The EDISON Alliance

Shared Principles for an Inclusive Financial System

WHITE PAPER

AUGUST 2021

Images: Getty Images

Contents

Foreword

Ajay Banga
Executive Chairman,
Mastercard

Derek O'Halloran
Head, Digital Economy and
New Value Creation Platform

The set of shared principles for an inclusive financial system introduced in this paper is not the first attempt at articulating a comprehensive framework for advancing financial inclusion generally or through digital means. So why now and why another set of principles?

Major transformation in financial services ecosystems is triggering new models of collaboration. This calls for a co-creation effort based on a shared set of principles which, if implemented, would wire the financial system to produce financial inclusion.

COVID-19 has accelerated digitalization, bringing a qualitatively different world much closer.[1] The lines between the physical and the digital in financial services are becoming increasingly blurred. The new set of principles integrates the physical and the digital, accepting digitalization as the default for the future.

In this context, an explicit system approach to financial inclusion is a must.[2] It sets inclusion as a system-wide objective and calls on a wide range of participants to achieve it through their complex network of interactions.

The Principles are intended to provide the basis for consensus building with a growing number of new players in increasingly fragmented and decentralized financial services ecosystems. They should inform financial products and services design, enabling technology design, and infrastructure planning and design. They are also intended to represent a view that governments might consider in pursuing regulations, supervisory practices and relevant public policy.

Creating an inclusive financial system is a team sport. The Principles provide a foundation for ongoing public-private dialogue and cross-industry dialogue on the modalities for partnership and collaboration that make inclusion a natural outcome of an innovative and competitive financial system.

This document was developed as an initiative of the World Economic Forum's EDISON Alliance and would have not been possible without the contribution of EDISON Alliance Partners, Barclays, GSMA, the United Nations Economic Commission for Africa, Vista Equity Partners and Western Union, as well as our teams at Mastercard and the World Economic Forum, whom we would like to thank for their efforts and commitment to shaping an inclusive financial system, as well as the broader members of The EDISON Alliance for their ongoing support and guidance.

Executive summary

Seven multistakeholder principles for an inclusive financial system are proposed as a shared framework for all participants in financial services ecosystems, which are transforming at warp speed.

COVID-19 and the associated “Great Lockdown” that the world experienced in 2020 led to an acceleration in economic digitization, including growth in digital financial services. The depth of the shift was most evident in countries that entered the crisis digitally ready but the crisis also highlighted the plight of the digitally excluded. 770 million people globally lack access to electricity and over 3.5 billion remain without access to the internet. While 1.2 billion people have obtained access to a bank or mobile money account since 2011, there are 1.7 billion individuals still without access. One billion people lack any foundational identity. Despite progress, formal financial systems continue to exclude many.

Digital technology has the potential to close the financial inclusion gap by reducing the cost, distance and speed of offering financial services. The economic impact of the crisis, however, is leading many observers to worry about the effects on the poor and the prospects for a more equal economy. Ensuring that COVID-19 recovery heralds digitally-led inclusive financial systems requires renewed, forward-looking concerted action that enlists all old and new participants in an increasingly fragmented financial services value chain.

This white paper was developed as an initiative of the World Economic Forum’s EDISON Alliance platform for partnership between governments, industries and people to advance digital inclusion as a foundation for achieving the United Nations Sustainable Development Goals. While private sector-led, it is the result of a collaboration between financial inclusion industry leaders, governments and international organizations who came together to form The EDISON Alliance.

The paper is designed for all participants in financial ecosystems including policy-makers, regulators, traditional financial services providers, mobile money providers, fintech companies, adjacent technology providers, microfinance institutions, non-governmental organizations and international organizations. The objective of the Principles is to encourage a systems approach to financial inclusion that brings together all participants as co-creators of a financial system for all. This will require private-private and public-private collaboration to embed in the transforming financial system seven characteristic principles that are essential for an inclusive outcome:

- **Inclusive by design:** *reaching the maximum number of people and businesses with mainstream financial services and supporting specialized financial services to include the rest.*

