

POINT OF VIEW



Digitizing Financial Inclusion

by Tae Yoo, Senior Vice President, Corporate Affairs, Cisco



Accelerating Financial Inclusion with Digitization: Bringing an End to Extreme Poverty

Imagine how much harder your life would be if you had no access to a bank.

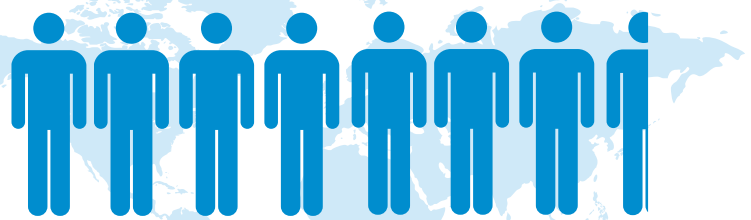
How would you manage your financial resources? How would you save for retirement or large expenses like buying a car? How would you support yourself if you got sick or injured and could not work? How could you plan for the future?

Now imagine how much harder it would be if you were poor. Without a steady paycheck or collateral, most banks will not provide access to financing. Even when people have some income or money, the amounts to deposit are so small, most banks won't even open a savings account.

Today more than 2.5 billion people lack access to formal financial services.¹ Known as the “unbanked,” most of these individuals are living close to or below the poverty line.² More than 760 million people worldwide live on less than \$1.90 a day, and the majority do not have a regular, predictable income.³ These people are from all walks of life. They are teachers and home workers who do not have consistent work. They are farmers who earn income only once or twice a year when they sell their crops. And they are entrepreneurs who can't raise the capital they need to start a new business and create new jobs.



760 million people worldwide



live on less than **\$1.90** a day



The High Price of Poverty

At the most basic level, being unbanked is about equity.

People who do not have access to loans, saving accounts, insurance, and other financial instruments and services are marginalized from society. This means they aren't able to achieve their full potential. But the problems of the unbanked extend far beyond the individual.

Being unbanked stifles innovation. Imagine a young woman with an idea to start a small business selling produce. Being unbanked means a traditional bank will not give her a loan because she does not have a credit history or collateral. She is not able to realize her goals and dreams, not because she doesn't have a well-conceived idea, but because she does not have the means to implement it. There is also the long-term impact on society when great ideas are lost because funding could not be secured.

Being unbanked means lack of stability. Consider a farmer whose crops get wiped out in a flood or are destroyed by a drought. He has no crop insurance to cover his losses, nor can he get a loan so his

“

The problems of the unbanked extend far beyond the individual. ”

family can keep the farm until the next season's crop. And so another family sinks deeper into poverty.

Being unbanked makes it harder to escape poverty. Without access to a savings account, a family may be unable to afford medicine or keep their children in school so they can create a better life for themselves.

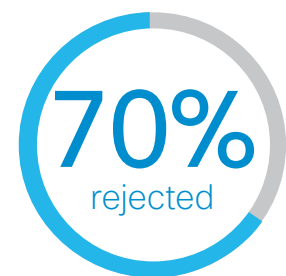
Being unbanked is not solely a problem of the developing world. In the United States, for example, small businesses employ the majority of Americans, creating two out of every three new jobs.⁴ Yet, access to financial capital continues to be a major barrier to the growth of small businesses.⁵ In fact, 70% of small business loan applications are rejected by traditional financial institutions.⁶ Lack of access to financial services not only stifles human potential, it stifles job creation, impedes economic growth, and perpetuates the cycle of poverty.



