

Revolutionizing Microfinance: Insights from the 2017 Global Symposium on Microfinance

MAY 22 – 23, 2017 KUALA LUMPUR

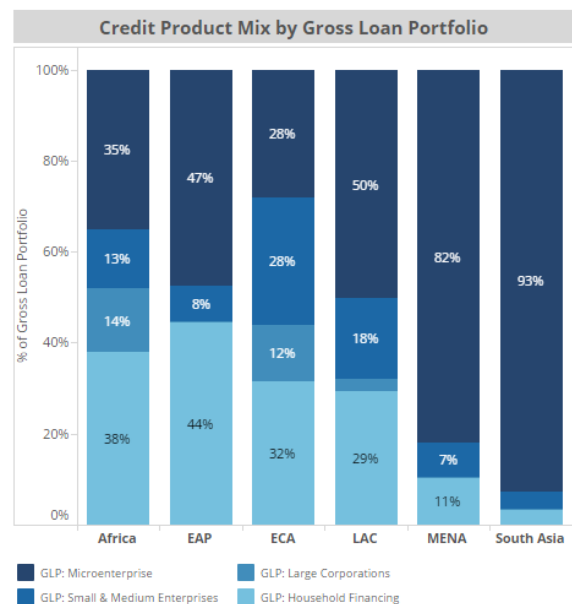


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EXECUTIVE SUMMARY

More than half the world has a mobile phone and by 2020 this will go up to three-quarters of the world¹. Mobile-based digital technologies present a huge opportunity for financial inclusion for the two billion individuals, and some 200 million small and micro-enterprises, in emerging economies that still lack access to basic savings and credit services. The challenge remains even for countries that have showed high levels of financial inclusion. In Malaysia, for instance, while 92% of adults have a basic bank account, the financing gap for small and micro-enterprises remains. Both globally and in Malaysia, even those who that have access to financial services often pay high fees for a relatively limited range of financial offerings (see figure).



(Source: *The MIX Market*, May 2017)

On May 22nd and 23rd 2017, over 400 people representing Financial Services Providers (FSPs), technology companies, and Microfinance Institutions (MFIs) came together at the Global Symposium on Microfinance “**Revolutionizing Microfinance: Insight. Innovation. Inclusion**” at Sasana Kijang in Kuala Lumpur, to develop a shared vision of how emerging digital innovations can be harnessed to meet the needs and expectation of individuals and small and micro-enterprise, and to provide a broad range of affordable financial products. The Symposium, organized by the World Bank Global Knowledge and Research Hub in Kuala Lumpur, in collaboration with Bank Negara Malaysia, was an opportunity to reflect on the achievements of microfinance over the last four decades, and develop a better understanding of how MFIs can be a part of the evolving financial services ecosystem, where technology is transforming both the way clients can access financial services, and how institutions can meet their needs while continuing to focus on efficiency and growth. Some of the major takeaways from the discussion include:

- The importance of a customer-centric approach, and how digital technologies and data now allow financial service providers to more effectively serve the financially-excluded population.
- The emergence of new technology-enabled business models that support increased operational efficiency, decrease costs, and create new partnership and funding opportunities

¹ https://www.gsma.com/mobileeconomy/archive/GSMA_ME_2016.pdf

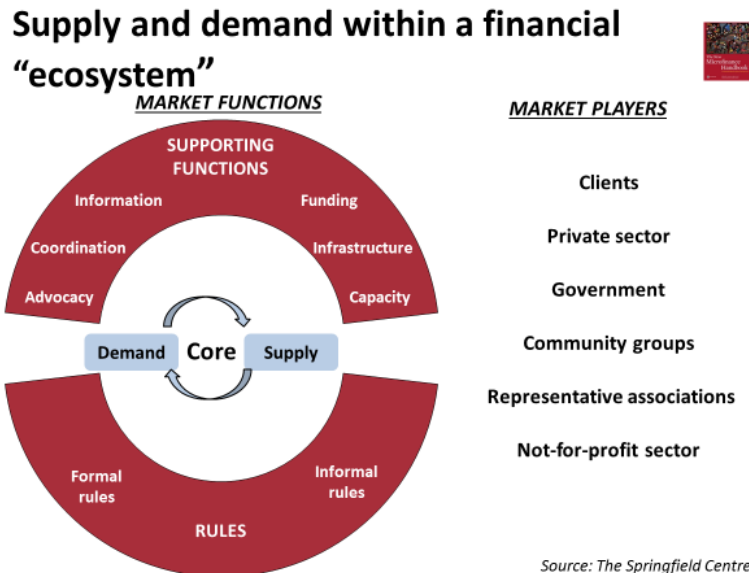
- The role of regulation as a critical driver of responsible and inclusive digital financial services. The challenge for regulators is to strike a balance that is responsive to supporting growth, while managing risks and protecting the clients.

Rapid advances in technology, mobile phone penetration, new players and massive investments in financial technology (FinTech) are transforming the financial services industry. This presents tremendous opportunities for MFIs to raise efficiency, lower transaction costs for institutions and clients, and expand outreach to new markets. However, new technologies are complex, and can be a difficult transition for both institutions and clients. In order for MFIs to be able to fulfill the promise of their role and play a part in the new ecosystem for financial inclusion, they must face the challenges of meeting evolving customer expectations and needs, by incorporating digitization and partnering with the other actors in the ecosystem.

INTRODUCTION

Over the last four decades, our collective understanding of the potential impact of financial services for poor households has evolved from traditional microcredit – the provision of a single basic financial product to the poor by specialized service providers – to financial inclusion, where both individuals and businesses have opportunities to access and use a diverse range of appropriate financial services that are responsibly and sustainably provided by formal financial institutions. This broader understanding of the financial inclusion ecosystem is characterized by a multidisciplinary approach that brings together finance, technology, and development economics.

Based on insights from financial diaries, research, and widely used references², there has been an increased recognition that low-income households need access to the full range of financial services, to generate income, build assets, smooth consumption, and manage risks — financial services that a more limited microcredit model cannot provide. Now, the term “microfinance” generally refers to a broad set of financial services tailored to fit the needs of poor individuals. This, in turn, has necessitated a move away from the narrow supply-led view of the past, to a broader focus on the financial ecosystem.



The concept of the financial ecosystem is based on the markets systems development approach as described in Figure XX above.³ The financial ecosystem provides a framework for understanding how different players fit within the system, including their main functions and the

² [Portfolios of the Poor How the World's Poor Live on \\$2 a Day, Princeton University Press, 2009](#)

³ [The New Microfinance Handbook, The World Bank, 2013](#)

relationships between them. At the core of this financial market system, poor and low-income people exist as consumers of financial services, and interact with providers to access and use financial services. Multiple market functions (supporting functions such as information services, skills and capacity-building services, coordination mechanisms, capital markets, market infrastructure, and rules and norms, which include all formal and informal codes, standards, and regulations that shape the terms by which demand and supply interact, as well as the supervision processes that help enforce these rules) are needed to support the core exchange between supply and demand (see Figure above). These market functions are performed by a range of different market actors, both public and private, who are motivated by their own capacities and incentives.

For the past few decades, most of the funding in microfinance has focused on financial and technical assistance to support the creation and growth of Financial Service Providers (FSPs), with the largest share of funding earmarked for supporting portfolio growth, assuming that the lack of institutional capacity to deliver financial services has been seen as the major bottleneck of access to finance for the poor. This approach doesn't acknowledge the underlying constraints of the markets within which these FSPs function. Sector-building efforts largely focused on building institutional capacity, but didn't pay much attention to understanding client needs, fostering enabling regulatory environments, or strengthening the market infrastructure — all the things needed to create the proper incentives, tools, and control mechanisms to develop diverse, innovative, and transparent financial services markets. At the same time, many FSPs continue to rely on subsidies in the form of low-cost donor capital, which also raises concerns about sustainable access over the long term. By incorporating the interests and incentives of clients and other key market players, and the influence of rules and supporting functions about financial service provision, the market system framework acknowledges that only by understanding the entire system can we address the constraints to — and take advantage of the opportunities of — increasing financial inclusion.

As FSPs, policy makers, donors, and other market actors have developed a better understanding about the complexities of the financial lives of the poor, there has been a realization that one-size-fits-all solutions such as microcredit do not create resilience, and development policy makers, researchers, and practitioners have begun to recognize the intersectionality of the needs of poor farmers, entrepreneurs, and workers, to develop financial products and support services that are tailored to their specific needs. Digital finance and mobile banking are transforming the financial inclusion landscape and have enabled larger number of people to access financial services and products. Thanks to technological innovations, not only is the contribution of financial services is more diversified — offering credit, insurance and savings products — but these also transform business models and funding opportunities.

The ***Global Symposium on Microfinance “Revolutionizing Microfinance: Insight. Innovation. Inclusion”***, held on May 22nd and 23rd at Sasana Kijang in Kuala Lumpur, provided a platform for discussion and dialogue on how emerging digital innovations can be harnessed to meet the needs and expectations of individuals and micro and small enterprises, and provide a broad range of affordable financial products. The Symposium, organized by the World Bank

Global Knowledge and Research Hub in Kuala Lumpur in collaboration with Bank Negara Malaysia, brought together some of the pioneers of the microfinance industry, including Joanna Ledgerwood, the author of *The New Microfinance Handbook* (World Bank, 2013), who spoke about the rethinking of the financial ecosystem using a market systems lens. [Bank Rakayat Indonesia](#) and [ACCION](#), two of the world's oldest and largest microfinance service providers, talked about how they are adapting and using technology such as satellites, agents, and payment aggregators to improve organizational efficiency and outreach. Newer players like [Musoni](#), the world's first cashless, paperless MFI from Kenya, presented on how they are leveraging the power of mobile technologies to create a new institutional structure. There were several good examples of how FinTech, in partnership with financial service providers, is leveraging innovations, such as alternative credit scoring models and algorithm-based lending, to harness the client's digital footprints, such as social media data and psychometric profiles, and offer a whole new spectrum of financial services.

The forum was also the venue for the launch of the World Bank's report on 'Financial Inclusion in Malaysia'. Datuk Seri Johari bin Abdul Ghani, the Finance Minister of Malaysia, and Datuk Muhammad bin Ibrahim, the Governor of Bank Negara Malaysia, talked about the progress Malaysia has made in achieving its financial inclusion goals, with 92 percent of adults in Malaysia having a basic bank account. However, the financing gap for SME remains. Both globally and in Malaysia, even those MSEs that have access often have to pay high fees for a relatively limited range of financial offerings. This in turn contributes to a slowdown of overall economic growth. By working together to leverage the ever-growing mobile and digital infrastructure, tailoring products that meet the needs of individuals and small businesses, digital financial services have the power to transform the economic prospects of billions of people, and open a whole new array of opportunities for small businesses that have been held back by a lack of access to financial services.

INSIGHTS

The major insights from the forum can be categorized under three key themes. These include 1) a move towards customer centricity, from a narrow supply-led view; 2) the new business models created by digital technologies; and 2) the role of regulation in supporting growth and inclusion.

Customer centricity

One of the major shifts has been a shift from a narrow focus on the institution and its performance, to a much broader focus on clients — understanding their behavior, financial service needs, and how various providers can better meet these needs. The average microfinance client (individual or MSME) has informal and irregular income, different spending and consumption patterns, different relationships with financial institutions, and needs different consumer protection measures. They also have to pay more for most financial services because of the difficulty in demonstrating ‘creditworthiness’. Digital technologies are disrupting the high cost of credit assessment and verification. Using specialized algorithms, providers can analyze information directly available on a customer’s mobile telephone (e.g. frequency and amount of airtime top up), and non-traditional data (e.g. social media profiles), to develop the credit profile of a client when making lending decisions. These digital footprints can also help financial service providers to interact more easily with customers and provide a range of financial products and services, including savings, insurance, pension and remittance, based on a deeper understanding of their financial needs.