- **Integrated system:** *providing the user with an integrated financial services experience through open standards and market-driven interoperability.*

- **Digitally led:** *expanding digital access as a leading channel for the delivery of financial services while maintaining robust physical access channels.*

- **Economically sustainable and commercially viable:** *balancing cost, affordability and quality and enabling inclusion as a commercial strategy beyond philanthropy.*

- **Informed by data:** *creating relevant financial solutions and maintaining security by using data responsibly*

- **Trusted:** *deepening trust in financial services through technology, transparency and consumer protection.*

- **Effectively regulated:** *enabling innovation and competition while maintaining stability, integrity and consumer protection.*

Background

The Principles outlined in this document are not the first attempt at articulating a comprehensive framework for advancing financial inclusion, including through digital means. In 2011, the Alliance for Financial Inclusion (AFI), a global network of policy-makers, issued the Maya Declaration defining the network's key commitments towards financial inclusion.[3] In 2016, the Bank for International Settlements (BIS) Committee on Payments and Market Infrastructures with the World Bank issued guidance on improving access to and usage of transaction accounts as part of the first report on *Payment Aspects of Financial Inclusion* (PAFI).[4] This guidance was adapted to the fintech era in a report issued in April 2020.[5] In 2016, the G20 also issued its *High-Level Principles for Digital Financial Inclusion*.[6]

However, as outlined in the foreword, COVID-19 has accelerated digitalization, bringing a qualitatively different world much closer, significantly disrupting financial ecosystems and introducing new players at a very high rate. There is a need for an explicit systems approach to financial inclusion that was identified by the EDISON Alliance community and which led to the development of these principles.

This document was developed as an initiative of the World Economic Forum's EDISON Alliance platform for partnership between governments, industries, and people to advance digital inclusion as a foundation for achieving the United Nations Sustainable Development Goals. While private sector-led, it is the result of collaboration between financial inclusion industry leaders, governments and international organizations, who together formed an industry-led working group on financial inclusion.

The document went through an iterative process involving the members of The EDISON Alliance Financial Inclusion Working Group, members of working groups on healthcare and education, the Alliance Board Members and their deputies and this culminated in a briefing to the Alliance Champions. The result is a set of seven principles that aim to serve as a platform for private-private and public-private collaboration to create a digitally-led, inclusive-by-design financial system.

The paper is designed for all participants in financial ecosystems that play a role in expanding financial inclusion, including: policy-makers, regulators, traditional financial service providers, mobile money providers, fintech companies, adjacent technology providers, microfinance institutions, non-governmental organizations and international organizations. The objective of these principles is to encourage a systems approach to financial inclusion that is economically sustainable, commercially viable and powered by data, trust and effective regulation. The Principles are based on the experience of industry leaders in the area of financial inclusion from banking, fintech, telecommunication and technology, as well as the input of public sector members of The EDISON Alliance. The Principles are also based on a review of the extensive work of leading organizations such as the Alliance for Financial Inclusion, the BIS, the Consultative Group to Assist the Poor (CGAP), the IMF, the UNDP, the United Nations Economic Commission for Africa (UNECA) and the World Bank.

FIGURE 1 | **Shared Principles for an inclusive financial system**

Principle 1
Inclusive by design

Embedding inclusion in the design of all policies, regulations, supervisory practices, products, services, security procedures, technologies and infrastructure.

1

Action areas

- People-centric, focusing as a priority on the needs, rights, financial health, and financial security of all, including the financially unserved and underserved, ensuring an affordable, frictionless and convenient experience.
- Ensuring that micro, small and medium enterprises (MSME) are well-served in an affordable, frictionless and convenient manner, including MSMEs that supply goods and services for the poor.
- Mitigating exclusion arising from hardware and software requirements by enabling and encouraging the development and supply of digital solutions and financial services that are accessible for communities and environments with low-tech and weak digital and energy infrastructure.

Principle 2
Integrated system

Enabling integrated ecosystems that supply high quality, differentiated and interoperable products and services for all.

