



Design Roundtable:

Exploring the Intersection of Human-Centered Design and Financial Inclusion



CATAPULTDESIGN

Context & Objective

The MasterCard Center for Inclusive Growth seeks to empower people through inclusive economies. With 2.5 billion people around the world without access to financial instruments such as bank accounts and 85% of the world's transactions conducted in cash, the MasterCard Center views financial inclusion as essential to expanding economic opportunities and increasing transparency. Financial inclusion is a core element of any inclusive economy. The MasterCard Center promotes inclusive growth and financial inclusion by bridging research and practice to uncover new, actionable insights and advancing these insights through strategic philanthropic investments. In doing so, the MasterCard Center aims to build unique academic-practitioner networks that catalyze greater collaboration and cross-fertilization across multiple disciplines.

Human-centered design is increasingly at the forefront of discussions on financial inclusion. But what exactly is the role that a human-centered approach plays? What lies at the intersection of human-centered design and financial inclusion and what opportunities or challenges does it present?

To explore these questions, the Center for Inclusive Growth hosted a design roundtable in San Francisco

and invited a balanced mix of thought leaders and practitioners in design, social entrepreneurship, and financial inclusions to participate.

The participant list included: Fabio Sergio, Frog Design; Patrice Martin, IDEO.org; Heather Fleming and Rachel Hartgen, Catapult Design; Alex Fiorillo, Grid Impact; Dan Tuttle, Dalberg; Shivani Siroya, InVenture; Cynthia McMillan, Kiva; Thea Anderson, Mercy Corps; Camilla Nestor, Grameen Foundation; Toru Mino, Kopo Kopo; Ben Knelman, Juntos Finanzas; Phil Levin; Adam Elmaghraby.

Participants from MasterCard included: Walt Macnee, Shamina Singh, Mitul Desai, Ryan Erenhouse, Paul Musser, Leslie Meek-Wohl, and Christina Sommer.



Ahead of the roundtable, participants were invited to submit thoughts or references to trends they have observed in human-centered design ('HCD') and financial inclusion. By collecting this information, a landscape map of relevant case studies and tools was created. The goal was to define the current known world and set the stage for exploring new ground and new solutions. Catapult Design grouped the content into the following themes:

Trend 1 | Opportunities for designing digital platforms and mobile technology that deliver financial services

ARTICLE: "[Ten Financial Innovations More Exciting than Bitcoin](#)"

ARTICLE: "[Younger Americans Are Open To Google, Apple, Paypal Becoming Their Bankers](#)"

ARTICLE: "[Pay Your Check with OpenTable](#)"

ARTICLE: "[Converting Small Change Into Something Far More Useful Than Savings](#)"

QUOTE: "(The Design Success is that) the mobile money movement trend has become successful because of the ability to connect technological solutions to strong design practice and principles, but (the design challenge is that) digital wallets do not have the same security as formalized bank accounts but are being used as saving

mechanisms, posing new challenges around providing financial security."

QUOTE: "In many cases, I believe mobile financial services are products looking for users. While there are clear benefits to adoption/usage for certain stakeholders in the mobile money ecosystem, in many cases the marketing and pricing of services is poorly targeted... Where I see a lot of potential is moving beyond the idea that payments in and of themselves are a product, and instead viewing them as enablers for clearer value propositions."

QUOTE: "We believe digital retail payments represents one of the largest untapped opportunities in financial inclusion in an emerging markets context (though some of the same principles might apply domestically). That opportunity is unrealized as least partly because of the design challenges in switching people away from cash payments."

Trend 2 | Shifting the focus from access to products to promoting usage through "customer-centric" products

ARTICLE: "[Janalakshmi's Journey to Customer Centricity](#)"

ARTICLE: "[Best of 2013: Product Development for the Poor](#)"



QUOTE: “The industry is increasingly solving the traditional challenges of distribution and product development, and it’s starting to become clear that simply getting even the right products into peoples hands is not the end of the story.”

QUOTE: “Many FSPs [financial service providers] think they are being user-centered – and some may very well be using approaches that get at similar outcomes, but others are not being user-centered even if they think they are.”