The idea of using digital trails to provide financial track records was pioneered by [Lenddo](#), which launched its operations in the Philippines in 2011. [Lenddo](#) uses an algorithms that analyzes a user’s social network behavior and mobile phone usage patterns to develop a credit score, and combines it with existing scores to reveal more sophisticated consumer behavior and preference patterns. This approach towards credit scoring has evolved to the usage of non-traditional data. While credit underwriting has traditionally focused on the applicant’s capacity to pay, it is now shifting towards propensity-to-pay models (scoring accounts based on their likelihood to pay), that look at specific character traits of the applicants.

Another big data-driven model that is showing promise is the use of Psychometric Evaluations. The [Entrepreneurial Finance Lab](#) (EFL) psychometric tool has applicants fill out a 25-minute questionnaire administered by the lender, and in less than 10 minutes EFL generates a credit score. The score is based on the applicant’s answers to questions capturing information that ***can predict loan repayment behavior, including the applicants’ attitudes, beliefs, integrity, and performance.*** ***Psychometric data has the potential to***

MALAYSIA SPOTLIGHT

MIMOS in Malaysia developed an integrity assessment based on a sample of 100,000 Malaysians, which assesses behavioral characteristics that proxies individuals’ integrity, as well as any adverse traits that could impact ability to repay. It’s also being validated based on local culture, norms, and values. This tool is currently being piloted with 3 microfinance institutions in Malaysia, and will be scaled up after the pilot.

www.mimos.my

reach more people than traditional banking, as everybody has psychometric data/information even if they don't have collateral or social media profiles. It also allows lenders to assess specific characteristics, such as entrepreneurial aptitudes, which is critical when funding MSMEs.

[Janalaxmi Financial Services](#), one of the largest MFIs in India, has pioneered an approach to assessing the creditworthiness of urban micro-entrepreneurs that combines psychometric evaluation and credit bureau scores (when available) with physical attributes, such as licenses, assets, and premises. This has allowed it to graduate the urban underserved up the ladder into individual lending products, and is one of the only MFIs in India that has successfully carried out this graduation model in parallel with its typical group microfinance lending.

A critical element of increasing access and use of financial services is to understand consumer behavior, and how it influences financial service needs and use. This means providing a range of products or services, but also includes easier ways to access an account, or a lower-cost delivery option, based on an individual client's preferences and context. [Bank Rakyat Indonesia](#) (BRI) is often considered one of the largest microfinance service provider in the world. With almost a third of its entire bank portfolio comprising of microfinance customers, it offers a wide range of financial products to its clients, and is constantly innovating its channel strategy to serve clients in hard-to-reach areas. The ever-growing BRI network now includes ATMs, mobile vans, floating (ship) branches, an extensive agent network, and their own satellite.

While digital technologies can benefit consumers by providing more accessible and affordable financial services, they do pose a whole new set of risks. These include poor customer recourse mechanisms, fraud, data privacy and security, service availability, hidden prices and fees, discrimination, insolvency, and non-authorized ads. Many of the clients of digital financial services are new to both formal finance and technology; therefore, enabling them to understand and mitigate risks, and minimize potential losses when using these new products and services, will be critical for providers to meet users' expectations, and in turn, achieve sustained financial inclusion.

MFIs and FinTechs face common key challenges; namely, the crucial importance of building trust around new digital financial services and appreciating that doing so takes time, and ensuring reliable and stable service delivery. The latter is often limited by poor telecommunications and energy infrastructure, especially in remote areas. Providers should establish communication channels and complaint resolution mechanisms that can address their customers' risk perceptions and issues, including the inability to transact during network downtime, complex and confusing user interfaces, poor customer recourse, and opaque fees. They should also consider using approaches such as assisted digitization (step-by-step demonstrations of processes, showing transactions in passbooks or receipts) to help the clients transition to digital financial services. Well-tailored services can help customers meet daily needs, achieve personal and business goals, and build resistance against vulnerability. As new customers engage with formal financial services, they build the capability to interact responsibly with these services. But instilling these customers with trust and confidence in the provider, and in formal financial systems, is not

automatic. Trust and confidence are outcomes of a successful design and an embedded customer-centric approach

New Business Models

The growth in digital infrastructure globally has created a massive opportunity for microfinance to expand its outreach through new business models and alternative delivery channels. MFIs are starting to see the benefits of new digital technologies, which can raise efficiency, reduce costs, lower transaction costs for both institution and client, and expand outreach to new markets. At the same time, digital financial services and new technologies are complex and put demands on overall operations, as well as introduce new processes that clients need to learn. New business models and partnerships provide opportunities to leverage the experiences of established MFIs and digital financial service providers such as FinTechs, telcos and payment gateways.

Mobile Money

[Musoni Kenya](#) is a MFI providing financial services through mobile payments. The company was established in 2009 as the first 100% mobile payments MFI in the world; completely cashless. Their current business model is 'hi-tech and high-touch', where the hi-tech refers to payments and transfer services that are offered through mobile phones. High-touch includes collection and provision of training to borrowers through Musoni staff. The staff provide new clients with a 3-week training on how to use the mobile money services, as well fill out an online application, undertake cash flow analysis, and provide feedback on the product via telephone. As its operations mature, Musoni is looking to redesign its products to reduce human interactions, shift loyalty of customers from loan officers to the institution, and increase outreach. The staff will then be able to focus on problem-solving and deepening client engagement.

Agent Banking

Many FSPs are leveraging mobile technology and agent networks to reach clients in rural areas, thus growing their portfolios and reducing the cost of service per client. Early evidence indicates that banking through alternative delivery channels contributes to client welfare by delivering more convenient financial services at a lower cost. BRI in Indonesia has over 84,000 agents handling \$27.5 billion per year in transactions.

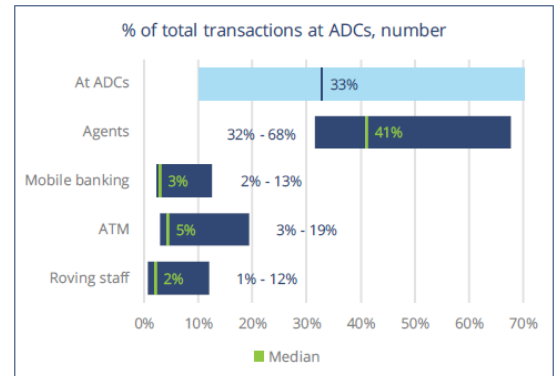
Malaysia Spotlight

BSN's agent networks and Virtual Teller Machines are key drivers of financial inclusion in Malaysia. BSN has wide outreach through 400 branches, 1000 ATMs, 100 VTMs and 7000 agents. This network allows it to have a presence in all districts in Malaysia. **97.4%** of the country's *mukim* (subdistricts with a population greater than 2,000) now have access points providing financial services. The key principle of agent banking is scalability at cheaper cost (99% savings compared to the costs of a full branch). Exploring the potential of converting new MFs customers to become Agent Banking (EBB). Commission earned from Agent Banking services is used to offset the loan repayments.

<http://www.mvbsn.com.mv/>

A recent study conducted by [MIX market](#) (with support from [The MasterCard Foundation](#)) to measure the performance of alternative delivery channels (ADCs) in reducing operational costs, improving convenience, diversifying income, and mobilizing deposits, revealed the following:

- A significant share of transactions is performed at ADCs (10 to 70 percent of an institution's transactions, with a median of 33 percent).
- Agent channels delivered 40 percent of transactions in institutions where this channel has been deployed.
- The average number of transactions per client per month is 1.3 at the institution level. This indicator is higher at ADCs, ranging from two to four per month.



Crowdfunding

Innovation Spotlight - Islamic Crowdfunding

Ethiscrowd is a Real Estate Islamic crowdfunding platform. EthisCrowd.com is the world's first Shari'ah-compliant crowdfunding service in Indonesia, which focuses on Real Estate Development projects, with a focus on Social & Community Projects. It crowdfunds Risk Capital for projects to reach bankability. Upon reaching pre-agreed development milestones, Islamic banks take over, and the Ethis crowdfunding community exits with its capital and profits. The projects usually last six to 15 months, and give returns averaging 10 to 16 percent per annum in SGD.

<https://www.ethiscrowd.com/>

Crowdfunding has the potential to transform retail financial services, as the use of technology, increasing connectivity through mobile phones and other devices, the legal and regulatory framework, and constantly changing economic conditions, allow new and innovative firms to compete with incumbents. The most common classification of crowdfunding features four main categories: donation, reward, debt, and equity. These categories are based on

what funders expect in return for their money (and their primary motivation to invest).

Debt crowdfunding, also known as lending-based crowdfunding, allows funders (lenders) to directly lend to fundraisers or invest in debt obligations issued through a platform. KIVA is one of the most well-known examples of this model. It partners with a range of organizations, including MFIs, social enterprises, schools, and non-profits. [KIVA](#) operates through Kiva.org, its P2P platform, and provides its partners with low-cost funds, assuming most of the risk as KIVA is repaid only after the borrower has repaid, and flexible loans sizes at a reasonable cost. However, there are challenges, such as managing the demand and supply, especially as crowdfunding becomes more popular, as well as regulatory challenges and capital control regulations.

[EthisCrowd](#) and Waqf World Growth Foundation (WWGF) are examples of how crowdfunding may facilitate digitization of traditional forms of finance, as well as community building.

[Crowdo](#), established in 2012, is an example of a FinTech offering a portfolio of P2P lending and securities crowdfunding solutions. Operating in Indonesia, Malaysia and Singapore, Crowdo's P2P lending platform is an online marketplace that connects pre-qualified SMEs issuing debt securities with Crowdo investor members who are seeking competitive interest rate returns. The

platform benefits the startup by providing efficient outreach to multiple investors via Internet and public relations visibility, and allows investors to benefit via an efficient deal-sourcing platform, diversification (bite-sized investments to diversify investment portfolios) and crowdsourced due diligence.

Role of Regulation

Regulation and supervision has a key role to play in supporting financial inclusion, especially as new actors and channels emerge. Regulators need to work with innovators in the private sector to promote test-and-learn approaches. Examples include developments that have occurred in Pakistan and Kenya, where new e-money operators were allowed to provide mobile-enabled e-money under controlled circumstances, with regulations that followed these developments. Similar approaches include regulatory sandboxes being implemented in Malaysia, Singapore and a few other places.

Regulators can play a critical role in ensuring there is equal treatment between established banks and the new non-bank FSPs. Burdensome Know-Your-Customer (KYC) requirements might hinder banks competing with FinTech players, who often operate under lighter regulation and oversight. This dilemma is especially encountered in jurisdictions where regulatory authorities might allow new players to provide financial services under a test-and-learn approach, while the existing players do not have the same opportunity to do so. The challenge for regulators is how to balance regulation and oversight for both the new players and the existing financial players, and there is no easy answer. Collaboration between different regulatory agencies, especially telecommunications, competition, and financial regulators, is necessary to avoid regulatory arbitrage.

While there has been much innovation around the role of alternative data and analytics to enable credit, many of these developments are not open, and newer FinTech players as well as crowdfunding platforms often do not share personally identifiable information (PII) with credit bureaus due to challenges, compliance costs, and proprietary models, so ensuring that credit data and history is shared openly is an important issue for financial sector regulators.

Finally, the digital divide must be addressed to be able to realize the full benefits of digital finance. Slow and unreliable Internet services, and lack of coverage, particularly in more rural areas where the challenges to provide financial access are most difficult, are still issues that need to be resolved.