2

Action areas

- Creating an enabling environment for market-driven interoperability across different financial service providers based on open industry standards and effective governance.
- Enabling the integration of non-traditional financial service providers who serve the base of the pyramid, such as microfinance institutions, micro-lenders, postal banking institutions, and fintechs in the broader ecosystem, through digitization, regulation, training and investment.

Principle 3
Digitally-led

Promoting safe and efficient digital payments and finance ecosystems that democratize access to the formal financial system through enabling infrastructure, regulations, products and services.

3

Action areas

- Recognizing that digital inclusion requires expanding access to a reliable and affordable power supply and information and communication technologies (ICT) for all individuals, MSMEs and communities. This includes access to and use of internet connectivity, mobile services and devices, and internet-enabled devices.
- Understanding the barriers to digital readiness, such as connectivity, cost, language and security, and using a people-centric approach that puts ethics and trust at the core to overcome barriers.
- Reviewing, delivering and promoting the use of digital identity solutions that are simple, secure, robust and privacy-protecting.
- Supporting the development of holistic ecosystems that enable the digitization of all transactions and interactions between governments, merchants, businesses and people.
- Supporting the digital transformation of micro, small and medium enterprises and non-traditional financial institutions that serve the base of the pyramid through connectivity, investment, preparation, economic optimization and training.
- Recognizing the current limitations of digital infrastructure, supporting seamless integration between digital and non-digital financial services, ensuring consumer access to cash-in and cash-out services, and maintaining and expanding a robust infrastructure of branch and agent networks.

Principle 4 Economically sustainable

Providing and maintaining quality payments and markets infrastructure, investing in innovation, keeping pace with consumer needs and demand, and ensuring the value created is appropriately shared between consumers, producers and intermediaries.

4

Action areas

- Ensuring commercial viability and economic sustainability by balancing needs, capabilities and benefits from value creation between all the participants in financial ecosystems, encouraging supply and uptake of services, maintaining a level playing field and promoting competition and market entry.
- Promoting affordability by enabling technological and business model innovation to lower the cost of financial services for the poor, encouraging competition and market entry, encouraging uptake of products and services and providing affordable and reliable digital infrastructure.
- Enabling and encouraging technological and business model innovation to protect the system against cybersecurity threats, prevent fraud, and develop relevant products and services for the underserved.
- Taking the costs of scaling, future-proofing, cybersecurity, fraud prevention, and data protection into account when designing and procuring for financial system infrastructure modernization.

Principle 5 Informed by data

Using data from digital transactions in a safe and responsible manner to design financial inclusion policies, regulations, products and services.

5

Action areas

- Setting high standards for the responsible collection, storage, sharing and use of data that adhere to the principles of security and privacy, transparency, accountability, integrity, and consumer ownership and choice.
- Enabling cross-border data flows to protect the system against cybersecurity threats by avoiding single point of failure and enabling threat detection. This also facilitates essential economies of scale that lower the cost of services, including remittances, by promoting digital collaboration, access to on-demand shared networks, servers, storage or applications through cloud computing solutions.
- Ensuring that AI-powered products and services, when used to solve information asymmetry and lower the cost of financial services to the last mile, minimize algorithmic bias and adhere to ethical standards and governance frameworks that ensure they are trustworthy, transparent, explainable, fair and just.

Principle 6
Trusted

Cultivating trust by educating and protecting consumers; ensuring transparency of laws, regulations, products, services and data practices; providing reliable infrastructure; and implementing rigorous privacy and cybersecurity frameworks.

6

Action areas

– Enforcing a robust consumer-protection framework that supports transparency and minimizes risks to privacy and data security.

– Promoting trust by improving levels of digital readiness and financial literacy, including among the financially unserved and underserved, especially women and other vulnerable populations.

– Providing security by design for all products and services with special attention to last-mile solutions and encouraging innovation in authentication, authorization and fraud prevention.

Principle 7
Effectively regulated

Adopting a non-discriminatory, technology-neutral, principle- and risk-based approach to regulation and supervision that is committed to the standard of proportionality and transparency.

7

Action areas

– Implementing clear frameworks for jurisdiction-specific and risk-adjusted customer due diligence procedures, including alternative identification methods, applied proportionally to all providers in the industry.