Being unbanked is **not** solely a problem of the developing world



Small businesses in the U.S. create two out of every three new jobs



70% of small business loan applications are rejected by traditional financial institutions

Financial Inclusion as a Solution

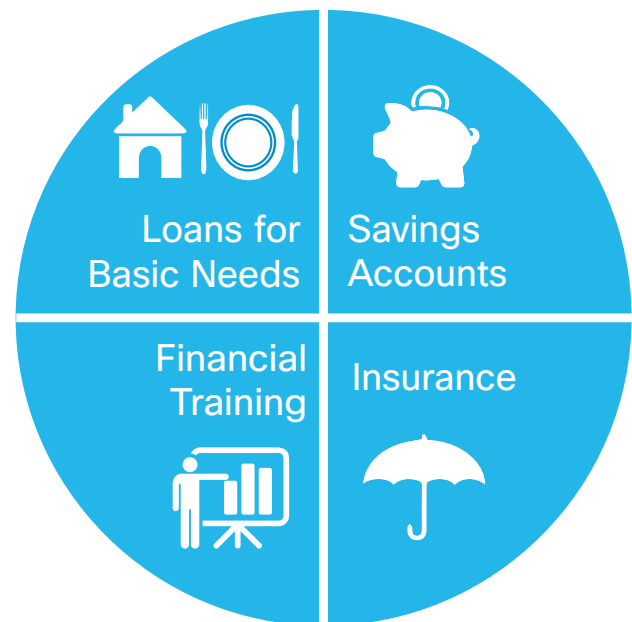
Financial inclusion is an approach to help people become financially independent and economically self-sufficient.

This is achieved by providing access to affordable and relevant financial products and services. Financial inclusion helps underserved populations increase their productivity and incomes. But financial inclusion means more than just helping those in poverty start new businesses. In many cases, they need help to provide food, housing, and healthcare for their families, as well as to invest in education for their children.

Consider Alice Katuramy from Uganda⁷ who started a small cattle farm with her husband to ensure her children could go to school. Their business was barely surviving. With a loan from Opportunity International, Alice was able to buy more cows as well as receive training on how to manage expenses and improve her farming practices. Today, Alice has more than 30 cows and mentors other farmers on how to raise good cattle. In addition, her farm has created four new jobs employing her neighbors. Alice is also using an Opportunity International savings account to protect her income and save money to buy dairy cows.

Financial inclusion is seen as a key priority and means of reducing poverty in a manner that ensures inclusive economic growth. The World Bank, for example, has set a goal of ensuring universal access to financial services by 2020.⁸

Financial inclusion means more than just loans



Financial inclusion means more than just loans to start or grow a business. Alice was successful because she had access to a combination of services:

Loans for Basic Needs: People need to be able to meet their basic needs before they can achieve economic stability. They may need different types of loans to purchase a clean cook stove or toilet, to buy or repair a house, to pay school tuition, or, in some countries, to cover marriage expenses.

Insurance: From crop and cattle insurance to personal health insurance, people need to be able to reduce their vulnerability to disaster and the unexpected.

Savings Accounts: People need to be able to save for unforeseen expenses or to build up capital to make larger investments.

Financial Literacy Training: Knowing how to manage money is a critical skill. To succeed, people need to understand which financial tools are the best suited to their needs. They also need to be aware of overextending themselves, as well as what their rights are as borrowers/consumers.