CONCLUSIONS

Despite the great progress that microfinance has made in reaching the unbanked, an estimated 2 billion adults still lack access to a transaction account and remain excluded from the formal financial system. Bridging this financial access gap will require going beyond business as usual; to incorporate new and diverse technologies and transcend the need for traditional brick-and-mortar service delivery, which has been the mainstay of microfinance for the past three decades.

The ability of technology to transform the delivery of financial services can already be seen in the development of mobile money over the last decade. The era of digital technologies and big data presents new opportunities to create better products that are tailored to customer needs and lifecycles, while also addressing some of the challenges around transparency, fair treatment, and recourse, all of which are essential to building trust and loyalty. Yet, there are risks of misuse of data in areas such as profiling, privacy, data security, and commercialization of customer data without their knowledge or consent. Providers need to acknowledge and address these issues pragmatically.

The emergence of FinTech as business model disrupters offering innovative technology-based solutions present an unparalleled opportunity to drive down the costs of service and reach the poor or unserved customers. Traditional MFIs need to adapt to rapidly changing financial services ecosystem or they will find themselves left behind in increasingly niche market positions. All consumers, irrespective of where they are in the economic pyramid, value convenience, security and customer service, and are willing to pay for these attributes. FinTech and other financial services innovators such as crowdfunding platforms have created low-cost commercial model that can be leveraged by financial institutions to increase operational efficiency and offer a wider array of products to low-income populations, and MSMEs. These fundamental changes to the financial services ecosystem, driven by innovation and digital technologies, highlight the new and uncharted risks that both regulators and providers need to acknowledge and proactively address, by re-thinking policy and risk management frameworks, as these are critical to reinforcing customer trust.

As digital technologies are fundamentally reshaping the microfinance and financial inclusion landscape, there is a need to ensure that products and services being offered actually meet the financial needs of different segments of the population. The use of ADCs doesn't mean that face-to-face interactions with MFI staff are not necessary. The efficiency gains from technology allow providers to use those in-person interactions to deepen client engagement and build relationships. In this new ecosystem, it is clear that no one actor functions alone. Partnerships between mobile network operators and FSPs, and between platform providers and financial institutions, demonstrate the role of building on the core competencies of each partner to provide services that can meet the needs of customers that have largely been unbanked before.

Digital financial services offer incredible potential new opportunities, but also new challenges and threats. From industry disruption in online payments for goods and services to peer-to-peer lending, new technologies and new digital financial services providers are transforming every level of the financial services industry. This digital revolution is fundamentally reshaping microfinance and traditional financial value chains, but a lot still needs to be done to ensure scaling up of

services, while delivering both convenience and security, fighting fraud, and guaranteeing sufficient consumer protection.

APPENDIX: Individual Session Summaries

Welcome Address

Sebastian Molineus

Director, Finance and Markets Global Practice

The World Bank

From Microcredit to Financial Inclusion

Microfinance has revolutionized not just the delivery of financial services to the poor, but how the public and private sectors have sought to engage these individuals as agents of their own change. Low-income individuals are now understood to be proactive customers who demand value, and serving them requires improved and agile business models. Microfinance providers are estimated to reach over 200 million customers, and much of this reach was achieved during periods of strong growth in the early 2000s, when microfinance was heralded as a critical development tool, and its commercialization capable of generating both financial and social returns. That this overly-exuberant expansion led to several industry crises globally, however, established the importance of effective, responsible finance and consumer protection. Microfinance providers have had to strengthen their staff capacity and systems, and to become more sophisticated in managing risks, developing alternative delivery channels, and adapting to new technologies. SMEs have also been added as a target market for some microfinance providers.

The term microfinance has increasingly been replaced by the concept of financial inclusion, with an emphasis on a broad range of financial services tailored to fit the needs of the poor. Today, diverse financial service providers, such as banks, MFIs, and FinTechs, which provide a range of products from savings, leasing, insurance, and payments to the unbanked or underbanked populations, play a critical role in the efforts to reach universal financial access and full financial inclusion.

Despite the great progress that microfinance has made in reaching the unbanked, an estimated 2 billion adults still lack access to a transaction account and remain excluded from the formal financial system, according to data from Findex 2014. Even more persistent is the gender gap, with women facing consistently greater barriers to accessing and using financial services. As financial access is the first step toward broader financial inclusion, which is a key enabler to reducing poverty and boosting prosperity, it is critical that women are equipped with financial tools needed to capitalize on economic opportunities.

Technology - An Enabler and a Threat

Solving the remaining gaps in financial access will take going beyond business as usual to incorporate new approaches and technologies to further lower costs, mitigate risks, and tailor financial products to meet the needs of the poor. Leveraging the digital finance ecosystem for financial inclusion will require navigating and integrating a range of solutions, whether through point-of-sale devices, agent networks, payment aggregators, or data analytics. The ability of technology to transform the delivery of financial services can already be seen in the development

of mobile money over the last decade, which is now available in 92 countries globally, and two-thirds of low- and middle-income countries. In 2016, registered mobile accounts surpassed 500,000 million, with 45 percent of mobile money services connecting to at least one bank.

Technology is also helping institutions gain more insights about their clients' needs than ever before, by harnessing their digital footprints, and resolve information asymmetry constraints. While there is a huge opportunity to provide tailored products at lower risk, there are ever-growing concerns of data privacy. As we learned from the early excitement in commercial microfinance, for technology to deliver on the promise of faster progress towards full financial inclusion, supervisory capacity, financial capability, and consumer protection also need to be prioritized.

Role of The World Bank

The World Bank Group has led a multi-tiered approach to fostering the continued success of the microfinance industry. With national authorities, we support enabling legislation, regulation, and supervision for FSPs, and the strengthening of monitoring capacity, and financial consumer protection legal and institutional frameworks. At the sector level, we support the development of critical financial infrastructure, including credit information systems and efficient payment systems, as well as ID and ICT infrastructure.

The Bank's micro and SME finance portfolio currently includes US\$3.5 billion in active lending, with 65 lending projects in 41 countries. The WBG also provides capacity-building advisory services to MFIs seeking to adapt and grow. As the World Bank Group's main direct investor in microfinance, IFC works with around 300 financial institutions that provide services in 91 countries, serving micro and small businesses, and low-income individuals.

In 2017, the G20 committed to advance financial inclusion worldwide, and reaffirmed its commitment to implement the G20 High-Level Principles for Digital Financial Inclusion, which the World Bank Group helped develop under the China G20 Presidency leadership in 2016. The eight High-level Principles encourage governments to promote a digital approach to financial inclusion, and are being increasingly used as a reference tool by countries.

The role of responsible and inclusive financial services is an important aspect of the World Bank's approach to financial inclusion. The UFA2020 strategy includes a strong focus on working with

Universal Financial Access by 2020

The Universal Financial Access 2020 (UFA2020) initiative, launched by the World Bank Group, envisions that by 2020, 1 billion adults worldwide – women and men alike – will be able to have access to a transaction account, or an electronic instrument, to store money, send payments and receive deposits as a basic building block to manage their financial lives.

The World Bank Group has partnered with 32 private- and public-sector institutions – including MFIs, banks, payment and technology companies, telecommunications firms, regulators, and industry associations to meet this ambitious target.

The UFA2020 approach centers on

- introducing transaction accounts,
- expanding access points,
- improving financial literacy, and
- driving scale and viability through high-volume government programs, such as social transfers, into those transaction accounts.

Since launching the initiative, World Bank and IFC operations are now together projected to help reach 656 million new account holders by 2020, keeping the institution on track towards its target for enabling access to those who are currently unbanked.

countries to strengthen public- and private-sector commitment, the enabling legal and regulatory frameworks, and bolstering financial and ICT infrastructure as important drivers for inclusive economic growth that benefits the wider population and small businesses.

Evolution of Microfinance: The Journey So Far

Session Description: Over the decades, microfinance has evolved from simple microcredit to the provision of an array of financial services including savings, insurance, payments and remittances, available to entrepreneurs and small businesses. In this fireside chat with the author of “The New Microfinance Handbook: A Financial Markets Perspective”, we will discuss the major shifts that have shaped the sector over the last two decades and how the microfinance sector now reflects the multidisciplinary intersection of finance, technology, and development, where new ideas are shaping the future.

Session Speakers: Moderator: 1. **Irina Astrakhan**, Practice Manager, Finance and Markets, East Asia & Pacific Region, World Bank Group (IA)
Panellists: 2. **Joanna Ledgerwood**, Author of “The New Microfinance Handbook” (JL)

During this session, Joanna Ledgerwood shared insights on the evolution of microfinance and introduced the market systems development approach to understanding and facilitating financial inclusion.

Key Takeaways

Microfinance, as it is understood, is rooted in the experimental programs from the 1970s in Bangladesh, Brazil, and a few other countries extending tiny loans to groups of poor women to invest in micro-businesses. This type of microenterprise credit was based on solidarity group lending, in which every member of a group guaranteed the repayment of all members. In the 80s and 90’s microfinance expanded rapidly with an influx of private-sector capital. While microfinance has grown to reach over 200 million families, approximately 2 billion people are still outside the financial system. Some of the main limitations of this conventional approach to microfinance were

- The focus on credit for productive segment only, while ignoring other needs and segments
- Does not address full suite of financial needs of the under-served/unbanked
- Relatively limited outreach after several decades of operation

As there was a collective recognition of the shortcoming of the conventional approach, there was also a realization that to move forward, the new approach needed to shift from a narrow focus on

the institution, to broader focus on clients through understanding of behaviour and financial service needs, and how to meet those needs. The second shift is a broader focus on the financial ecosystem, including more coordinated efforts by the government and industry to improve financial inclusion, by understanding the supply and demand; and the development of new business models (e.g. branchless banking using technology and agent networks) to expand outreach.

As outlined in “*The New Microfinance Handbook*, 2013”, a market systems lens to analyze the financial ecosystem provides a framework for understanding how different players fit within the system, including their main functions and the relationships between them. At the core of this market system, poor and low-income people exist as consumers of financial services, and interact with providers to access and use financial services. Multiple market functions (supporting functions and rules and norms) are needed to support the core exchange between supply and demand. These market functions are performed by a range of different market actors, both public and private, who are motivated by their own capacities and incentives.

A functioning and inclusive financial system is one that is characterized by strong and sustainable performance in the core, demonstrated by size and outreach, depth and quality (poverty levels and the degree to which services meet consumer needs), and capacity and competence of rules and supporting functions, allowing the market to learn, adapt and develop in a sustainable manner.

Questions and Answers

1. What do you think the role of the regulator in this market system approach?
 - Safety of the financial systems is the main role of the regulators, by setting standards and formal rules and ensure adherence
 - Some regulators also plays the role in promoting financial inclusion, by making assessments either to send a signal or nudge the market to increase outreach to the poor in a sustainable business model.
 - Part of the financial inclusion strategies is to develop an awareness of financial inclusion, which requires accurate information provided to the market.
2. The role of financial inclusion and literacy has becomes more important. Who should be responsible for the financial education agenda?
 - All market actors, public and private, need to play a role in financial education. It's not about pushing products, but for the public good. There are roles for Government to play in many ways, to reach the poor. All of this needs to be coordinated.
3. What about the role of Government as a regulator? As Muhammad Yunus once said, “The more you stay away from government, the better.” If the people know it's from the Government, they will not pay back the money.

