure] Caribou Data

Which segment keeps cash digital?

Savers

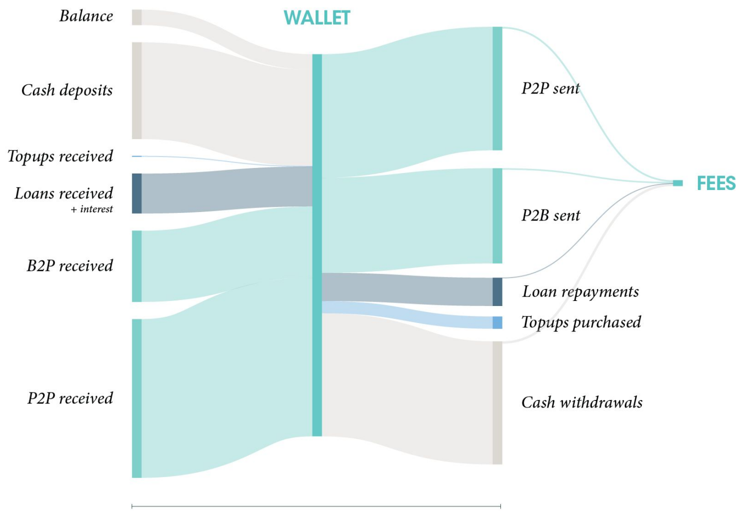
9% of all DFS active users · Caribou Data • *insights built on privacy*



Half-life of e-money loop = 5.6 days

Borrowers

16% of all DFS active users · Caribou Data • *insights built on privacy*



Half-life of e-money loop = 4.6 days

Savers and *Borrowers* have similar half-lives for cash in the system, with *Borrowers* moving more money through each month.

Source: [Figure] Caribou Data

V Concluding remarks

In this section

We discuss implications and action steps for the DFS community.

What does inclusion look like?

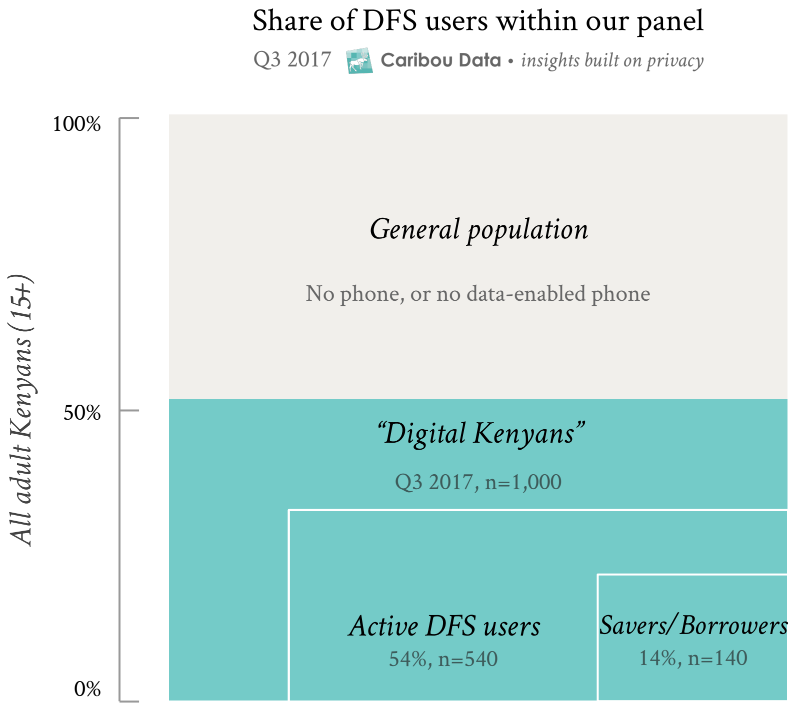
In the 2017 Learning Advances[1] report, we argued:

*To metrics such as "access", "affordability," and even "usefulness," we should add a focus on the extent to which individuals, households, and small enterprises actually and **effectively use** the technologies, products, and services to which they have increasing access.*

While the overall number of mobile money users in Africa may be impressive... most use DFS infrequently and only for very specific purposes (e.g., sending money to other people far away).

This analysis underscores how, even amongst "advanced" users in the saving and borrowing segments, there are indications of such challenges to effective use, notably overpaying for unused data, and gambling.

Each segment behaves differently, with implications for how users are on-boarded (the access challenge) and then begin to interact (effectively) with a changing DFS environment.



Source: [1] FiDA Learning Advances in Digital Finance 2017

How do these analyses shape our knowledge of inclusion and turn to action?

The unique perspective provided by Caribou Data has yielded a more nuanced and sophisticated way of examining financial behaviors.

The segmentation provides insights that can help a range of actors think more strategically about how to most effectively design and deliver digital financial services.

Insights gained begin to address some questions—and open the door to many others. It is our hope that these analyses and corresponding insights will serve as building blocks for future work in the space.

- Financial Institutions
- FinTechs
- MNOs
- Implementers

This segmentation (even if as an example), illustrates that there is more than one type of advanced user. Product development must be attuned to segmentation of users and corresponding needs. `

- Policy Makers

Policy needs to consider different user segments, emerging products and implications for how to best promote innovation while protecting consumers.