– Adopting a pro-competition framework and mindset to guarantee both fair competition and responsible collaboration.

– Levelling the playing field to ensure existing and new participants are able to operate, compete and innovate.

– Adopting a regulatory framework that encourages innovation and creates a culture of experimentation in the interest of inclusion.

The Principles explained

The seven consensus-based principles are designed to be applied by all participants in financial ecosystems in an adaptive way to match country context, the types of players and the level of market development. Each principle is defined and its key action elements articulated, followed by examples of different approaches to effective implementation.

1

Principle 1 | Inclusive by design

An inclusive financial system is one that embeds inclusion as a principle in the design of all policies, regulations, supervisory practices, products, services, security procedures, technologies and infrastructure.

Designing with diversity in mind

The picture of the financially excluded is very diverse and the persistence of financial exclusion, despite significant progress, indicates that financial systems around the world have so far failed to fully encompass the diversity of the populations that they are meant to serve.

Inclusive design, a design approach that emerged from the digital technology space, means "the design of mainstream products and services that are accessible to and usable by as many people as reasonably possible."[7] To achieve inclusive financial systems, participants need to create products and services that reduce barriers to access for as many people and businesses as possible and reduce the level of ability required to use the product or service. Not every product or service will be suitable for everyone. There are practical and commercial constraints that make satisfying the needs of all prohibitive. But by designing with diversity in mind and with an intent to reduce barriers, the need for specialist solutions will be smaller and economies of scale can be achieved.

> Inclusive design ... means "the design of mainstream products and services that are accessible to and usable by as many people as reasonably possible."

Areas of action

Understanding diversity
Inclusive design is people-centric, focusing as a priority on the needs, rights, financial health and financial security of all, including the financially unserved and underserved, ensuring an affordable, frictionless and convenient experience.

It also ensures that micro, small and medium enterprises (MSME) are well-served in an affordable, frictionless and convenient manner, including MSMEs that supply goods and services for the poor.

Mitigating technology barriers
To be inclusive, a financial system needs to mitigate exclusion arising from hardware and software requirements by enabling and encouraging the development and supply of digital solutions and financial services that are accessible for communities, environments and businesses with low-tech and weak digital and energy infrastructure.

BOX 1

Design for inclusion: Telco-Bank collaboration to digitize savings groups in Tanzania[8]

Through M-Koba, a product of the collaboration between Vodacom Tanzania and Tanzania Commercial Bank (formerly Tanzania Postal Bank), leaders of savings groups can use M-Pesa's Unstructured Supplementary Service Data (USSD) menu on their feature mobile phones to create an account and savings group members are then identified by their mobile phone numbers. Members can contribute to savings accounts from their M-Pesa wallet at no extra cost and check their account balance. They can also request loans from the system, which selects three members randomly to approve the loan. Loans are disbursed to the borrower's M-Pesa wallet upon approval. To encourage adoption and use of the financial service, M-Koba was made interoperable, allowing full access to members of other telecom networks. Data shows that 40,000 savings groups have signed up to M-Koba, with a predominantly female membership.

2

Principle 2 | Integrated system

An inclusive financial system consists of integrated ecosystems that supply high-quality, differentiated and interoperable products and services for all.

Integration takes many forms

With digital transformation and the increase in digital platforms and digital giants affecting industries around the world, ecosystems are emerging which link firms that provide complementary products and services in dynamic collaboration.[9] Financial services production and distribution value chains are being disaggregated, with different partners seamlessly providing different components of the service. This enables firms to address the barriers to financial inclusion by:[10]

- Reducing the cost of customer acquisition
- Obtaining better data on the customer to mitigate risk, inform underwriting decisions and understand the needs of people and businesses
- Combining capabilities to provide timely, innovative solutions that meet customers' needs.