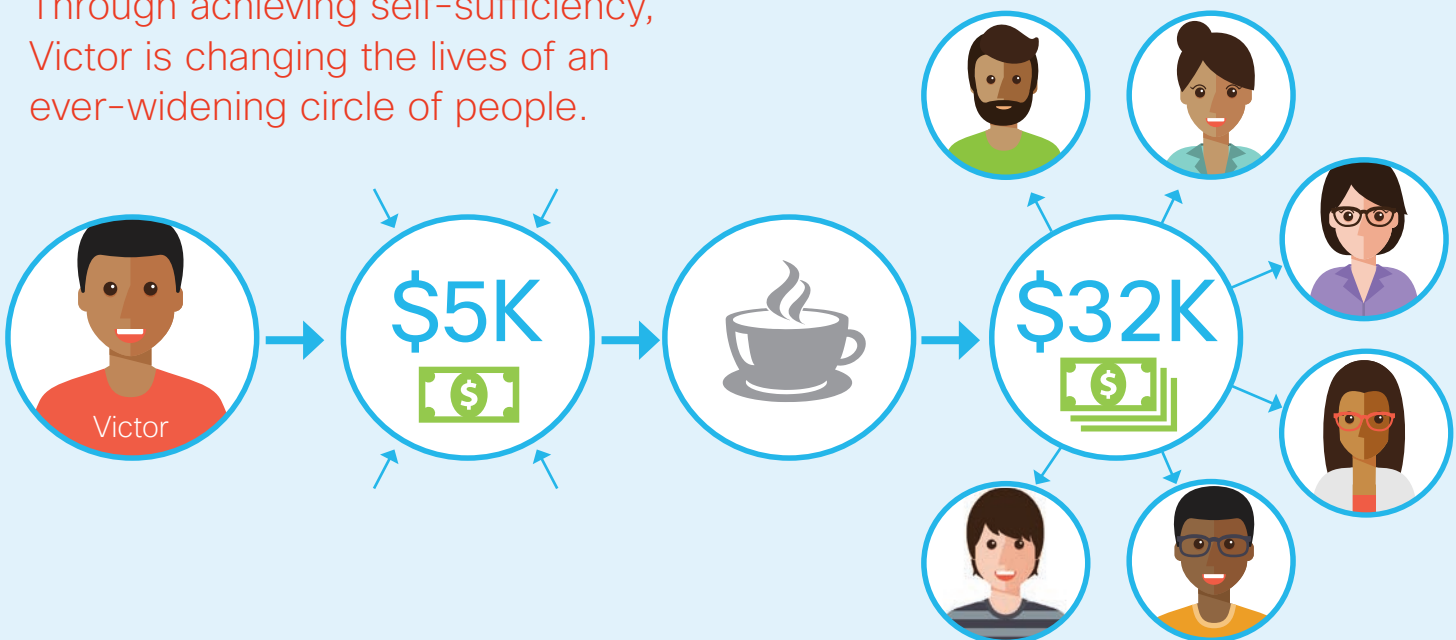
The most compelling evidence of the power of financial inclusion is to look at the individuals it impacts. Victor wanted to open a coffee shop in San Francisco, California, but could not get a business loan from a U.S.-based bank or microfinance institution (MFI). He was, however, able to secure a \$5K loan from Kiva's peer-to-peer

lending network (see appendix A). His loan was crowd-funded by 67 Kiva lenders. Sometime after paying off his first loan, Victor took out a second loan to remodel his coffee shop and hire additional staff.

Perhaps the most powerful part of Victor's story is not just how he changed his own life, but how through achieving self-sufficiency, he is changing the lives of those around him. Through his success, Victor has become a Kiva trustee himself and has endorsed six Kiva U.S. borrowers, bringing \$32K of small business loans to other entrepreneurs in his community.

Kiva helped Victor lift himself up. Now Victor has been able to help lift up others, who in turn will be able to help an ever-widening circle of people.

Through achieving self-sufficiency, Victor is changing the lives of an ever-widening circle of people.



The Foundations of Financial Inclusion

To meet the demand for universal financial services, financial service providers need the capacity to address the needs of the unbanked.

To date, microfinance institutions (MFIs) have successfully brought access to financial services to more than 100 million unbanked people around the world.⁹ However, to meet the World Bank's goal of universal access by 2020, even more has to be done.

Specifically, MFIs need to build out the basic infrastructure, technology, delivery channels, management, and staff capacity to design and deliver a variety of appropriate and affordable services. In addition, they need to be able to

service a large number of people in rural and remote areas, as well as handle large numbers of small transactions, in a sustainable manner.

At the same time, strong systems need to be in place to protect individuals. Transparency and accountability are key in enabling clients, financial institutions, investors, credit rating agencies, and funders to determine whether a financial service provider is effective and efficient. This includes mechanisms for ensuring that appropriate services are offered, delivery channels can reach unbanked individuals, over-indebtedness is prevented, responsible pricing is in place, and clients receive fair treatment.

Finally, organizations that work with underserved populations need to be able to measure their





Organizations that operate in highly-impooverished areas and rely on assumptions to inform their business decisions and strategy will be far less effective than those acting on objective poverty data. ””

poverty outreach and track progress over time. Decisions that impact the lives of the poor should be driven by high quality data. Organizations that operate in highly-impooverished areas and rely on assumptions to inform their business decisions and strategy will be far less effective than those acting on objective poverty data.