- What he meant is Government should not be providing financial services directly. The market system approach includes both public and private sectors. The Government's role is to ensure safe financial system, and to ensure that the environment is safe.
4. Since Brexit and Trump, we see more nationalistic views from emerging countries, resulting in the number of donors dropping. Do you think it will impact how we manage microfinance in the emerging countries?
 - It's not a bad thing to avoid putting money direct into the system. There are other alternatives that could be done e.g. partnerships for positive impact to microfinance.
 5. Market approach: the developed markets always play donor role; emerging markets sometimes play donor or receiver; but the developing markets are always in the receiver role. How can I invest my money in financial inclusion, any new ways?
 - Use a P2P lending platform. That is one way for average citizens to invest in microcredit/finance.
 6. Trajectory of microfinance. Is this market system approach a new or summary of what has happened in the last 20 years. Sebastian Molineus of the World Bank, in his opening remarks, has asked whether financial inclusion has replaced microfinance. Which role MFIs can place along the digital financial services in various contexts.
 - This is a new and fairly radical change. Discussions need to be around whether it is necessary to define microfinance, and it has been acknowledged that financial inclusion has a broader scope. In future, the role of MFIs and DFS will take on more importance, and a study on the incentives needs to be done.
 7. Information symmetry and outreach has been main issues in microfinancing. How about any market imperfections and how do we address that? Would the technology help?
 - Yes, it helped with affordability, and
 - Reaching poor people in rural areas.

Innovating to Transform Microfinance

Session Description: The future of the industry is being shaped by rapid advances in technology that promise to multiply outreach and increase efficiency. Join an industry pioneer, Nadeem Hussain, and learn from his exciting journey over the last decade, during which he set up a new microfinance bank, launched a mobile money platform, and is now seeding the next generation of FinTech startups in Pakistan.

Session Speakers:

Moderator:	3. Irina Astrakhan , Practice Manager, Finance and Markets, East Asia & Pacific Region, World Bank Group (IA)
Panellists:	4. Nadeem Hussain , Coach and Founder, Planet N Group Pakistan, Founder of Tameer Bank, Pakistan (NH)

During this session, Mr. Nadeem Hussein, founder of Tameer Microfinance Bank and Planet N Group in Pakistan, discussed the roles of technology in reorienting and reshaping the business models in microfinance, by harnessing new technology 'railroads' such as mobile phones and Internet connectivity.

Key Messages

a. Role of technology in reshaping the industry

- Technology provides more efficient ways for MFIs to assess creditworthiness of borrowers. They provide higher scalability, without a corresponding increase in cost for lenders and borrowers.
- Contrary to general convention, less physical interaction in credit assessment does not necessarily result in higher default rates. The creation of innovative scorecards that accurately profiles the target segment allows contactless evaluation to be conducted without increase in defaults.
- Microfinance lenders need to consider two key elements in determining the business models; (1) cost of acquisition of customers, and (2) lifetime revenue from these customers.
- New technology-enabled products, such as nano-loans, nano-deposits and nano-insurance, allow institutions to reach new segments more easily.

b. Role of government

- The specific nature of the microfinance business is not directly comparable with commercial banks. Microfinance has lower barriers to entry, such as reduced capital requirements, and room to continually innovate is crucial. Regulators/governments should allow flexibility/proportionate regulation to ensure the growth of a vibrant microfinance industry.
- Additionally, tiered KYC requirements should be put in place for 'low-risk' segments (e.g. lower loan amount).

c. Microfinance business model of the future – lower personnel, higher role for technology.

- In 'testing' new business models, MFIs should not be overly concerned on default rates, especially in the first few years of operations. Creating the right business model is more important.
- Over time, with more data available, new opportunities will present itself, in the form of more specific segments/focus for lenders to concentrate their efforts on, e.g. customers which even with fewer contacts/reminders will not miss their loan repayments.
- Appropriate scorecards, developed from the accurate profiling of customer segments, allow conscious decisions to be made in determining the lending strategy i.e. leaving low default/low-income segments or venturing into higher default/high-profitability segments.

d. Data as key enabler of serving the masses through technology

- The use of technology in microfinance is only as good as the data that can be used for the technology itself. Data drives the decision making of lenders.

Questions and Answers

1. What parameters should be used to avoid the smartphone apps used by unauthorized people?
 - *By default, the risk-based KYC implemented in Pakistan addresses this issue, i.e. lower transaction limit (minimize the losses to the customers).*
2. How do you ensure consumer protection and privacy? Is there any guarantee the lender will not sell the data obtained from borrowers to other parties?
 - *Customer consent is essential. Customers only give data to lenders for the chance to get the product (loan). If the lender wants to use the data for other purposes, they will need to get additional consent from the customer.*
3. How do you organize customer information gathered through the use machines/systems, to ensure repayment performance is good?
 - *Nano-lending assumed higher default rates i.e. 10%. Lenders should not look to reduce default, but rather, look at ways to increase lending and profits through the data.*

The founding of Tameer Microfinance Bank

- Tameer Microfinance Bank (currently Telonor Microfinance Bank), founded in 2000, is Pakistan's largest and the first private commercial microfinance bank licensed by the State Bank of Pakistan.
- The Bank started with senior banking professionals from the Citigroup. The initial focus was on getting a quality network and core banking operations up and running, which would spur fast growth, while maintaining high-service operation levels and portfolio quality.
- With the addition of personnel not associated with banking, its unique proposition is continual innovation and redefinition of its core product and service offerings to the public,

keeping in sync with changing and growing customer needs, with the ambition to benchmark and redefine the way banking is done.

Planet N

- Planet N is an angel platform which invests in start-ups that has the potential to enhance Pakistan's financial and economic inclusion, by focusing on big data, artificial intelligence, and digitalization of services including nano-credit.
- Since 2016, Planet N has 18 companies in its portfolio across the e-commerce, fintech, edutech, super food agriculture, retail, and renewables sectors.
- A key thrust is the promotion of collaboration and shared services among the companies in Planet N's portfolio, to complement the ecosystem for financial inclusion.

Prime Movers in Microfinance

Session Description: Innovation is key to addressing the challenges of global poverty and financial inclusion. The microfinance industry is being transformed by innovations in risk management, funding, products, and services to meet the evolving needs of the poor. Using the data on sector growth from The MIX Market, as well as perspectives of leading industry actors, this session will throw light on some of the trends that are emerging in the microfinance industry. Trends discussed will include the role of technology, use of community-based financing models and expansion of funding opportunities.

Session Speakers:

Moderator:	5. Ulrich Zachau , Country Director, Southeast Asia, East Asia and Pacific, World Bank Group
Panellists:	6. Sachin Hirani , Regional Manager for Asia, The MIX Market
	7. Agus Rachmadi , Vice President, Bank Rakyat Indonesia
	8. Abhishek Agrawal , Chief Regional Officer – South Asia, ACCION

This session featured a presentation by three leading organizations in microfinance, followed by a facilitated discussion on the key trends and innovations in the industry.

Presentation 1: The MIX Market

MIX Market is an online platform that allows users to assess market conditions, individual FSP performance, and the financial inclusion landscape. The platform offers robust and comprehensive datasets spanning thousands of organizations and over 100 markets. Based on the data collected by MIX, through the hundreds of FSPs that report to it, this session started with an overview of the current microfinance landscape, as well as results from a survey on ADCs.

Key Takeaways:

- Approximately three billion people are either excluded or poorly served by the financial sector.
- Worldwide, 62 percent of adults have an account at a financial institution or through a mobile money provider.
- Profile of the global microfinance portfolio (source: MIX market)
 - Active borrowers are mainly from South Asia region (54%), of which 50 percent comes from Bangladesh, Pakistan & India.
 - Latin America and the Caribbean region leads on deposit (46% share) and outstanding GLP (41% share).
 - The microfinance sector of East Asia and the Pacific (EAP) continues to primarily serve female borrowers, representing 85 percent of total borrowers.
 - Africa, ECA and South Asia focus more on serving the urban clients whereas EAP, LAC and Middle East and North Africa (MENA) have their clientele majorly based in rural areas.
- Diversified product and funding structure of microfinance sector:
 - Product variation: South Asia predominantly caters to microenterprise. EAP, on the other hand, shows good variation in its product mix, with equal focus on housing finance loans.
 - Funding structure: Deposits form the major source of funds across all markets except MENA and South Asia. South Asia being a highly borrowing-dependent market will change soon with the change in policies. Equity share is highest in MENA.
- In 2016, The MIX Market conducted a survey to measure the performance of ADCs in reducing operational cost, improving declined convenience, diversifying income and mobilizing deposits. The survey revealed the following:
 - A significant share of transactions is performed at ADCs (10 to 70 percent of an institution's transactions, with a median of 33 percent).
 - The agent channel delivered 40 percent of transactions in institutions where this channel has been deployed.
 - The average number of transactions per client per month is 1.3 at the institution level. This indicator is higher at ADCs, ranging from 2 to 4 per month.
 - ADCs are accessible to few clients (outside of agents, where an 86 percent enrolment rate is reported, the percentage of total clients enrolled on either mobile services, ATMs, or roving staff rarely exceeds 20 percent)

Presentation 2: Bank Rakyat Indonesia

Bank Rakyat Indonesia (BRI) is the oldest largest banks in Indonesia. It specializes in serving the small scale and microfinance market, with over 58 million retail clients and over 4,000 branches, units and rural service posts. As of 2010, it was the second largest bank in Indonesia by assets. BRI has had a longstanding focus on microfinance clients, and based on their experience, they shared how they have focused on maintaining a double bottom line - achieving commercial growth, while serving the needs of its microfinance clients.

Key takeaways:

- Key performance indicators (KPI) of successful microfinance programs include outreach (serve more people), sustainability (to ensure continuity of the programs) and socio-economic development (better quality of life for beneficiaries)
- For a program to be sustainable, microfinance providers should not depend on donors or government, and should be able to cover their own costs. Currently, BRI is able to cover its own costs, with a non-performing loan (NPL) ratio as low as 0.5 percent.
- BRI conducts a social impact study every three years to assess the achievement of the microfinance program, to understand impact of the lives of the customers.
- BRI's is constantly innovating to serve its customers with the latest/newest technology, while acknowledging the needs of microfinance customers based on the local context and culture.
- BRI's operations have evolved significantly since the 1990s – from initially using IT to facilitate online transaction, to introducing BRI unit outlets, Teras Kapal, Teras Mobile, BRILINK, mobile banking, and recent launching of a BRI satellite in supporting its financial inclusion agenda.

Presentation 3: ACCION

Accion International is a global non-profit organization dedicated to building a financially-inclusive world with economic opportunity for all, by giving people the financial tools they need to improve their lives. For more than 50 years, Accion has helped tens of millions of people through its work with more than 90 partners in 40 countries. Based on this rich history of supporting the microfinance industry through various phases, Abhishek discussed how the institutions are adapting its strategy to support the next wave of technology-driven innovation in microfinance.

Key Takeaways:

- Innovation and technology allow financial institutions to create solutions that lower costs, reduce transaction times, and provide relevant, convenient, quality products to those in need.
- Startups are best poised to innovate because of their streamlined decision-making, entrepreneurial flexibility, lack of bureaucracy, and ability to leverage new technologies and approaches.
- FinTechs have a transformative potential for the underserved:
 - By the end of 2016, two-thirds of the world's population had mobile subscriptions (4.8 billion); by 2020, almost 75 percent of people on earth (~5.7B) will have mobile subscriptions.
 - The number of people who access the internet via phone has doubled over the past 5 years to 3.6 billion; that figure will rise to 4.7B, or 60 percent of the global population, by 2020
- To capitalize on this new wave of technology-led innovations in promoting greater financial inclusion, Accion collaborates with partners:
 - Under the Venture Lab initiative, Accion invests capital, and provides support to early stage FinTech innovators that increase access to, improve the quality of, or reduce the cost of financial services for the under-served at scale.