For positive network effects to occur, ecosystems need to be as open as possible without undermining viability, incentives to innovate or competition.[11]

Areas of action

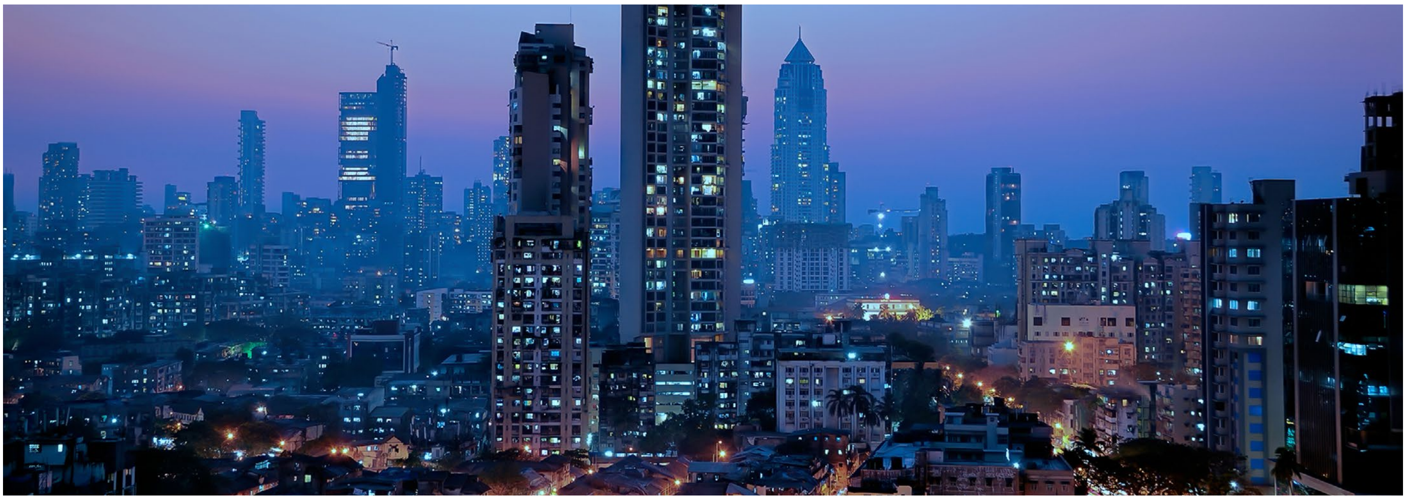
Market-driven interoperability
To be inclusive, a financial system should create an enabling environment for market-driven interoperability across different financial service providers based on open industry standards and effective governance.

Integrating non-traditional financial service providers
Enabling the integration of non-traditional financial service providers who serve the base of the pyramid, such as microfinance institutions, microlenders, postal banking institutions, and fintechs in the broader ecosystem, through digitization, regulation, training and investment.

BOX 2

Financial system integration: tiered banking licences in India

On 27 November 2014, the Reserve Bank of India (RBI) issued guidelines for the licensing of small finance banks (SFB) in the private sector.[12] The objective of introducing a differentiated tier of banking institutions was explicitly to advance financial inclusion and increase the reach of formal financial services to base-of-the-pyramid customers, both individuals and businesses. Traditionally, this segment was served by either full-service, large state-owned banks or by an array of non-bank financial institutions that fell outside the banking regulatory framework. The new approach to advancing financial inclusion was to: (1) increase competition in the market by encouraging the entry of non-traditional financial services providers such as fintech and mobile network operators; and (2) integrate non-bank financing companies, most of which are microfinance institutions in the regulated banking sector. There are currently 11 licensed SFBs[13] in India, the majority of which started as small microfinance institutions before converting under the new licence. They can now use their banking licence to offer their clients a full suite of financial services. This regulatory arrangement enables base-of-the-pyramid and last-mile users to access an integrated set of financial services through providers that are integrated within the broader financial ecosystem. It also enables collaboration and strategic partnerships between financial institutions that serve the poor and commercial banks by securing regulatory consistency and reducing the risks.[14]



3

Principle 3

Digitally-led

An inclusive financial system is one that is digitally powered, promoting safe and efficient digital payments and finance ecosystems and democratizing access to the formal financial system through enabling infrastructure, regulations, products and services.