Trend 3 | The emergence of alternate forms of creditworthiness (like proxy credit scoring)

ARTICLE: “[Emerging Evidence on the Impact of Credit Scoring on SME Lending](#)”

ARTICLE: “[Scoring for Access: Emerging evidence on the impact of credit scoring on SME lending](#)”

COMPANY: [Lenddo](#), an online platform that helps the emerging middle class use their social connections to build their creditworthiness and access local financial services.

Trend 4 | Borrowing ethnographic methods and other qualitative exercises and applying them to the financial service sector.

ARTICLE: “[Ethnographic Design](#)”

ARTICLE: “[Liquidity Farming: How the poor cultivate relationships to create sources of future cash](#)”

METHODOLOGY: CGAP’s [Kaleido Tool](#): exploring customer-centricity

TOOLKIT: [Promoting Women’s Financial Inclusion: a toolkit](#)

CASE STUDY: Grameen, CGAP, AppLab Uganda: [Turning Insights into Products: Applab Money](#)

ARTICLE: “[Behavioral Approaches to Product Innovation at the Base of the Pyramid](#)”

QUOTE: “No matter how useful or innovative new financial services targeting the bottom billion will appear to be, it will be essential for them to account for the socio-cultural context within which they will be situated, to be adopted and eventually scale.

QUOTE: “(Toolkits that now exist) presents a comprehensive process that is built on a rigorous understanding of how to meet the needs of people empathically.”



Trend 5 | Pulling from innovations and innovators in developing economies

ARTICLE: [“Ten Financial Innovations More Exciting than Bitcoin”](#)

QUOTE: “Some of the most interesting digital innovations in financial services actually come from ‘developing economies’...(it shows) how to stop seeing these geographies and the people who live there as recipients of solutions addressing their emerging needs but rather as innovators that can be empowered to shape their own path to financial independence.”

Trend 6 | Creating an inclusive process to the product development

ARTICLE: [“User Participation: the secret to successful prototyping”](#)

Trend 7 | Applying design principles to products and services beyond credit

CASE STUDY: MEDA, IDEO: [Savings Products in Uganda](#)

ARTICLE: [“Converting Small Change Into Something Far More Useful Than Savings”](#)

ARTICLE: [“Behavioral Approaches to Product Innovation at the Base of the Pyramid”](#)

SLIDESHOW: [“Human-Centered Design and Microinsurance”](#)

CASE STUDY: IDEO.org; Hygeia, FETS, and EFinA: [Mobile Money and Health Insurance](#)

COMPANY: [Lumni](#), funding higher education

QUOTE: “There’s a relatively new and very interesting trend that we’ve seen in the design of both student and business loan products in which repayments are based not on a set schedule, but rather on a fixed percentage of future income or profits.”

Trend 8 | Making the business case for design in financial inclusion

QUOTE: “We need to be able to quantify the business case for financial services providers (FSPs), including examples of uptake and usage of financial products with and without using a human-centered design approach.”

QUOTE: “People are very interested to understand how they can incorporate a human-centered design approach into their businesses at minimal cost. We did some polling, and on the question about who should pay for the design process, most participants felt the FSP should pay (not donors) – and many of the participants were FSPs, so



that's a good sign."

Trend 9 | User-experience that builds trust/brand/familiarity and moves users away from the traditional brick and mortar experience

ARTICLE: "[Younger Americans Are Open To Google, Apple, Paypal Becoming Their Bankers](#)"

QUOTE: "How can traditional financial service providers retain their competitive edge in new markets where their history and brands are not necessarily as strong an asset as they are in other areas of the world"

For a complete list of un-synthesized responses, please refer to [Appendix A](#).

The Roundtable

To start an intimate dialogue on what role a design approach can play, participants were broken into small teams and asked to map an approach for tackling a particular financial inclusion challenge. Each roundtable team had at least one design practitioner, one member from the Center for Inclusive Growth, and one financial inclusion practitioner.