This behavioral segmentation of DFS use by "digital Kenyans" with data enabled phones offers insights, but also important questions:

Insights

Design for simplicity. Shortcodes still outpace in-app behaviors. There are still lots of feature phones, and amongst smartphone users, lots of underpowered, old, and "full" phones to contend with.

Less Than Daily users are a long tail, and majority of DFS users even in a leading market like Kenya. Work remains to encourage more regular use of DFS.

Kenya is still a place for small top-ups and a metered mindset.

There is more than one type of advanced user. Segmentations amongst advanced users are a helpful way to identify distinct needs/behaviors.

Intensity begets intensity—*Borrowers* in particular are deeply engaged with their phones and are high value customers.

Open questions

Do small-scale informal micro enterprises (likely many in the *Daily Simple* user base) need their own product offerings with a different fee structures?

What are the best ways to move Android users towards in-app behaviors?

How does DFS use interact with messaging use, beyond the proximites we observed in this analysis (ask your users, and explore links between messaging and DFS).

This behavioral segmentation of DFS use by “digital Kenyans” with data enabled phones offers insights, but also important questions:

Insights

There is plenty of room (and need) for digital Kenyans to move into more advanced and regular DFS use. Only about half of our sample was an active DFS user, and of that, the majority was still infrequent and simple.

Gambling is concentrated amongst heavy *Daily Simple* users and the *Borrowers* segment, an inbuilt, potential disadvantage to high-intensity use.

Savers (trending rural and female) and *Borrowers* (urban and male) are quite distinct, demographically. How might the outreach to each group be tailored to account for this fact?

Open questions

It might be worth exploring nudges and behavioral incentives for saving vs those for borrowing.

Looking at fee breakdowns by segment prompts a question: who is cross-subsidising who? *Borrowers* emerged as “frequent users of everything” which is good for service providers, but perhaps in a way that distracts innovation away from the long tail or occasional users.

This segmentation is designed to be illustrative rather than canonical, but the splits between *Savers* and *Borrowers*, and between *Less Than Daily* users and *Daily Simple* users may be worth exploring by the policy community in further detail.

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Caribou Data

vi Appendices

In this section

We provide additional details about the methodology, recruitment and privacy considerations.

Methodological details and ethical considerations

Data

Data covers a 90-day period from Q3 2017, with a panel of 1,000 users. Data types collected include app usage, network connections including signal strength, approximate location, data consumption, and transactional records.

Sample

We recruited to match interlocking quotas for gender and age in urban/rural locations, derived from the 2009 Kenyan population census and rebased for the 18+ adult population.

The resulting panel thus correctly and proportionately reflects female (51%), rural (63%) and younger (67% <40) users

Panel recruitment

Our local recruitment partner in Kenya was Every1Mobile (E1M), which conducted a mix of online and in-person recruitment to fill the demographic quotas required.

A geographic distribution was not mandated, but our sample resulted in coverage of 45 of 47 Kenyan counties, as defined in the 2010 Constitution of Kenya.

Definitions

For all measures, time and durations are shown in seconds, currency data in Kenyan Shillings (Ksh) and data consumption in Mb. Any measures shown as an average use the *median* average.

A few common definitions:

- **Sessions**: number of unique app *events*, where a session is defined as the time between an app being foregrounded (typically ≈launched) and backgrounded (≈quit)
- **Active**: the observation of a behaviour at least once in a rolling 90 day period
- **Share**: as a proportion of the total panel

Methodological details and ethical considerations, cont.

Privacy

Our work is predicated on an absolute commitment to individual privacy, with a baseline of adherence to the GDPR,[1] regardless of whether local privacy law offers fewer protections.

Panelists are provided a clear explanation of how their data will be used, and the terms of the remuneration. Online explanations are in English only, but in-person recruiters are able to speak local languages as required.

We ensure effective anonymity of all panelists via processes taken at multiple layers: firstly, the data we collect is stripped of identifiable data before being recorded, and secondly, we utilise *differential privacy* techniques such as obfuscation, non-linear noise, and subsampling into some data types (such as location data), that may otherwise be more likely to be correlated or de-anonymized. All data is encrypted at rest and in transit.

At the analysis level, we employ similar differential techniques, which means that our system reviews every query and the result it would produce, and only returns a result if it is accepted to be non-identifiable; e.g., if a query was very specific and resulted in a very small *n*, the system would return a null result to protect against de-anonymization.

Limitations

Like all social science studies, this research has limitations. Most importantly, the sample is composed of data-enabled phone users, which by definition is not representative of all adult Kenyans.

Because we remunerate panelists (approximately $5/month in airtime) to participate, there is possible selection bias toward individuals who find that incentive attractive. In addition, the remuneration could impact some panelists' behavior in how much they spend on airtime/data. However, if anything we would under capture metered-mindset behaviors.

Despite in-person recruiters speaking local languages, it's possible that prospective panelists with limited or no English language proficiency were uncomfortable or unable to participate, introducing bias in the sample.

[1] European Union Regulation (EU) 2016/679, "General Data Protection Regulation" (GDPR), https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016R0679&from=EN