“ An inclusive financial system should be built on a foundation of digital inclusion that expands access to a reliable and affordable power supply and ICTs for all individuals, MSMEs and communities.

Inclusive infrastructure is a prerequisite for inclusive finance

An inclusive financial system is not possible without addressing the barriers to digital connectivity and managing the digital gap during the transition. Initiatives such as The EDISON Alliance and the World Bank Digital Development Partnership (DDP)[15] offer platforms for mobilizing innovation and financing to support strategies that expand connectivity and close the digital divide. One of the key foundational barriers to financial inclusion is the lack of identification. Even for the six billion people that possess a form of identification, the shift to digital may leave many unable to access financial services using the increasingly dominant digital channels.

No one should be denied financial services because of a lack of access to connectivity, digital devices, digital identity or digital literacy. All stakeholders must work together to ensure that foundational identity and digital identity become available to everyone regardless of income, gender, geography or level of digital access.[16] The centrality of digital notwithstanding, physical access to financial services remains a necessity or a preferred option for many. An inclusive financial system requires strong physical access infrastructure that guarantees that users, especially base-of-the-pyramid and last-mile users, can use financial services in the method that they prefer and that meet their needs. Branch and agent networks, seamlessly integrated with digitally-enabled financial services, are therefore a core feature of the system's inclusive design.

Areas of action

The physical infrastructure for digital inclusion

An inclusive financial system should be built on a foundation of digital inclusion that expands access to a reliable and affordable power supply and information and communication technologies (ICT) for all individuals, MSMEs and communities. This includes access to and affordable use of internet connectivity, mobile services and devices and internet-enabled devices.

Digital readiness

Digitally-led financial inclusion requires a solid understanding of the barriers to digital readiness, such as connectivity, cost, language and security, and using a people-centric approach that puts ethics and trust at the core to overcome barriers.

Digital identity

To achieve digitally-led financial inclusion, it is important to review, deliver and promote the use of digital identity solutions that are simple, secure, robust and privacy-protecting.

Digitization of financial flows

Propelling the development of a digitally-led financial system requires holistic ecosystems that enable the digitization of all transactions and interactions between governments, merchants, businesses and people.

Small and medium enterprise (SME) digitization

Digital SMEs are essential for the development of a digitally-led financial system and require coordinated and focused support for the digital transformation of MSMEs and non-traditional financial institutions that serve them through connectivity, investment, preparation, economic optimization and training.

Physical/digital integration

Recognizing the current limitations of digital infrastructure requires a seamless integration between digital and non-digital financial services, ensuring consumer access to cash-in and cash-out services, and maintaining and expanding a robust infrastructure of branch and agent networks.

BOX 3

Digitally-led remittances with a robust physical infrastructure

Despite the accelerated trend in digital payments, cash remains the main form of payment in many parts of the world, even among banked customers. In many African and South-East Asian markets, for example, where branchless banking is broadly available and millions of mobile wallet transactions happen daily, many consumers still need to convert to cash before they can pay for everyday goods because the digital point-of-sale infrastructure is simply not in place.

To continue to serve these customers, Western Union pairs innovation in its fast-growing digital network with scale in its retail presence. The company's network reaches billions of bank accounts and millions of mobile wallets in approximately 120 countries, along with more than half a million retail locations in more than 200 countries and territories, including many in underserved communities and neighbourhoods.

Western Union agents include large networks such as post offices, banks and retailers and other established organizations, as well as smaller independent retail locations. Many agents operate in locations that are open outside of traditional banking hours, for example on nights and weekends.

Strategic collaborations with national postal organizations in 79 countries enable millions of customers to send and receive money worldwide in cash and, increasingly, digitally as Western Union and its postal organization agents develop innovative ways to digitize the experience for joint customers.

4

Principle 4 | Economically sustainable

An inclusive financial system provides and maintains quality payments and financial infrastructure, investing in innovation, keeping pace with consumer needs and demand, and ensuring that the value created is appropriately shared between consumers, producers and intermediaries.

> Affordability is key to the economic sustainability of the system and should be achieved by enabling technological and business model innovation to lower the cost of financial services to the poor.