Each challenge laid out a scenario that included a geographic location, an end-user profile, and a description of the end-user's biggest challenge related to financial inclusion. As an example:

Geography: rural Ghana

Target User: men and women focused on agribusiness in drought areas

The teams were not focused on creating a financial solution for their target user, but rather on developing an improved and phased approach through which to address the target user's financial challenge. In devising such approaches, each team included the following: objectives for each phase, activities or methods to include in each phase, and an indicator or milestone to trigger movement from one phase to the next. Common activities, phases, and objectives emerged. The teams brainstormed around tools or resources relevant both for the common activities and around potential new solutions



to address gaps in current thinking uncovered during the mapping process.

In going through this process, the experts shared their different perspectives, found common ground, and identified areas in which to learn from another’s expertise or industry.

Opportunities for Innovation

Post round-table, Catapult Design categorized the ideas and insights shared from the roundtable teams into four main opportunities to bridge the design and financial service sectors:

CHALLENGE: Most of the existing HCD content is not contextually relevant to financial service providers (FSPs)

OPPORTUNITY: How might we develop appropriate design tools and resources that are specific to organizations addressing financial inclusion?

“Videos that do a deep dive into design methods relevant to the creation of financial products”

“A Lonely Planet for field research”

“Information should be easily digestible for the widest audience possible.”

“Vertical resources are lacking. Addressing financial Inclusion in Kenya is different than addressing financial inclusion in Cambodia, and so on.”



CHALLENGE: The packaging and delivery of existing HCD content is not considerate of the needs of the FSP community, and thereby unusable.

OPPORTUNITY: How might we explore the constraints that define a useful and usable tool or resource for an FSP?

“Most of the existing stuff out there is not usable.”

“70% of reports are never read. No reports. No 100-page toolkits.”

“Physical documents do not transform organizations.”

“Distribution also affects how usable a resource is. If you break a white paper down to just one presentation on the top three insights, that’s more digestible and learnable.”

“Good resources or tools depict what’s possible. They show what the future looks like, giving you incentive to use the tool or resource to achieve that future.”

“IDEO never creates tools in one medium. Videos are coupled to a deck and vice versa.”

“Should educate users on perceived cost or

expenses. Many groups, for example, assume or believe that iterating and prototypes is more expensive than business as usual.”

CHALLENGE: Access to existing knowledge, case studies, or tools is spread throughout the world wide web. There is not a dominant voice or platform for accessing these things.

OPPORTUNITY: How might we structure and foster a community promoting knowledge sharing and leveraging MasterCard assets?

“A library of design work that’s been conducted to date would be very useful. Categorized, organized, intuitive to access.”

“Should be related to MasterCard’s unique assets, like data. Can we make those assets available as a unique MC resource?”

“Any of MasterCard’s unique assets, like data, should also be altered for usability. Does every organization have the ability to analyze data sets? What can MasterCard derive, publish, etc. from the data that would be valuable information for organizations creating human-centered financial services?”



“A single platform, a mega-resource, for practitioners. The platform would be built around the principles it promotes with a solid UX design.”

comparing the outputs from solutions developed through a design approach versus a traditional approach.”

CHALLENGE: The creation of new design tools or resources is futile if financial service providers do not want these tools or resources.