By collecting poverty data from all or a statistically significant sample of the households they reach,

organizations can:

- Measure their poverty outreach (i.e., the portion of their customers, clients, or employees who live below the poverty line or are vulnerable to becoming poor)
- Design products, services, and other interventions that better address poverty-related issues
- Assess the performance of anti-poverty interventions among the poor and poorest
- Track poverty levels and outreach effectiveness over time

With these types of data, management staff can then make informed strategic decisions and provide stakeholders with objective evidence that the organization is effectively reaching the poor and those vulnerable to poverty.

Collecting poverty data can:



Measure poverty outreach



Design better products



Assess performance



Track outreach effectiveness

The Challenge of Ending Extreme Poverty

To bring the world together to meet the needs of the world's poorest, the United Nations created the Millennium Development Goals (MDG).

The original set of eight goals included reducing extreme poverty rates by half by 2015. This goal was achieved five years ahead of schedule.

Building on the MDGs, the United Nations has created the Sustainable Development Goals (SDG). Goal 1 is to end poverty in all its forms everywhere. However, global forecasts on poverty reduction suggest that the United Nations' target of ending extreme poverty by 2030 will not be met.¹⁰

Consider the cost of bringing traditional financial services to rural areas with low population density and poor infrastructure. Commercial banks often avoid serving people living in poverty because

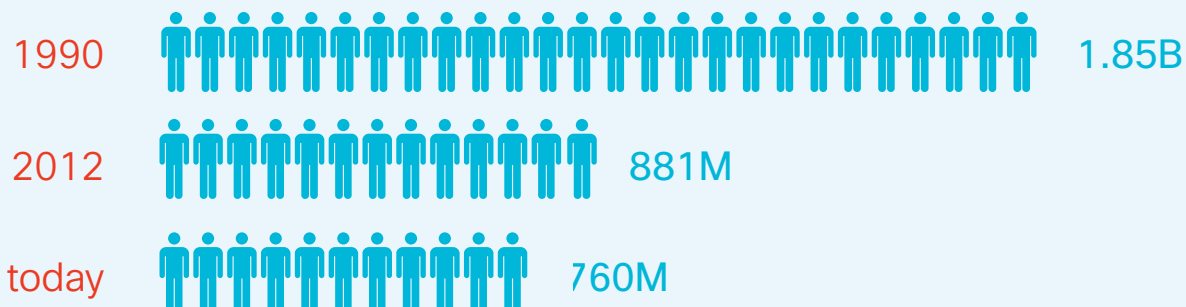
“

Global forecasts on poverty reduction suggest that the United Nations' target of ending extreme poverty by 2030 will not be met. ”

of the infrastructure costs of setting up formal branches and the high operating costs associated with processing many small transactions.

Today, the 760M+ people who live on less than \$1.90 a day is an improvement from 881M in 2012 and 1.858B in 1990.¹¹ However, while poverty rates have declined in all regions, half of the world's extreme poor live in Sub-Saharan Africa. In addition, the majority of the world's poor live in rural areas, are poorly educated, and are under 18 years of age.¹²