- Accion is the sponsor and anchor investor of the Accion Frontier Inclusion Fund (AFIF), the first global FinTech fund for the under-served. The Fund, which is managed by Quona Capital, invests in innovative financial technology and services companies that promote financial inclusion (e.g. big data, machine learning, P2P, GIS)

Questions and Answers

1. With higher penetration of smartphone usage, does it help reaching out to the poor? Would this development require a change in the distribution channel?
 - Migration from feature phones to smartphones is happening at a fast rate, but this trend does not reach the lowest-income classes& poor, rural people
 - Need to have both, the smart (mobile apps) & USSD (for feature phones)
 - Use of technology will reduce cost, thus leading to higher volumes and lower financing rates
 - Regulators need to enhance security. Clients need to know who has and is managing their personally identifiable data. Ensure that it does not fall to the wrong hands.
2. Cost of microfinance higher than SME financing. How do we revolutionize microfinance?
 - Use technology (e.g. BRI satellite, ship, mobile banking) to reduce costs and to serve customers at remote areas on an online basis.
 - Use ADCs to engage customers and make customers comfortable
 - FSPs need to also innovate products, in addition to distribution channels.
 - Regulators should look at regulation, rather than interest rate capping.
3. MIX market data is mainly accepted by academicians. How do you ensure the authenticity of the data in MIX? Charges levied by The MIX Market makes it difficult for researchers to access.
 - The MIX Market leverages on technology for data submission by MFIs and relies on MFIs' annual financial statements.
 - Charges are required to sustain The MIX Market's operations.
4. Looking ahead 5 years from now, what do you see as the single greatest challenge?
 - More and more FinTech-type companies that we are supporting continue to be innovative in harnessing technology. How we adopt these technologies, and how we engage with these customers, needs to be detailed so that the customer is comfortable in using the technology.

Big Data Meets Microfinance: Hype or Hope?

Session Data has always been an essential element of financial service delivery. With the growth in digital technologies, big data is changing the way all business is done. 80 percent of all data in the world was generated in the last two years. While this presents a tremendous opportunity for developing insights about people's behaviors and offering them tailored financial products, there are several challenges. Even with high digital penetration, most microfinance markets are characterized by relatively-little useful data. Also, as the business models are still young, there is lack of clarity around data-sharing rules and the implication for privacy and consumer protection. This session will explore the

Description:

opportunities as well as challenges and concerns about the role of big data in supporting MFIs.

Session Speakers:	Moderator:	9. Bennett Gordon , Digital Financial Services Consultant (BG)
	Panellists:	10. Fredes Montes , Senior Financial Specialist, World Bank Group (FM) 11. Chiou Hao Chan , Managing Director, APAC, Mambu (CHC) 12. Mah Kam Lin , Group Data Scientist, Malayan Banking Bhd. (MKL) 13. Mark Mackenzie , Managing Director-Asia Pacific, Lenddo (MM)

This session featured a panel discussion on the role of big data in promoting microfinance. The panelists talked about merits of different types of data, how data is changing microfinance, and the role of regulation in addressing some of the concerns.

Key takeaways

- Traditionally, FSPs have relied on their own credit-scoring tools, as well as credit bureau profiles (when available), for decision-making. This type of data is easily accessed and interpreted by humans, without the need for complex technology solutions and algorithms.
- The approach towards credit scoring evolved to the availability of non-traditional data. Underwriting of the risk in microfinance has traditionally focused on the applicant's capacity to pay, but is now it is now shifting towards a propensity-to-pay models that look up at the character of the applicant.
- Due to the widespread use of smart mobile devices and the Internet, the digital footprint of humans has increased dramatically in recent years, creating large amounts of electronic data referred to as Big Data.
- For FinTech companies like Lenddo, nothing is more predictive than data that can give the insight of the behavior of the consumers. This includes email, social media such as Facebook, Twitter, as well as other online interactions such as online bill payments. Using complex algorithms, these companies are able to create credit scores for clients that focus on "propensity to pay".
- Big banks often focus on organic and transactional data, as opposed to social media data, which represents lots of facts in unstructured data. Organic and transactional data includes number of log-ins, payment history, credit card usage, etc.
- The insights acquired through big data can and will transform every aspect of the microfinance industry, by:

- Leading to better strategic business decisions;
 - Helping FSPs design customized products and services for their clients;
 - Triggering acquisition of new clients;
 - Facilitating cross-selling activities; and
 - Lowering operating costs.
- Big data analysis can also enable businesses to identify issues in real-time, allowing them to recalculate risk portfolios within a short time span, as well as identify fraudulent behavior. This will help to increase access to financial services for the poor.
- It is important to evaluate the needs and purpose of big data. We must understand what data is relevant to achieve the objective. Data should be refined further to make it more meaningful, and it can be supplemented with proxy data.
- While big data is changing the way microfinance is done, it does come with some inherent challenges and risks :
 - *Data Privacy*: Data on people's personal information, interests, and activities may be collected and used for analysis without their knowledge. Sensitive personal data, such as health information, can be at risk of being revealed publicly. Consumers may be denied loans from other financial institutions, if data on late payments is made public without further information on the circumstances that led to the late payments.
 - *Discrimination* is another risk of big data, as consumers with similar characteristics may be grouped together, and excluded from accessing financial products and services. This type of profiling can lead to the wrong people being included, or the right people being excluded.
- Regulation has a critical role in ensuring that the right data is being used in a responsible manner. As this is a relatively new area, some countries do have preliminary regulatory frameworks for data protection, but many others don't. Regulation around the collection and use of data should focus on:
 - Proportionality of the data
 - Transparency for those collecting, processing, and using the data
 - The purpose of using this information
 - Ensuring quality of data, data is error-free, and data has been obtained from lawful sources
 - Integrity of the data;deciding which data is relevant and why, and only collect that
 - Who has access to the information and why
 - Ensuring that the data is not being used to discriminate against groups or individuals
- MFIs need to leverage digital technology better. Big data plays an important role in helping FSPs to develop services tailored to client needs, and also to acquire new clients, facilitate cross-selling activities, and lower their operating costs.
- In the near future, customers will be able to receive better-tailored offers and products, while working with financiers who have a more thorough understanding of their needs and

circumstances. The competition to bring in more new customers will generate lower prices and better services for those at the base of the global economic pyramid.

Innovative Credit Risk Assessment

Session Description: Alternative data has the potential to fundamentally change credit risk assessment in the microfinance industry. Recent innovations in technology have made it possible to use ADSs, such as online presence, mobile use and psychometric tests, to develop a client's credit profile. This session will provide information on how financial institutions looking to better understand their customers, grow portfolios and control risk, can use alternative data to understand the credit risk of their clients. The speakers will also discuss the distinct advantages and disadvantages inherent to each data source, as well as some of the consumer protection and privacy issues that need to be considered.

Session Speakers:

Moderator: 14. **Shaharuddin Zainuddin**, Director, Malaysia Development Bank

Panellists: 15. **Modibo Camara**, Founder A2F Consulting

16. **Alan Martinez**, Director Advisory Services, Entrepreneurial Finance Labs (EFL Global)

17. **Dr. Haniza Yon**, Director, Psychometrics/Cognitive Analytics, MIMOS Malaysia

18. **Bidhan Chaudhuri**, Chief Operating Officer, Janalakshmi Financial Services, India

This session featured four presentations on different approaches on innovations in credit scoring followed by a discussion.

Presentations 1: Overview of Digital Credit

Digital credit is credit offered via mobile phones, with features that include instant loan approval (in seconds), fully-automated loan decisions, remote disbursement and loan repayments, and it is collateral-free. Digital credit is characterized by very-short-terms loans (less than 30 days) of very small amounts (under USD50) and high interest rates. It is mostly used to meet day-to-day cash-flow or emergency needs.

- Digital credit is becoming more popular and widespread. There are about 22 digital credit offerings, of which 18 in Sub-Saharan Africa. Of these, six products have more than 1 million clients; (M-Shwari Kenya has 13.5m clients)
- There are a number of consumer protection concerns with the use of digital credit, such as

- Most current offerings have a very high interest rate, as the providers are pricing the increased risk into the product. The expectation has been that technology would allow lower rates, but if that is not the case, then is technology really helping?
- Given automated processes and target clientele, clients may not be aware of the level of interest rates and fees that they pay; for defaults, even higher rates apply.
- By granting permission to access smartphone data, clients may not be aware of implications (e.g. that their daily movements and call records are logged).
- Digital credit in its current form will not replace microfinance but be complementary. There is still a case for cash-flow-based lending, and technology can play a role here too (e-commerce, apps to collect data etc.)

Presentation 2: EFL's Psychometric Credit Risk Assessment Approach

EFL has developed a psychometric-method-based tool to assess default risk, by focusing on qualities such as an applicant's intellect, business acumen, ethics, and attitude and beliefs. EFL creates a robust credit risk evaluation that is more powerful than traditional credit screening methods.

- The tool is designed to be used as an assessment for entrepreneurs and SMEs. The tool allows FSPs to assess individuals without collateral, history records, using psychometric methodologies.
- The process involves individuals filling out an application online that is analyzed by the EFL algorithm to generate a score. Using this approach, EFL has scored more than 1 million people, mainly in Indonesia and India.
- EFL clients are already seeing increased return on investment of up to 3.5 times, and a decrease in default rates by approximately 72 percent. It has also reduced the loan processing time by approximately 75 percent.
- Psychometric data could reach more people than traditional banking, as everybody has a personality, even if they may not have collateral or financial history. It looks at character traits, where metrics are around attitude, entrepreneurial potential and how they perceived the community.
- Research look at other alternative data – bureau data, mobile data, online social data, psychometric data. However, only eight percent of the population of the world has access to bureau scores, and while mobile data is promising, another source of data that has yet to be explored is mobile payment data.

Presentation 3: Applications of Psychometrics in Creditworthiness Assessment in Malaysia

MIMOS developed integrity assessment since 2009, based on a sample of 100,000 Malaysians which assesses integrity and counterproductive behavior. The tool has been used in different

kinds of businesses, employees, and has been validated based on the local culture and norms in Malaysia.

- The assessment module is now being piloted at a leading MFI, and profiles of 2000 microfinance borrowers have been collected. The progress of these clients in terms of repayment is being monitored to increase the predictive capacity of the tool.
- The tool assesses personal creditworthiness in terms of compliance (integrity) and entrepreneurial traits.
- Based on the latest technology developed by MIMOS, the tool is adaptive and the number of questions may change and be reduced based on the answers. This has also increased the reliability of the test by 50 percent.
- A business interest profile has also been introduced to identify what kinds of businesses the client is most passionate about and interested in.
- Most of the MFIs are interested in building the capacity of their clients in addition to providing loans. This profile is helpful for MFIs in identifying training needs and knowledge gaps for clients.

Presentations 4: Let's go "Physital": Innovative Credit Assessment for Urban Micro enterprises

- Jana Laxmi Financial Services is the largest MFIs in India with 7.5m customers, and it focuses on the segment at the bottom of the pyramid, which is not served by formal financial institutions, and where most credit needs are met through loan sharks.
- Jana's market-based approach to financial inclusion is defined by three distinct characteristics:
 - Sole focus on servicing the urban poor
 - Tailored customer-centric approach to financial products and services design and development
 - Central role of technology and processes for efficiency and scalability
- Microenterprises run by the urban poor collectively represent a market size of \$0.5 trillion in India.
- This segment has slightly different cash flow (daily), hence Jana has developed a hybrid credit assessment approach that include physical engagement and digital data (physital). This includes
 - Historical Score: Can include credit bureau score (when available) and credit history with Jana.
 - Application Score: Based on the technical evaluation sales, cash flows combined with a psychometric evaluation (using the EFL tool).
 - Degree of formalization: A review of assets, licenses, premises, finances and owners background.
- Jana has pioneered models to graduate the urban under-served up the ladder into individual lending products, and is one of the only MFIs that has been able to successfully carry out graduation model lending in parallel with its typical group microfinance lending.