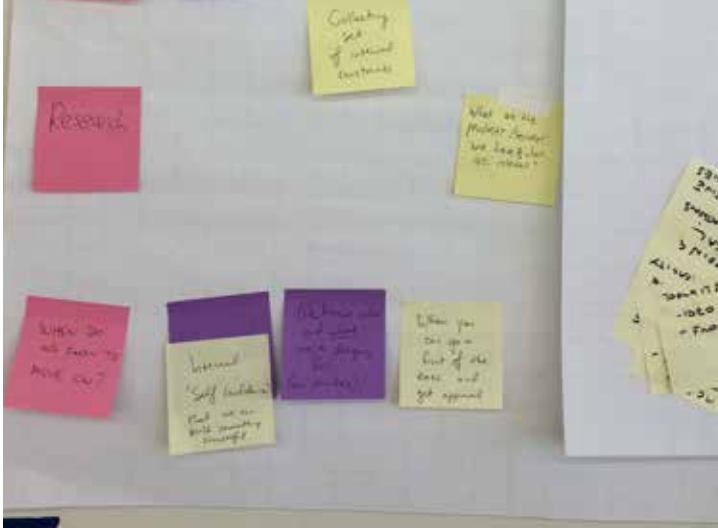
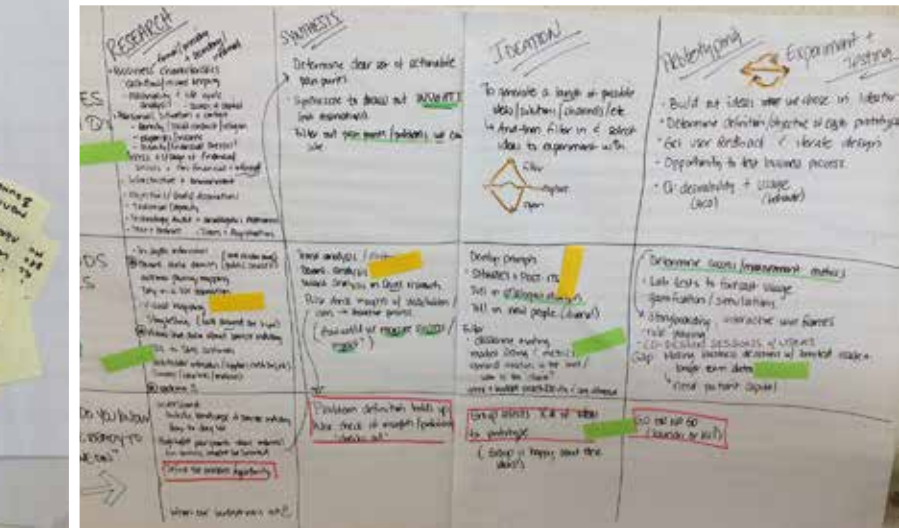
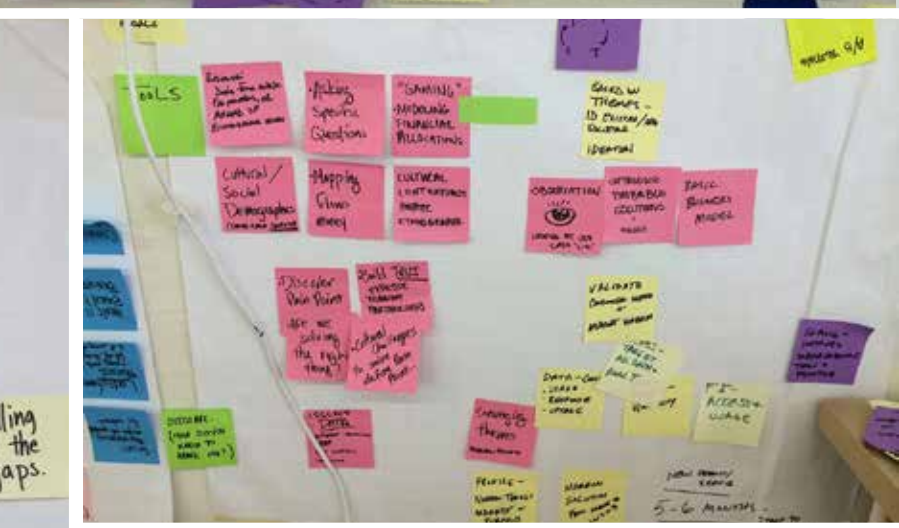
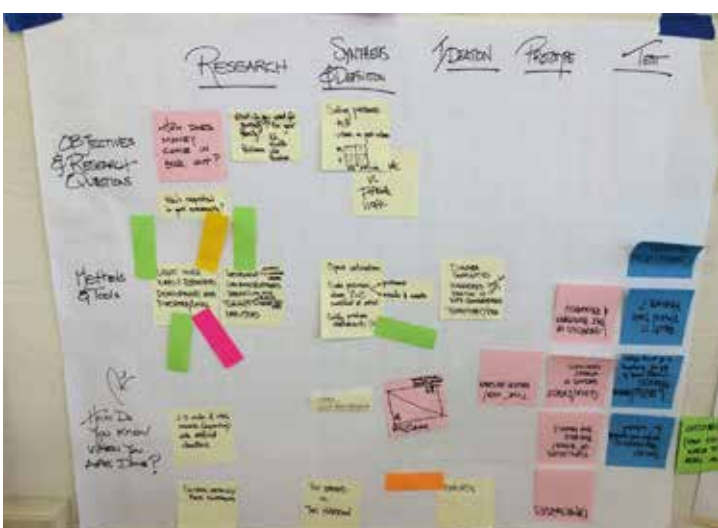
OPPORTUNITY: How might we create demand for an HCD approach from FSPs?