Number of people living on less than **\$1.90 a day**



¹⁰ United Nations, 2015

¹¹ The World Bank, 2016

¹² The World Bank, 2016

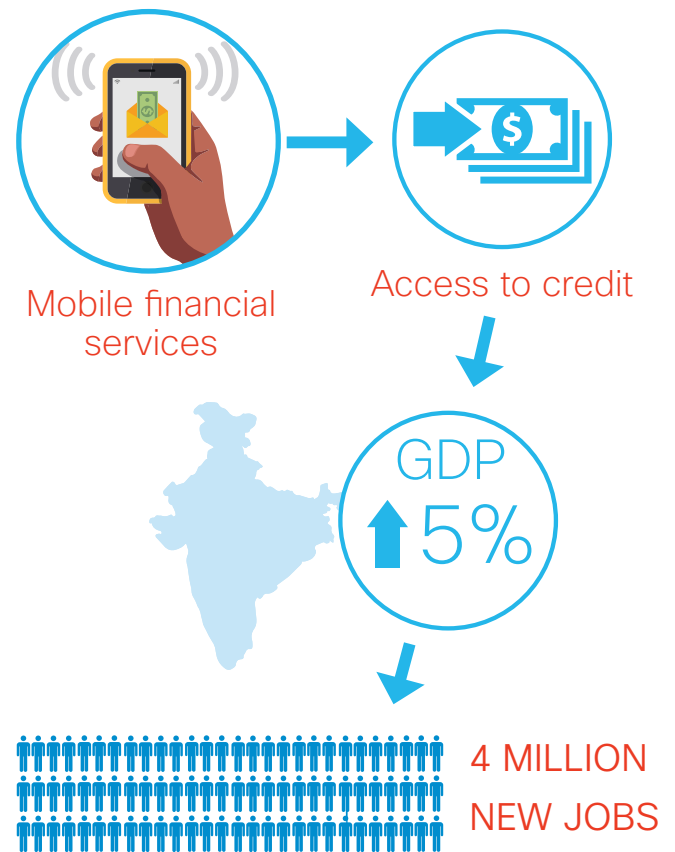
Financial Inclusion and Digitization

Financial inclusion will play an important role in ending extreme poverty. The availability of financial services to the unbanked directly leads to increased economic activity throughout a region. A Boston Consulting Group (BCG) study examining the impact of mobile financial services across multiple countries found that mobile financial services alone has the power to increase gross domestic product (GDP) by up to 5% in the countries examined.¹³

In India, for example, the BCG study estimates that India's GDP could rise 5% by 2020 through the addition of mobile financial services in society. Increased access to credit, greater investment opportunities, and the creation of new businesses could result in an additional four million jobs for India's workforce.¹⁴

However, more needs to be done to reach the unbanked throughout the world. Of the 2.5 billion unbanked, one billion currently have access to a mobile device. This means that mobile financial services hold great potential for reaching the unbanked.¹⁵ And as mobile device usage continues to proliferate around the world, it offers an effective, scalable, and economical way to deliver financial services.

“ The availability of financial services to the unbanked directly leads to increased economic activity throughout a region. ”



Of the 2.5 billion unbanked, **ONE BILLION** currently have access to a mobile device.

13 Telenor Group, 2012
 14 Telenor Group, 2012
 15 Telenor Group, 2012

Technology-based solutions like mobile banking, Point of Sale (PoS) solutions, and ATMs, among others, use digitization to enable financial service providers to more easily scale among rural and remote areas. Digitization connects people, processes, and things intelligently. This gives us access to more data that we can use to make more intelligent decisions and so derive more benefit from the digital revolution.

Financial inclusion is an important step in enabling every individual to engage in the digital economy and benefit from the tremendous opportunities digitization can bring to society. In turn, digitization is key to accelerating the impact of financial inclusion:

- **Scale** to more people through a connected network of experts, services, and devices
- **Reach** rural and remote areas, particularly the most vulnerable populations (e.g. rural, youth, low income, women, etc.)
- **Greater efficiency** so financial service providers can process large numbers of small transactions in a cost-effective manner
- **More effective impact** through data collection and analysis leading to solutions that open doors to additional opportunities
- **Enable self-sufficiency** of the unbanked faster
- **Replicate** what we have learned so we can bring these solutions to multiple sectors and geographies around the world

The Key to Accelerating the Impact of Financial Inclusion:



Scale



Reach



Greater Efficiency



More Effective Impact



Enable Self-Sufficiency



Replicate

Creating Opportunity

Cisco believes that digitization will play a pivotal role in increasing inclusive access to financial products and services to individuals in poverty throughout the world.

Digitization has the potential to be a great equalizer— it enables us to reach the most people possible and the people who need that support most.

Our economic empowerment investments focus on leveraging the power of digitization and technology to support underserved individuals to become economically self-sufficient. This is part of our wider strategy to invest in initiatives that increase access to knowledge and skills, employment, micro/small business development, and financial inclusion. To ensure long-term success, we also validate that the initiatives in which we invest are able to demonstrate social impact for the intended population and themselves have a path to financial sustainability.