Question and Answers

1. Does the use of these alternative credit scoring methods bring down costs of lending?
 - The cost of lending/assessment is not the issue, but it has brought down the cost of collection. Haven't seen any impact on cost of lending. Innovation has helped, but the 'physital' is still important. Use alternative data if the traditional data is not relevant. Despite digital penetration, customers are still not ready to use it. The bank still need to meet with clients and request answers for all the questions. Innovation does helps but there is still a need of physical engagement.
 - Institutions need to identify which areas to be automated, and how they are being automated e.g. pricing, type of products.
2. Has alternative data replaced the need of traditional data?
 - The use of traditional method is still relevant. Alternative data is to complement in making more accurate predictive assessments.
 - You would need a much more intensive process before displacement of traditional data takes place. Data could be used to provide objectivity in credit decision.
3. How can consumers protect themselves from the biases of these companies' algorithms?
 - Having bias removed is not injustice to the lender. Regulators require transparency by informing consumers why they are getting rejected, thus they can improve further.
 - In developing psychometric parameters, the questions asked can be framed to ensure that they are not biased. Introduction of policies and standards can also ensure no biases in the implementation of the psychometric analysis.
 - Assumption that psychometric analysis is inherently biased is not true as in most cases, people did not try getting a loan because they feel they are discriminated against (perception).
4. How much personal information will borrowers have to surrender to get a loan?
 - There will not be much additional personal information required, as assessment is based on personality. The questions developed are simple behavioral questions that the individual may not even realize is a form of assessment. Based on the answers, the institution could make prediction about behavior based on the personality.
 - They are not intrusive, as people is aware they need to be engaged in order to obtain financing. The institutions should develop engaging questions and not intrusive questions.
 - Using the mobile platform, clients may not aware of the extent of information shared and what the information is used for. Regulator should ensure the information collected is reasonable and not being misused.

Effective Delivery Channel for Microfinance

Session Description: Between 2011 and 2014, an estimated 700 million people gained access to financial services; however, approximately, 2 billion are still financially excluded. Serving this population with appropriate products cannot be achieved without accessible channels that lower the cost of service and increase reach. ADCs such as agent banking, mobile financial services and an ATM network are proving to be effective, but often require changes to institutional processes, and can be expensive for small MFIs. This session will discuss the changing nature of microfinance delivery channels, and how best to leverage opportunities such as cashless MFIs, mobile-based insurance products and the ability to offer value-added products like energy solutions or agri-inputs.

Session Speakers:

Moderator: 19. **Jennifer Isern**, Practice Manager, Finance and Markets Asia Region, World Bank Group **(JI)**

Panellists:

1. **John Owens**, Senior Digital Finance Advisor
2. **Kameel Abdul Halim**, Deputy Chief Executive (Strategy & Communication), Bank Simpanan Nasional, Malaysia
3. **Juliet Ongwae**, Chief Innovative Officer, Musoni, Kenya

This session feature an initial presentation providing an overview of ADCs followed by two presentations of how financial institutions are leveraging these channels.

Presentation 1: Overview of Alternative Delivery Channels

- Technology played an important role in providing new ADCs to facilitate access to financial services for the unserved. Three areas which has seen innovation:
 - Products – mobile payments, mobile on micro credit, mobile micro insurance, new products which arose from alternative data
 - Distribution – apps and tools to digitize and speed account approvals, biometrics, tools to track field staff/agents, third-party agent aggregators
 - Back-office Operations – integration with e-money platforms, integration with mobile gateways for communication with customers, big data analytics for credit decision.
- Six ADCs of financial services are - i) ATMs; ii) Internet Banking; iii) Mobile Banking; iv) Agent Banking; v) e-Wallet; and vi) SMS Gateway.
- E-Money providers are changing the financial landscape. Examples
 - AliPay - used than more than 5% of population. During CNY, USD9 bil was transacted per day. Acquired Lazada and Moneygram, to further boost its global customer base.
 - Banks' integration with E-Money platforms lead to lower MPESA transactions.
- In Kenya, banks are integrating with mobile/E-Money. This has expanded ownership of accounts by more than tenfold. Currently there are more E-Money accounts compared to deposit accounts
- Agent banking is growing rapidly in places like Bangladesh, where there are more than 350,000 agent touchpoints that provide a range of services from cash-in/out to balance inquiries to loan collection and account opening.
- There are a number of strategic considerations for MFIs to examine as they develop a roadmap for what kind of delivery channels might be best suited based on
 - Customer needs
 - Environment
 - Regulatory framework
 - Institutional capacity
- For many traditional MFIs, the process of adopting ADCs presents many challenges, such as investment cost, need for partnership, building trust, consumer education & financial literacy, communication channels, Internet access and complaint resolution mechanisms.

Presentation 2: Effective Delivery Channels: The BSN Malaysia Experience

- Technology and FinTech companies raise an important question - will banks still exist in the next 10 years? The answer is 'Yes', as shown by history, technology and men can coexist effectively e.g. ATMs in the 80s.
- BSN's mandated role is to act as the driver of financial inclusion and showcase its agent banking initiatives, as well as to share BSN's Virtual Teller Machine as a way to advance financial inclusion using technology.
- Technology has been the focus of BSN's business to serve its mandate of providing access to financial inclusion to the under-served segments. With BSN's agent banking, the areas

served (sub-districts) has increased tremendously, from 46 percent in 2011 to 97 percent in 2016. This includes serving areas in deep interiors of Malaysia where there are no other FSPs.

- Wide outreach through 400 branches, 1000 ATMs, 100 VTMs, 7000 agents and with a presence in all districts.
- The key principle of agent banking is scalability at cheaper cost (99 percent savings vs full branch). BSN agents make up 86 percent of total agents in Malaysia.
- Agent banking presents a great opportunity of increasing outreach at a lower cost, but agents are not able to provide all the services that can be offered at a branch.
- Agent banking is improving customer experience, as they can conduct transaction after office hours (35 percent of transactions). Customers see an 83 percent reduction in travel time and cost.
- BSN is trying to create synergy between agent banking and microfinance. Agents could be touch points to accept financing applications.
- Moving forward, BSN is planning to modernize agent banking through enhanced devices, operational efficiency, strategic marketing, real-time payment, new products and services.
- Some of the main lesson learned while introducing ADCs are
 - Focus on inclusivity despite high cost – able to reap the benefits of first mover advantage and economies of scale
 - Important to build strong relationship with vendors and utility providers
 - Run risk of under-execution
 - Nourish bank and agent relationship

Presentation 3: Leveraging the Mobile Channel – Musoni Kenya

Musoni is the world's first completely cashless MFI based in Kenya, and it is leveraging existing digital platforms created by mPesa to offer a range of products, including individual loans, agri-business loans, education loans and emergency loans. Technology has made it possible for Musoni to operate without an extensive branch network and provide fast disbursement (4 to 72 hours). Products offered include group loans, individual business loans, agri-business loans, asset financing, school fees and emergency loans.

- Current business model is 'hi-tech and high-touch', where the hi-tech refers to payments and transfers. High-touch includes collection and provision of training to borrowers.
- All borrowers have to go through a 3-week training on how to use mobile money.
- Loan applications, repayments and disbursements are done via tablet. The loan officers are also able to undertake cash flow analysis and provide feedback on products.
- By automating many of the steps, it is able to free up the loan officers' time to focus on engagement with customers when there is a problem and see the feedback on the products
- Moving forward, Musoni plans to implement more 'hi-tech' processes which includes:
 - More customer-centric products that reduce human interactions and shift loyalty of customers from loan officers to institutions, and increase outreach beyond current presence.
 - Leverage mobile technologies to deliver basic training.
 - Develop apps to monitor attendance (minimize usage of loan officers).

- Dependency on MPESA platform may lead to concentration risk, so it needs to identify alternate options.
- Revise the role of the loan officers so they can concentrate on collection and customer engagement.
- Improve data collecting to improve credit scoring.

Questions and Answers

1. Is digital financial services really so cost effective?
 - Evidence showed that it would reduce costs for institutions and customers e.g. Alibaba experienced tremendous cost savings, online sales, agent banking.
 - It also depends on types of products. It would reduce cost for simple products. It could drive up cost for more complex products. In addition, the bank will incur high cost in setting up the infrastructure e.g. back office system etc.
 - Flexibility in time, short time for approval, by leveraging data and credit scoring, managed to save the cost of loan officers to disburse micro loans.
2. What is your view on consumer protection, education, data privacy issues & customer recourse?
 - Financial Institutions (FIs) need to constantly look at impact to customers. Although it is desirable to have access to sensitive data, FIs need to be able to draw the line. Need to be transparent by letting customers know what data collected and how it is being used.
 - Financial literacy programs need to be enhanced to help customers understand the terms and conditions, as well as implication of digital transactions.
 - On agent banking perspective, banks need to know the profile of agents and monitor performance to ensure standards are adhered to e.g. AML and secrecy of data. Not too rigorous but sufficient to conduct basic transactions.
 - Regulators need ensure responsible lending is practiced by FIs. In Kenya, Mshwari blacklisted 400,000 names in the credit bureau even though the outstanding amount was minimal.
 - Data privacy and individual data protection is important, hence it is critical to ensure data-holding systems are secured.
 - Need to educate clients about fraud - money scams, email scams which can be misused to open E-Money accounts.
 - Customer recourse and complaint management systems are essential.
3. Agent-banking terminals require a high investment cost, and what's lacking is the repayment. What about collaborating with other FIs so costs can be shared?
 - It is good to collaborate but agent banks operate within fixed parameters – security and ease of transaction. E.g. agents conduct three transactions per day at RM200 each. They have to deposit the physical cash at the bank branch. There are constraints on how many banks an individual agent can serve.
4. How do we mitigate risk from these platforms?

- Technology could be used to collect data to manage credit risk
 - Operational risk is a challenge e.g. over-dependence on 3rd-party infrastructure may pose reputational risk.
 - Digital platforms are open to cyber-attack. There are approximately 1000 cyber-attacks every day. Use of digital channels requires FIs to have better cybersecurity.
5. How do we bring the under-served to the mainstream?
 - Raise the bar for existing microfinance to graduate by increasing capacity and capability, and try to use mainstream financial services.
 - Increase the lending amount.
 6. How do we manage group meeting via mobile phone?
 - Develop apps to monitor attendance and performance, and give group access to app.
 - Co-guarantee loan through the app.
 - Have meetings without having officers to be at the meeting.
 -
 7. What is the average retention rate of agent at BSN?
 - 100 percent. However, agents need to manage certain level of productivity. This is monitored through achievement of KPIs.
 8. How are trainings conducted for clients? Kenya is small country – is your model going to work in Indonesia?
 - Training is done through feature phones, which are affordable. It is very interactive to facilitate Q&A.
 - When moving from informal to formal platform, must inform the clients about the whole system such as credit bureau, tax etc.
 - There's no one-size-fits-all environment.

Alternative Funding for Microfinance

Session Description: Technology is a vital element of the innovation taking place to advance financial inclusion, and technology-enabled businesses are allowing people to conduct basic transactions, such as peer-to-peer (P2P) payments, without ever stepping inside a bank branch. P2P lending in microfinance has evolved significantly since its emergence a decade ago. Thus, crowdsourced funding platforms are gaining popularity as a source of investment for micro and small entrepreneurs.

This session will bring together some of the pioneers and new entrants to discuss opportunities, risk and regulatory implications of crowdfunded capital for microfinance.

Session Speakers:

Moderator:	20. Robin Newnham , Head, Policy Analysis and Capacity Building Alliance for Financial Inclusion
Panellists:	1. Ahmad Sabree , Business and Shari'ah Development Consultant, EthisCrowd 2. Akshay Regmi , Portfolio Manager for Asia, Kiva 3. Abdar Rahman Chignell , CEO Waqf World Growth Foundation (WWGF) 4. Philip Leong Sheng Yik , Analyst, Crowdo

Rapporteur: Sherina, Development Finance and Enterprise Department

This session featured presentations from 4 different crowdfunding platforms that focus on microfinance and small business finance.