“Help create case studies and learning by supporting organizations who are iterating (prototyping) and piloting (testing) their ideas. Organizations that are embracing a human-centered approach.”

“Support organizations that are starting with a hypothesis instead of a solution. A hypothesis requires a mind that is open to a variety of ideas to test in the market as opposed to a single solution that may or may not work.”

“Enable organizations that let inputs and learnings from their target user define the solution. A human-centered approach.”

“Support the development of a business case





What We Learned

The gap between meaningful solutions to financial inclusion and those who create the solutions is access and use of information. We discovered that:

- Good information on creating meaningful solutions is generated, but not packaged in a way that is useful to practitioners;
- Information is often generated for the sake of generating it, and thereby not meaningful;
- Information is produced by entities that overlook quality in favor of quantity;
- There is a need for more open source knowledge-sharing platforms;
- All practitioners do not need an end-to-end design solution. Targeted and affordable approaches are sometimes better;
- Casting a wide net for information sources can help better determine true end user needs;
- There is a need for better data gathering and analysis capabilities. Valuable qualitative (example: customer field research) and quantitative (example: e-payment transactional data sets) research and data are not widely available to designers and financial inclusion practitioners. Those that do have general data collection ability do not always collect the right data, while others not only are data poor but also lack adequate data analytics capability.

Appendix A

Each participant was asked over email to identify trends or examples of the role design plays in the financial inclusion sector. Here are their Individual responses:

Fabio Sergio,
Frog Design

“10 Financial Innovations That Are Changing The World More Than Bitcoin”

I found this piece illuminating because it shows that some of the most interesting digital innovations in financial services actually come from “developing economies”. How to stop seeing these geographies and the people who live there as recipients of solutions addressing their emerging needs but rather as innovators that can be empowered to shape their own path to financial independence?

“Younger Americans are open to Google, Apple, PayPal becoming their bankers”

This short piece appears totally unrelated to Financial Inclusion, but I actually believe otherwise.

Traditional providers of financial services in developed economies have the long-established trust and (brand) equity required to have an implicit market advantage over other players, but things are changing fast. In areas of the world where financial literacy hardly exists the situation might be even more extreme. In these quickly evolving markets well-established service providers in other domains - such as communication or commerce - could credibly and competitively offer financial services as well. (e.g. local/global Telcos, or global players like Google & Amazon, or “local” brands servicing millions such as Baidu in China) How can traditional financial service providers retain their competitive edge in new markets where their history and brands are not necessarily as strong an asset as they are in other areas of the world?

“Liquidity Farming: How the poor cultivate relationships to create sources of future cash“

This piece reminded me once again that no matter how useful or innovative new financial services targeting the bottom billion will appear to be, it will be essential for them to account for the socio-cultural context within which they will be situated, to be adopted and eventually scale. How to leverage the potential hidden in subtle human motives, behaviors and habits when designing financial solutions in areas of the world where new mental models have to be created first for people to fully grasp short-term potential and long-term benefits? How do people’s positive and negative emotions play a role in these dynamics, and how to account for them?

Ben Knelman,
Juntos Finanzas

Trend: The “limiting factor” of financial inclusion is shifting from access to engagement/usage

The industry is increasingly solving the traditional challenges of distribution and product development, and it’s starting to become clear that simply getting even the right products into peoples hands is not the end of the story.

Trend: the conversation is expanding/shifting from successful solutions to successful models

It’s increasingly recognized that the frontier of innovation is shifting (or needs to shift) from proving specific solutions/interventions through pilots, towards proving successful models (at production scale).