The aim of our financial inclusion strategy is to apply the power of digitization to:

- Extend reach to more people and to reach previously excluded populations
- Increase the volume and diversity of financial products and services available for the underserved, including the use of digital financial services

“

Digitization has the potential to be a great equalizer— it enables us to reach the most people possible and the people who need that support most. ”

- Build the capacity of the microfinance industry to ensure they have the ability to design, offer, and oversee the implementation of these services
- Provide access to timely and relevant data to increase transparency and accountability of the microfinance sector
- Collect data to measure outreach, design new interventions, and track progress over time

Cisco continues to partner with leaders in microfinance to bring the benefits of digitization to all the world’s people, including organizations like Kiva, Opportunity International, Freedom from Hunger, and the Microfinance Information Exchange. Cisco has also supported Innovations for Poverty Action (IPA) in taking over the Progress out of Poverty Index (PPI)[®], a powerful tool for understanding the needs of vulnerable populations better. For a detailed look at how Cisco has enabled these organizations to increase their impact through digitization, see Appendix A: The Power of Digitization.

Bringing the World Together

While the world continues to make progress toward ending extreme poverty, there is still much work to be done to meet the needs of the unbanked.

The unbanked need access to financial services that can help them take care of their families and lift themselves out of poverty. Financial inclusion is an important part of enabling self-sufficiency.

Digitization will play a key role in accelerating the impact of financial inclusion. Digitization increases the reach and capacity of financial service providers. It provides transparency and accountability to protect the individual. Digitization also facilitates the collection and analysis of data so we can confirm who actually needs help and that we are actually helping them. Finally, digitization enables providers to offer a wider range of services designed to better meet the needs of vulnerable populations, especially those living in rural and remote areas.

In the end, however, digitization is just a tool. Without the involvement of global problem solvers to take action, poverty will continue to exist. This is why Cisco continues to develop relationships with new partners and make investments in organizations developing innovative solutions to advance positive social change.

For example, Cisco has recently announced its partnership with CARE (Cooperative for Assistance and Relief Everywhere) to help support its digital agenda and scale its efforts to fight global poverty. The organization delivers emergency relief that helps people withstand and overcome disasters such as the 30-year drought in Ethiopia and recent earthquakes in Nepal. Last year, CARE worked in 95 countries and reached more than 65 million people. Here at Cisco, we are excited to see how much further CARE's reach will extend through digitization.

Digitization brings the world together. Together we can make the vision of ending extreme poverty a reality.

The time to act is now. Will you join us?



Appendix A: The Power of Digitization

The following case studies illustrate how digitization can increase the reach and impact of organizations to support underserved individuals and help them become economically self-sufficient.

Extend reach to more people and to reach previously excluded populations

Kiva envisions a world where all people hold the power to create opportunity for themselves and others. Kiva's mission is to leverage the power of technology to connect people via lending to alleviate poverty. To do so, Kiva provides an **online, crowd-sourced, peer-to-peer lending network** where people can lend money to underserved individuals around the world.

Cisco is partnering with Kiva on its Kiva Zip initiative. Kiva Zip provides a platform for person-to-person lending and support to U.S.-based micro- and small-entrepreneurs. Individuals can browse the profiles of potential borrowers and choose to provide micro-loans. While microfinance has been successful globally, it has not had the same success in the United States where the high cost of reaching underserved small businesses is the primary barrier to scaling.

Cisco has provided seed funding to develop and pilot test the Kiva Zip model, and apply digitization to **integrate Zip into the main Kiva platform**. It is now fully integrated within Kiva's main platform under the name Kiva U.S. Kiva has been able to **streamline and automate processes, scale to reach more people**, and put the organization on a track to sustainability.

Digitization has enabled Kiva to connect entrepreneurs with good ideas but insufficient capital to lenders and trustees to meet those capital needs. Based on Kiva's successful crowd-funding model, low- and moderate-income individuals who have not been able to get a loan from a traditional source are vetted and are now able to secure zero percent interest loans.

Early results have been impressive: 2,800 underserved U.S.-based entrepreneurs have been able to secure loans in the initial one-year grant period. Of those who hired additional people, an average of 2.1 net jobs were created per loan.