Presentation 1: EthisCrowd

Ethis Ventures (Ethis) is an Islamic market place-maker specializing in social-impact investments, complemented by philanthropy. It focuses on finding investments with low risk, high returns and great social impact. Ethis aims to spearhead the growth of alternative funding marketplaces and create an ethical & Islamic ecosystem to circulate good to humanity. Ethis was established in 2014, registered in Singapore in 2015, licensed in Malaysia in 2016 by the Securities Commission of Malaysia, but most of its projects are in Indonesia. Within 1 year, Ethis grew its staff strength from two to 18. Ethis builds, operates and ventures with Islamic crowdfunding platforms to serve the needs of the global *ummah*. Islamic crowdfunding merges the technology of crowdfunding with the structures of Islamic finance and principles of *Fiqh Muamalat*. Currently there are three running platforms under Ethis, each catering to a different segment (i.e. real estate, SME & education) Ethis caters to the unserved segment, mainly smaller customers just like microfinance does.

- Current outreach of Ethis:
 - Three running platforms
 - 48 investment campaigns totalling S\$5.6m
 - S\$185,350 over 61 charity campaigns
 - 30,000 members from 11 countries
 - 2,500 transactions
 - 2,000 crowd funders

- Business model of EthisCrowd.com, an Islamic crowdfunding platform for real estate is as follows:
 - PT Ethis (Indonesian associated company of Ethis) joint venture with the project partner, a close circle of proven Indonesian developers. PT Ethis secures project with notarized deeds (e.g. construction of affordable housing for low-income earners) and project assets is used as collateral.
 - EthisCrowd provides *mudharabah* bridging financing to the JV company prior to their bankable stage (viable to be funded by banks) for a share of profits/losses. For e.g. land clearing stage, development of basic infrastructure stage.
 - Sale to buyers (e.g. low-income families) are confirmed in advance. The buyer purchases via a government-subsidized program. The JV company will repay to Ethis with profit (agreed share of profit will be returned to EthisCrowd investor).
- Ethis has spent the past one year overcoming three main challenges:
 - Educating the crowd on the concept of crowdfunding and its benefits, as well as features of investment structures and contracts employed by Ethis.
 - Cultural Inertia. There is a clear need for greater efficiency and transparency as well as reporting and accountability in Islamic finance and philanthropy.
 - Regulatory uncertainty. For Ethis to grow rapidly, it requires the capacity to manage regulators in multiple territories.

Presentations 2: KIVA

KIVA is an international nonprofit, founded in 2005, with a mission to connect people through lending to alleviate poverty. KIVA partners with a range of organizations, including MFIs, social enterprises, schools, and non-profits. The criteria for organisations who want to partner with KIVA is for the organisations to be serving the needs of poor, vulnerable and/or excluded populations, either through financial services or by using credit to expand access to beneficial products and services. KIVA sees itself not only as a supplier of funds, but as promoting transparency and impact (social reward for the excluded people).

- KIVA's global impact and reach:
 - 2.4 million borrowers
 - 82 countries
 - 1.6 million lenders
 - \$982 million lent through KIVA
 - 317 field partners
- KIVA operates through Kiva.org's P2P Platform and has two partnership models:
 - **Field Partners:** KIVA establishes a credit line for each Field Partner that allows them to raise funds through the KIVA website. The credit line is the maximum amount a Field Partner can have outstanding with KIVA, and functions similarly to a revolving fund. Credit lines can range from \$50,000 to \$4 million.
 - **Direct to Social Enterprise:** KIVA pools the lenders' contribution (\$25 USD or more) for the loan of their choice and sends them to the Field Partner. KIVA loans

short-term working capital to social enterprises ranging from \$10,000 to \$50,000 with a maximum tenor of 12 months (or exceptional cases of 18 months). The Field Partner returns the money to Kiva according to borrower repayment plans, and individual social investors receive their money back, or alternatively reinvest the money.

- Benefits of KIVA for field partners:
 - **Low-Cost Funding:** KIVA passes 100 percent of lender funds to Field Partners at 0 percent interest and KIVA lenders cover currency devaluations over 10 percent.
 - **Risk Transfer:** KIVA is repaid only after the borrower has repaid. When properly reported, borrower defaults are borne by KIVA lenders.
 - **Flexibility:** Loan sizes (\$25 - \$50,000 USD) and terms match borrowers' needs. Field Partners can charge their borrowers a reasonable interest rate.
- Risks and Challenges
 - **Managing Risk, Impact and Popularity of Loans:** demand/supply loans mismatches at KIVA's market, seasonality of ending on the platform, balancing popularity with impact (more impact might mean more risk for the lenders) and the impact of a field partner may not be translatable through a borrower profile.
 - **Regulatory Challenges:** Microfinance regimes and capital control regulations.
 - **Microfinance industry risks:** reputational risk, individual country risk and over-indebtedness.
- There are many cases where a field partner reduces the interest rate.
- KIVA's model also allows for corporations (e.g. HP Foundation) to support microfinance lending through matching loan funds, a KIVA-managed lending account, with tax deductible options.
- Crowdfunding platforms are growing across the world and playing an increasingly important role in achieving the Sustainable Development Goals.

Presentation 3: Waqf World Growth Foundation (WWGF)

Waqf is a recommended benevolent act in Islam, as it is based on contributing to philanthropic causes recommended by Islamic textual sources, namely the Quran and the Sunnah (examples of Prophet Muhammad). Historically, *waqf* has served many purposes, including the construction and maintenance of Islamic religious, educational, scientific, and social institutions. WWGF's patron is Tun Abdullah Ahmed Badawi, former Prime Minister of Malaysia. WWGF revitalizes *waqf* by leveraging on deep spiritual motivation for the revitalization of *waqf*, business-mindset, entrepreneurialism, crowdfunding, FinTech and hedge-fund-grade investment, as well as by being data-driven. WWGF focuses on few areas; namely, cash *waqf*, effective charity and *qard-al-hassan*. Cash *Waqf* is the backbone of the foundation.

- The advantages of Cash *Waqf* is as follows:
 - Alternative channel for *waqf* creation for the masses (the crowd)
 - Liquidity and flexibility
 - Offers capital creation for disbursement
- Upon receiving Cash *Waqf* from the crowd, WWGF uses the cash to extend interest free microfinance (*qard hassan*) or invested in real estate, equities, commodities and *sukuk* (Islamic bonds).

- Cash *Waqf* Crowd Funding is disruptive in view that they provide interest-free microfinance. Nevertheless, it provides several opportunities:
 - A channel for microfinance
 - Support existing Islamic microfinance organizations already doing amazing work
 - Encourage transparency and reporting through technology
- WWGF's partnership with PBMT have a \$3 million beneficiary base

Presentation 4: Crowdo

Crowdo was established in 2012, registered in Singapore and licensed in Singapore (debt & equity crowdfunding) & Malaysia (equity crowdfunding). Crowdo has a regional presence and markets at Singapore, Indonesia & Malaysia. Crowdo's management team are FinTech experts with more than 30 combined years of experience from top institutions.

Crowdo crowdfunding platform connects smart investors with smart business.

- An entrepreneur logs into the system, fills in the form and uploads documents to the system.
- Crowdo reviews the information and documents prior publishing it online and advertising the business via social media.
- Once the project is published on the platform, online investors can immediately invest in the business, thus reducing the time to find for door-to-door funding. Investors can embark on interactive Q&A sessions before investing in the business.
- The platform is a game-changer for start-ups, SMEs and investors.
 - Benefit to Startup: Efficient outreach to multiple investors via Internet and public relations visibility.
 - Benefit to investor: efficient deal-sourcing platform, diversification (bite-sized investments to diversify investment portfolio) and crowdsourced due diligence community.
- Crowdo also works with venture capital to bring parallel investments to the marketplace.
- Crowdo provides beyond financing support for the entrepreneur (e.g. public relation visibility, dedicated consultants provide end-to-end support).
- Achievement of Crowdo to-date:
 - Generated close to 30K members, with 1,200 projects financed to date (on average, 200 projects financed per month).
 - Record holder for highest ECF fundraise for "The Parenthood" (2.64 mil).
 - Typical time to close a multi-billion IDR loan is 2 days.
 - Typical time to close a multi-million IDR loan is 2 hours.
 - Zero cases of fraud.

Questions and Answers

1. What is the right balance between regulation and innovation?
 - Regulation adds advantage to drivers of crowdfunding. Making investment more comfortable and centralized. Regulation that is implemented in phases creates a more open and less restrictive environment. Notwithstanding limit imposed, it's a good kickstart for initial investment. It also creates awareness for investors and public at large.
 - Profit-sharing crowdfunding does not fall under any guidelines in Singapore, thus is not subjected to regulation. The leeway provides flexibility on the structure and is more appealing to young investors. Malaysia's regulator requires the platform to be more stable prior to registration. The benefit of regulation is there will be no speculation on the legitimacy of the platform from the beginning.
2. Crowdfunding also has limitation. Regulation not only restricts crowdfunding, but also other sources. Entry barrier entry may lead to unscrupulous behavior. What is your view on this?
 - We have governance in place (Shari'ah Committee) and transparency is one of the Islamic principles, thus this prevents unscrupulous behavior.
3. Microfinance was for poor people. What is the relationship between real estate and microfinance?
 - EthisVenture: We are a crowdfunding platform; we do not promote Ethis as microfinance but we are serving the segment served by microfinance.
4. Given current perception towards Islam, how do you introduce more positive outlook for your company?
 - Depending on where you are. Life is easy in Malaysia, different than in US due to different perception towards Islam. We made contract according to Shari'ah principles, but we use English (e.g. 'profit sharing' or profit and loss at an agreed ratio).
 - KIVA looks at impact (e.g. poverty score, income level, how microfinance effects income). KIVA also relies on the survey and research done by partner organizations. An impact expert from University of Berkeley looks into how lender monies go to community and effect their life.
5. How difficult it is to deal with regulator and what are some of the tips?
 - Focus on impact. It is a lot easier than opening a bank. Know your market, know the problem you want to solve, and have a proper plan.

Scaling Up for Greater Social Impact

Session Description: In microfinance, we seek to use the tools of finance to achieve the noble objective of empower those living in poverty to build a better future for themselves, their children and their communities. While expanding outreach is an important part of the success of microfinance, expanding the depth of outreach to include the most marginalized and vulnerable groups remains a challenge. They may require additional services, such as coaching, training, or access to health services, in order to participate more meaningfully in the economy and benefit from it. This session showcases some of the pioneering and promising examples of how institutions are innovating to maximize social impact.

Session Speakers:

Moderator: 21. **Dato' Mohd Hanif Sher Mohamed**, Chairman, Credit Counselling and Debt Management Agency, Malaysia

Panellists: 1. **Dato' Wan Mohd Fadzmi Wan Othman**, President/Chief Executive Officer, Agrobank Malaysia

2. **Abhishek Agrawal**, Chief Regional Officer – South Asia, ACCION

3. **Ricardo Tafur**, Regional Technical Advisory, International Finance Corporation (IFC)

Session Highlights

This session featured three different presentations on how financial institutions are providing value-added non-financial services to enhance the lives of their clients, while maintaining a focus on financial sustainability.