Cynthia McMillan,
Kiva

Trend: Poverty assessments and intervention mechanisms:

Use of Participatory Wealth Rankings (PWRs) to determine which members of a community are poor and should be targeted for a given poverty alleviation intervention. This poverty evaluation tool is often used by MFIs (like Fonkoze in Haiti) as the first step in setting up extreme poverty graduation programs, and ensures community buy-in by selecting families perceived to be poorest. The heads of selected households generally then take part in a training period in which individuals without productive businesses receive an asset transfer of their choice, wraparound services and business training, with the end goal of preparing the poorest to “graduate” and become economically active, viable microfinance candidates.

On a similar note, the Poverty Stoplight program developed by Fundación Paraguaya, an MFI in Paraguay, allows loan clients to assess their own poverty. A “stoplight” measurement tool is used to help borrowers self-identify the type of poverty that affects them most (lack of income, dearth of financial opportunities, poor living conditions, etc.). Borrowers rate 50 areas of their life as green (not poor), yellow (poor) or red (extremely poor). Together with their loan officer, they come up with a business/life plan to resolve yellow and red indicators. Through this program, Fundación Paraguaya hopes to lift 9,000 women and their families out of poverty by 2017. To date, they’ve hit these targets, and the program has been so successful that the tool has even been adopted by the Paraguayan government. More information about the program is here.

Trend: Income-based loan repayments: There’s a relatively new and very interesting trend that we’ve seen in the design of both student and business loan products in which repayments are based not on a set schedule, but rather on a fixed percentage of future income or profits. These products are riskier from the institution’s perspective, but are much better adapted to the real needs of clients. For example, Lumni Chile offers a long-term student loan product in which students commit to repay a fixed percentage (rather than fixed monthly amount) of their post-graduation income for a set period of time. This means that students who end up in more lucrative careers (e.g. law, business) will ultimately repay more than students who end up in lower paid jobs (e.g. public service). There’s a short Economist article that mentions the structure. Novica, an e-commerce website that lends to artisans, uses a similar revenue-based repayment mechanism.

Thea Anderson,
Mercy Corps

Trend: alternative forms of credit scoring. Here is Example 1 and Example 2.

Trend: How (or how not) e-transfers can increase financial inclusion. Mercy Corps has funding from MasterCard to explore this in Nepal and the DRC. We will also be launching an impact evaluation in the Philippines with BankO mobile savings bank to understand why/why not there is uptake in other financial services when clients open account to receive e-transfers post-Typhoon Haiyan.

Patrice Martin,
IDEO.org

https://www.lenddo.com/pages/what_is_lenddo/about

<http://blog.opentable.com/2014/pay-your-check-with-opentable-mobile-pilot-payment-program-launches-in-san-francisco/>

Adam Elmaghraby

What: Mobile Money for the Unbanked , white paper

So What: mobile money and peer to peer transactions are reshaping how quickly people can exchange money using 3rd party applications and services. Pg 26, identifies staggering statistics about the penetration rate of mobile money services in the past 3 years

Design Success: Mobile money movement trend has become successful because of the ability to connect technological solutions to strong design practice and principles.

Design challenge: Digital wallets do not have the same security as formalized bank accounts but are being used as saving mechanisms, posing new challenges around providing financial security.

What: [Mazacoin](#), cryptocurrency

So What: Mazacoin is e a cryptocurrency to stabilize an economy for a sovereign nation of the Lakota Indian. Mazacoin has the opportunity to provide financial independence for the Lakota on a global stage.

Design Challenge: It is lacking a design strategy, yet could show great promise in making the use of alternative currencies more accessible and widely distributed.

What: Promoting Women's financial Inclusion: A tool kit (prepared by UKAID and German BMZ)

So What: This toolkit is a comprehensive analysis of best practices, operations, and methods for monitoring outcomes for financial inclusion. The focus of this toolkit financial inclusion as a tool for gender equality, with undertones of developing a more robust understanding of how financial inclusion can shape agribusiness.

Design Success: This toolkit presents a comprehensive process that is built on a rigorous understanding of how to meet the needs of people empathically.