- 2.1M borrowers and 1.5M lenders across 83 countries
- 1M+ loans totaling more than \$900M
- 97% repayment rate
- More than 490K farmers supported
- 56K+ people gained access to clean energy
- 24K+ education loans

Appendix B: The Power of Digitization

Increase the volume and diversity of financial products and services available for the underserved, including the use of digital financial services

Opportunity International (OI) is global non-profit organization that provides financial solutions and training to empower people living in poverty to transform their lives, their children's futures, and their communities. First, OI focuses on key sectors that will yield the most impact, such as agriculture and education. Then OI employs a triple-bottom line approach to their work: scale, sustainability, and impact. Finally, by leveraging each dollar with savings and other sources of capital, \$1 within the system becomes \$6 over a five-year period.

Cisco provided support to develop and pilot **mobile money solutions** in three countries in Africa (Uganda, Rwanda, and Malawi). The goal of the initiative has been to increase the breadth and depth of services to clients via **digital financial services offerings**. Some of these services designed and launched by OI include:

- **Providing direct financial education to clients via group loan meetings as well as via mobile phones**
- **Building out a full suite of mobile money products, including deposits, balance, payments, etc.**
- **Expanding mobile money customer access points** by enhancing OI agent networks to make deposits and withdrawals more convenient

In just two years, the program has scaled to reach more than 400K people in six countries. With 1,300+ financial access points in Sub-Saharan Africa, digital transactions total \$3.5M per month. In addition, the program piloted a branchless banking model in Tanzania supporting the use of mobile money for cashless agricultural loan disbursements and repayments, as well as **digital technology for data capture from smallholder farmers including land mapping, data storage, and real-time reporting.**



OPPORTUNITY
International

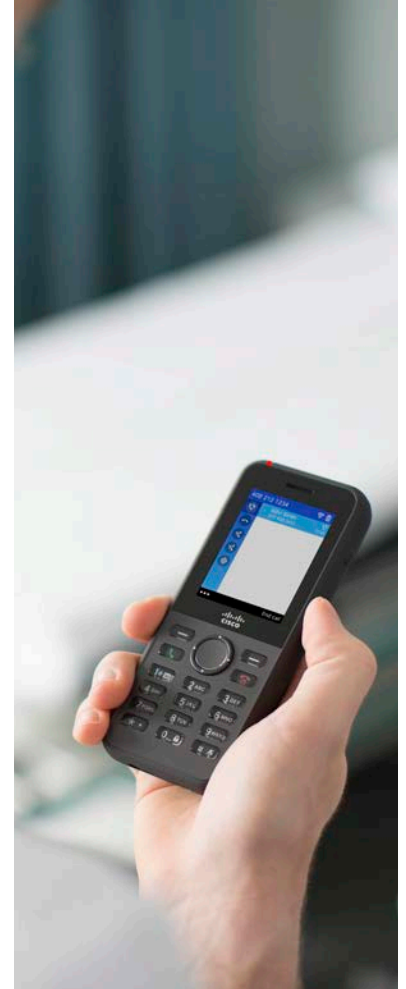
- 14M clients in 24 countries
- 4M loans clients
- 4.9M savings clients
- 13.6M lives protected via insurance
- \$1:\$6 impact over five years

Appendix B: The Power of Digitization

Based on the success of the pilot, Opportunity International (OI) will be expanding its digital financial services program to introduce new products and services to further enrich clients' experiences, including:

- Two-way SMS communications, which will allow greater interaction between OI and its clients
- Voice-based messaging, which enables OI to serve clients who are unable to read
- Partner digital platforms to enable clients to see a more holistic view of their finances
- Deliver training via mobile phones so clients can receive training in financial literacy
- Equipping all trainers with tablets, ensuring all staff can share information more efficiently when working remotely with rural clients.

The power of digitization benefits Opportunity International not only in improving their business operations, but also the unbanked populations they are charged with serving.



Appendix C: The Power of Digitization

Build the capacity of the microfinance industry to ensure they have the ability to design, offer, and oversee the implementation of these services

Freedom from Hunger (FFH) brings innovative and sustainable self-help solutions to equip families with the resources they need to build futures of health, hope, and dignity. FFH promotes value-added, integrated microfinance programs that pair financial services with other resources like education and health protection.