Presentations 1: AgroBank

AgroBank was established as a DFI in 1969 with initial funding from the World Bank. It is distinct from other banks, as its mission is enriching social well-being, particularly those who live in rural and semi-rural areas. It has four key strategic initiatives for value creations:

- Progressive outcome towards sustainable development goals
 - Aligning new micro enterprises in high-value and highly-demanded industries. Higher microenterprise participations through an innovative project structure (contract farmers, satellite growers)
 - Increase survival rates of young entrepreneurs in the agriculture business, by providing highly-affordable financing and flexibility in collateral requirements through cash-flow financing
 - Higher output through multiple production sites, economies of scale and increasing yield and income

- Designed suitable products and services to cater to strategic segments
 - Specialized financing programs based on risk profiles of microenterprises e.g. Paddy-i provides comprehensive financing for rice farmers
 - Financing products to facilitate asset ownership – e.g. MAEF-I, the only bank to finance the purchase of agricultural machinery
 - Wide range of financial solutions to cater to the entire agriculture value chain
 - Structured savings and investment plan
 - Comprehensive protection plan for marginalized community
- Explore new intermediary channel and robust geographical presence for greater access
 - Internet banking that caters to the specialized needs of micro enterprises
 - Greater client outreach through physical branches and agro agents, even in remote locations
 - Cashless payment platform through the only debit card cash management services that link to government subsidies for agriculture.
- Intensify outreach for greater financial literacy and entrepreneurial readiness (163 programs)
 - Structured business advisory program and business clinics
 - Centre of Excellence (ACEDiA) for agriculture financing to provide advisory services and improve financial literacy
 - Capacity building and knowledge sharing
 - Entrepreneurial development programs
 - Technical trainings for micro enterprises
 -

Presentation 2: ACCION International.

Accion's vision is a financially inclusive world – one in which every individual has access to high-quality, affordable financial services. This means that in addition to providing financial services and investing in FinTech innovation, there is a need to build the capacity and capability of clients. Building financial capability is not a one-time effort but needs to be a continuous process. Some of the key principles for building financial capability are

- Teachable Moments: Reach consumers when they are making financial decisions
- Learning By Doing: Let consumers practice using financial products
- Nudges, Reminders and Default Options: Timely reminders and default options support good habits
- Rules of Thumb (Heuristics): Mental shortcuts help turn learnings into habits
- Make It Fun: Games and humor aid learning
- Customize It: Tailor advice to an individual's specific financial situation
- Make It Social: Leverage the power of social forces

Accion's financial literacy program helps clients improve their ability to manage their personal and household finances, and become informed and effective consumers of financial services.

- The core financial management skills provided in the programs allow low-income clients to move beyond credit management to access and effectively use important asset-building tools such as savings and insurance.

- Financial literacy is also a critical component of consumer protection, creating knowledgeable clients who can more effectively use financial services and avoid the risks of over-indebtedness.
 - The program is targeted at low-income household members with low levels of education and includes courses on financial planning, cash flow management, budgeting, investing, insurance, savings and debt.
 - Accion is now developing innovative ways to deliver content to low-income clients – such as video and broadcast media – in addition to traditional training methods. These new delivery methods aim to more effectively train larger groups of low-income clients, including those who are unable to read.
 - Dialogue on Business (DOB) is a business skills training program developed for adult learners and based on the knowledge and experience of program participants. It uses interactive games and role-playing to help participants solve real-life business challenges. Because the workshops are based on the real situations of participants, rather than textbook cases, DOB is especially engaging for people with little formal education who may not learn effectively in a traditional classroom setting
 - Within a year, ACCION can see the impact and changes of the trainings in the participants, with improved skills in managing financials, increased savings and higher profits
- Accion’s Center for Financial Inclusion spearheaded the global campaign to promote client protection principles. Through an industry wide consultative process, “The Smart Campaign Principles for Client Protection” were developed and are now considered industry standards. These are now being updated to include principles on responsible digital finance.

Presentation 3: International Finance Corporation (IFC)

The session shared the experience of Vietnam DFIs in optimizing social impact through non-financial services. MFIs in Vietnam mostly grew out of development projects and are owned by mass organizations. The demand for non-financial services in Vietnam is high, and microfinance clients highly value these services. The Vietnam MFWG conducted a survey in 2016 of 296 microfinance clients, and it showed very high demand for financial literacy training as well as capacity-building skills. Two MFIs, TYM and Thao Hoa, are providing value-added services beyond financial services to their clients.

- TYM is a limited liability company run by the Vietnam Women’s Union, operating in 12 provinces with 20 branches. It invests about 4 percent of its total operating cost (approx. \$250,000) to provide non-financial services. This budget includes some funding from donors as well as its own profits. The services provided include
 - Training and capacity building – healthcare, start-up, literacy trainings and study tour
 - Community support – medical check-ups, home improvement, education and scholarship, infrastructure and women’s empowerment
 - Business development services – value chain, trade fairs twice a year, and connecting to markets

- Thanh Hoa is a limited liability company FPW Thanh Hoa & Thanh Ha Ltd. Company with four branches in one province. It invests about 1 percent0% of its total operating budget (USD70k) from its profits and about \$140K from donors to provide value added non-financial services to its clients. The services include
 - Personal financial management training for ethnic communities and resettled farmers
 - Advisory services
 - Healthcare and sanitation training along with loans for clean water, latrines, nutrition
 - Community support – gender equality, agriculture techniques, risk management
- Clients' needs assessments are conducted regularly through surveys, group discussions and loan officers' experience with customers, either by the MFIs themselves or by specialized entities (external). KPIs are set for each non-financial service provided to measure the outcome.
- Value-added creations benefit both MFIs and clients. It increases loyalty to MFIs, increases reputations, and mitigates credit and operational increases. The interactions with customers provide avenues to explore other potential financial services (e.g. insurance).
- However challenges still arise such as funding, attraction of participants/beneficiaries, quality control of services, balancing the agenda of donors/partners with MFIs and adverse impact if the non-financial services do not fulfil clients' expectations.

Questions and Answers

- While non-financial services could increase demand of the products, how to cover the cost of these services?
 - Financial literacy should not be charged and should be kept separate from sales, but it should be part of business expansion expenditure.
 - For DFIs, there are some concessionary funds available, but they have to properly manage them to remain sustainable e.g. their portfolios should at least be able to generate minimum return. DFIs could also subsidize the social mandate from its commercial income. One has to understand what clients wants and package it to mitigate the risk.
 - Financial literacy should not be charged. Quality of the training is important.
 - You have to differentiate between marketing costs, development costs, and financing costs.

The Way Forward for Microfinance Institutions – Perspectives of the Pioneers

Session Description: Three decades ago MFIs disrupted the global financial system, and provided millions of the world's poor with access to microloans and the potential to boost their businesses and livelihoods. But now, traditional MFIs are competing against mobile network operators, commercial banks and FinTech startups for their place in a changing global landscape. Are they still relevant, do they serve a niche and how do they adapt to survive? During this session, the pioneers in the industry will attempt to answer some of these challenging questions by looking at the past and gazing into the future.

Session Speakers:

Moderator: 22. **Michael Steidl**, Senior Financial Sector Specialist, World Bank Group

Panellists:

1. **Aznan Abdul Aziz** , Director of Financial Sector Development, Bank Negara Malaysia
2. **Daryl Collins**, Managing Director, Bankable Frontiers Associates (BFA)
3. **Michael Tarazi**, Lead Financial Sector Specialist, CGAP

4. **Margaret Miller**, Global Lead, Responsible Financial Access, World Bank Group

Session Highlights

The session was an opportunity to discuss the opportunities and challenges faced by the microfinance industry as technology reshapes the financial inclusion landscape.

Key Messages:

Technology can help MFIs deliver greater value to clients: Why most MFIs start with loans is because it's the best value proposition to the poor. Digitization can help service providers understand their clients better, and make the face-to-face interaction more meaningful. MFIs are not competing with other institutions, but with their own products or services, and need to create products that meet the actual needs of the clients, and face-to-face interactions can help their clients understand this better. When loan officers have all data on the customers at their fingertips, they can deepen the interactions with the customers and focus on customer satisfaction. Digitization doesn't mean that you won't have face-to-face interaction with your clients.

Build trust and work on small, incremental products and services: Trust is in the heart of financial intermediation. Trust that all parties will fulfill their obligations. By creating incremental products, this will slowly bring in customers. M-PESA focused on airtime top-up as initial added value, to get people to make use of mobile e-money to start with.

Improving customer adoption: On the demand side, technology is only good when people use it because it solves a specific problem for them. Woods underlined the challenge of improving customer adoption, and said that deepening this is important to drive scale and encourage use. Simple design of products and services that address customers' problems can drive adoption.

Technology can create operational efficiencies: New branchless banking methods show promise in bringing down the costs of transactions, but institutions need to develop new client engagement methods that are more targeted and demand-driven. Cross-selling more than one product is important to better serve clients sustainably.

Rise of big data: Technology has allowed analysis of the mass of information now available through digital sources. This creates opportunities to reduce the costs of dealing with clients. Several private-sector players have started using big data for credit and insurance purposes, since this brings down the costs of providing these services, especially for low-income customers. This is where the economics come into play to support greater access to a full range of financial services. Prime examples include the more than 9 million customers of M-PESA who now have access to savings and credit from the Commercial Bank of Africa in Kenya.

Alternative Funding Apps: New apps such as P2P funding and crowdsourcing are game changers. These platforms can provide access to small and medium-size enterprises having

difficulty obtaining financing from banks. These players offer more flexibility and use alternative data to provide access to financing for entrepreneurs.

Sharing credit data: While there has been much innovation around the role of alternative data and analytics to enable credit, many of these developments are not open and these new FinTech players, as well as crowdfunding platforms, are often not sharing their data with credit bureaus due to challenges, compliance costs, and proprietary models; so ensuring that credit data and history is shared openly is important for regulators to look at.

Identification and biometrics: Developments in the use of national identification cards, especially those in India that support biometrics, not only facilitate KYC compliance, but reduce risks and support transactional verification at much lower costs. They also create the basis for linking direct transfers and other subsidies from the government and reducing redundancies.

Supportive regulation to drive innovation: Governments and regulators, such as Bank Negara Malaysia, are providing space for “regulatory sandbox” testing of new digital financial services. A regulatory sandbox, such as the one established by Bank Negara Malaysia in early 2017, creates a ‘safe space’ in which financial service players can test innovative new products, services, delivery mechanisms and business models without immediately incurring all the normal regulatory costs and lengthy approval procedures. This speeds up financial innovation, and allows a greater range of financial service products to be tested and introduced than would normally be possible under more traditional and lengthy approval processes. We see the use of cloud-based services driving the market, along with delivery channels, especially the use of biometrics for attracting as well as verifying customers to facilitate financial transactions. The various new applications around the use of mobile money technology to support financial services for the poor are also helping to drive adoption.

Partnerships are key, but also challenging: Partnerships between traditional players like banks and new players, such as mobile network operators and FinTech companies, offer tremendous potential to reach large numbers of customers, hence getting partnerships right is a big challenge. As more players connect to financial institutions, they are all only as strong as the weakest link in the value chain.

Challenges of consumer protection and education: When digital solutions to financial services, such as through mobile, are offered to common people, bridging the gap in the use of technology can be a serious problem. Lacking familiarity with digital technology, customers often experience difficulties as they adopt and learn to trust it. Effective, consumer-centric financial education can address this challenge and protect those consumers against digitization’s risks. Digitization of processes can make it easier to access bank services, particularly in getting loans. However, having easy access to credit is a double-edged sword, as consumers can be caught in a debt trap and over-indebtedness. A credit bureau and consumer financial education can help guard against this. Investing in consumer protection and education should be an integral part of the business plan for digital financial service providers.¹

Ensure access to technology: Without full access to technology, all of the work in digital financial services will not reach those at the base of the pyramid, so the digital divide must be addressed. Challenges in this area include slow and unreliable Internet services and lack of coverage, particularly in more rural areas where the challenges to provide financial access are most difficult. To properly address this issue, countries need to focus on ensuring access to the Internet for all