Camilla Nestor,
Grameen Foundation

Here are some blogs we've written on taking a design approach to financial services:

- Product development for the poor: <http://www.nextbillion.net/blogpost.aspx?blogid=3519>
- Ethnographic design: <http://www.nextbillion.net/blogpost.aspx?blogid=3533>
- User participation and prototyping: <http://www.nextbillion.net/blogpost.aspx?blogid=3563>
- Failures en route to success: <http://www.cgap.org/blog/series/embracing-failure-ultimate-success-branchless-banking>

As for general trends, we're just coming off a 100-person event we organized in India around user-centered design for financial inclusion, and a few key themes came out clearly:

Theme 1: We need to be able to quantify the business case for financial services providers (FSPs), including examples of uptake and usage of financial products with and without using a human-centered design approach.

Theme 2: Many FSPs think they are being user-centered – and some may very well be using approaches that get at similar outcomes, but others are not being user-centered even if they think they are.

Theme 3: People are very interested to understand how they can incorporate a human-centered design approach into their businesses at minimal cost. We did some polling, and on the question about who should pay for the design process, most participants felt the FSP should pay (not donors) – and many of the participants were FSPs, so that's a good sign.

Alex Fiorillo,
GRID Impact

A recent blog post I wrote about behavioral design in financial inclusion:

<http://cfi-blog.org/2014/03/28/behavioral-approaches-to-product-innovation-at-the-base-of-the-pyramid/>

A two-part interview that NextBillion did with me on financial inclusion + behavioral science:

<http://www.nextbillion.net/blogpost.aspx?blogid=3613>

<http://www.nextbillion.net/blogpost.aspx?blogid=3615>

A blog post (recent) by Janalakshmi (FSP in India) and CGAP on the Kaleido tool they co-developed:

<http://www.cgap.org/blog/road-ahead-implementing-kaleido-scale>

(*Kaleido report here: http://www.cgap.org/sites/default/files/Other-Kaleido-Brochure-March-2014_0.pdf)

Toru Mino,
KopoKopo

The widespread adoption of mobile financial services remains a challenge for most providers, with 71% of all registered mobile money users inactive across over 200 deployments globally ([MMU State of the Industry, 2013](#))

In many cases, I believe mobile financial services are products looking for users. While there are clear benefits to adoption/usage for certain stakeholders in the mobile money ecosystem, in many cases the marketing and pricing of services is poorly targeted.

Where I see a lot of potential is moving beyond the idea that payments in of themselves are a product, and instead viewing them as enablers for clearer value propositions. For example, at Kopo Kopo we are linking a product with a clear value proposition (unsecured cash-advances) to transaction data in order to provide clear incentives for merchants to drive transactions ([Grow Press Release](#)). From an ecosystem view: in this case, the merchants benefit the most from driving transactions, so they bear the fees and burden to convince their customers to use electronic payments, while for end-consumers the keys are ensuring the lowest barriers to transaction (ie: zero fees and easy cash-in).

Dan Tuttle,
Dalberg

It's from 2012, but the messages are still relevant and the linked-to annual report on the state of microinsurance in the world is comprehensive, compelling, and interesting. That 500M people are covered by some form of microinsurance I find tremendously positive and as a good potential platform from which to convert financial access into financial services usage:http://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_177356/lang--en/index.htm

I also see housing finance as increasingly compelling in the future as the breakneck pace of urbanization moves more people of all income levels into cities. FinMark Trust has a great report reviewing the state of housing finance in the developing world, for which the overview is interesting (ignore the other 170 pages of data). Mortgages are bound to be a growing part of the financial inclusion story globally: http://www.finmark.org.za/wp-content/uploads/pubs/YearBook_CAHF_2013.pdf

Shivani Siroya,
InVenture

1. [India is world's fastest growing smartphone market. App developers, take note.](#)
2. [With 243 million users by 2014, India to beat US in internet reach](#)
3. [Urban world: Cities and the rise of the consuming class](#)
4. [China and Kenya: Different Models for Scaling Branchless Banking](#)
5. [Banking startup LendUp shows why design is king as big data gets personal](#)
6. [Converting Small Change Into Something Far More Useful: Savings](#)
7. [\\$20 smartphones 'coming in the next few months'](#) (May 7, 2014)

Phil Levin

Trend: Digital retail payments through mobile money in the developing world. We believe digital retail payments represents one of the largest untapped opportunities in financial inclusion in an emerging markets context (though some of the same principles might apply domestically). That opportunity is unrealized as least partly because of the design challenges in switching people away from cash payments.

Prepared by