Cisco supports FFH's efforts to improve the financial and social performance of microfinance institutions (MFI) by using **distance learning** to strengthen the core competencies of field staff. Many MFIs lack the capacity to provide adequate training to their field agents, thus jeopardizing the quality of service delivery, putting the organization at risk of poor portfolio quality, and potentially leading clients into over-indebtedness.

Cisco helped fund the **platform that e-enabled their curriculum** and scaled their approach. The platform was developed and executed against an earned revenue model to ensure FFH's long-term financial sustainability. This is helping FFH improve the efficiency and effectiveness of their programs. It also enables them to scale their reach to train more field agents so that, in turn, more people can be given access to financial products and services.

The end result is more efficient, effective, and capable staff able to maximize social and financial benefits for people with limited economic and educational opportunities. For example, in Latin America, 1,455 MFIs employ an estimated 44,300 field agents who serve 18.2M borrowers. Conservative estimates forecast that in the next 12 months, the program will reach over 2,500 individual agents, in turn reaching 500K+ of FFH's target beneficiaries with quality financial and educational services.



- 6M beneficiaries (99% women)
- 23 countries
- 180 partners
- Reaches 28M family members
- Training to reach 2500+ individual agents, in turn reaching 500K beneficiaries

Appendix D: The Power of Digitization

Provide access to timely and relevant data to increase transparency and accountability of the microfinance sector

The Microfinance Information Exchange (MIX) provides market data and intelligence on financial service providers who serve low-income populations with the mission of promoting transparency. MIX provides objective, integrated data on providers, including more than 100 financial, operational, and social performance indicators.

Cisco supports a variety of connect MIX initiatives to help **leverage technology and digitization to provide objective, validated, and relevant performance data and analysis**. We helped MIX **migrate to an online platform and e-enable their data collection, validation, and analysis capabilities**. The Financial Inclusion Maps initiative overlays country-level macro-level data with microfinance sector data to map financial literacy, mobile access, education level, Internet access, employment, access to clean water and shelter, etc. Cisco also supported the development and pilot of the Voice of Client Initiative. This initiative uses **mobile phones to collect anonymous feedback** from clients. In addition to assuring that clients are being treated responsibly and fairly, it enables MIX to better design and deliver products.

- Maintains profiles on more than 2K financial service providers globally
- Tracks and reports on 100+ financial, operational, and social performance indicators
- Provides interactive online tools to analyze and compare data points across providers, countries, and regions



- Maintains profiles on more than 2K financial service providers globally
- Tracks and reports on 100+ financial, operational, and social performance indicators
- Provides interactive online tools to analyze and compare data points across providers, countries, and regions

Collect data to measure outreach, design new interventions, and track progress over time

The Progress out of Poverty Index (PPI) is a poverty measurement tool designed for use by organizations and businesses with a mission to serve the poor. Since 2010, the Cisco Foundation has provided support to e-enable the PPI and ensure the long-term financial sustainability of the program. Cisco supported multiple facets of the PPI, including:

- Development of PPIs for new countries
- Updating of existing PPIs
- **E-enabling PPI training, certification, and customer support to employ data collection and analysis for better decision-making**
- Expanding awareness of the PPI and the number of organizations using the index

More recently, Cisco supported a two-year plan to transition the PPI to a new home and structure as part of its long-term financial sustainability. The PPI has been taken over by Innovations for Poverty Action (IPA), a world-renowned research and policy non-profit that discovers and promotes effective solutions to global poverty problems.

Today, the index is used by more than 500 organizations who reach more than 180M poor and very poor clients in 60 countries. Through the PPI, the needs of vulnerable populations are better understood. Organizations can identify those who are mostly likely to be poor or vulnerable to poverty. The PPI is showing strong returns, as is evidenced by the hundreds of organizations that now have access to household-level poverty data and are using this data to increase their impact.



- Covers 60 countries and 90% of the world's poorest people
- Used by 500+ organizations reaching 180M people
- Increased diversity of users, including multilateral development organizations, corporations, funders, social enterprises, and non-profits



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)