Balancing cost, affordability and quality

One of the main supply-side barriers to financial inclusion is the high operating cost of providing financial services to base-of-the-pyramid and last-mile customers and businesses.[17] The cost is driven by the need to maintain an extensive physical infrastructure to respond to the low-tech, high-touch needs of many customers and businesses in this user segment.[18]

At the same time, affordability is an essential feature of inclusive product and services design. Yet, excessive focus on user cost can reduce product functionality and the attractiveness to the client. There is evidence that low uptake and lack of use of payment products offered to base-of-the-pyramid users through government cash transfer programs were due to the de-prioritization of customer-friendly features in favour of a lower administrative cost and modest service fees.[19] The best way to achieve affordability without compromising the quality of products and services is through innovation and competition.

Financial services have network market characteristics. The more participants join the network on either side of the market, the more economies of scale and scope can be achieved. This expansion of the network only occurs if parties have the flexibility to balance their needs and share the value created among them appropriately.

Commercial viability will be easier to achieve when financial services and products match the needs of base-of-the-pyramid individuals and businesses. An inclusive design guarantees longevity of business relationships, where customers graduate from one product or service to another during their financial journey. This allows financial service providers (FSP) to consider the value of the relationship over a longer time horizon. Servicing financial inclusion then becomes a commercial strategy, not a short-term profit and loss calculation.[20,21]

Areas of action

Commercial viability and economic sustainability
Ensuring commercial viability and economic sustainability is key for a resiliently inclusive financial system and this involves balancing the needs, capabilities, and benefits from value creation between all the participants in financial ecosystems, encouraging the supply and uptake of services, maintaining a level playing field and promoting competition and market entry.

Affordability
Affordability is key to the economic sustainability of the system and should be achieved by enabling technological and business model innovation to lower the cost of financial services to the poor, encouraging competition and market entry, uptake of products and services, and providing affordable and reliable digital infrastructure.

Costing relevance, innovation and resilience
To be economically sustainable, the financial system must encourage investment in technological and business model innovation to protect the system against cybersecurity threats, prevent fraud and develop relevant products and services for the underserved.

It must also take the costs of scaling, future-proofing, cybersecurity, fraud prevention and data protection into account when designing and procuring for financial system infrastructure modernization.

BOX 4 Economically sustainable financial inclusion and the rising costs of security

"Cyber risks are a corollary of digitalization and a permanent risk feature of digital services."[22] Increased connectivity, new entrants, and the fragmentation of financial value chains increase the surface area for cyberattacks and their penetration. Experts expect global cybercrime costs to grow 15% per year in the coming five years, reaching $10.5 trillion by 2025.[23] A survey of 73 banking supervisors from developing countries in 2016 found that most of them cited fintech and the resulting cyber risk as their top macroeconomic and financial stability challenge.[24]

Addressing cybersecurity risk involves increasing resource commitments by financial services providers. According to the FS-ISAC/Deloitte Cyber Risk Services CISO Survey 2019, respondents spent an average of 10% of their IT budget on cybersecurity. This amounted to an average of 0.33% of their revenues, and an average $2,300 per full-time or equivalent employee. There were variations by company size and by industry segment. The survey found that providers of financial services infrastructure such as clearing houses, exchanges and payment processors spent the most on cybersecurity at 1% of their IT budget and 0.75% of revenues.[25] The same survey in 2020 found that cybersecurity spending by financial institutions had increased since 2019.[26]

Respondents to the FS-ISAC/Deloitte Cyber Risk Services CISO Survey 2020 identified rapid IT changes and rising complexities as their top challenge in managing cyber risk. This was followed by the unavailability of skilled cyber professionals.[27]

These developments are not restricted to developed financial markets. With Africa's digital economy growing rapidly, mobile-based transactions expanding, and an e-commerce market projected to reach $75 billion in annual sales by 2025, cybercrime is estimated to have cost African economies $3.5 billion in 2017.[28] African banks are also investing in cybersecurity, albeit under constrained access to relevant IT and cybersecurity skills. According to one survey of banks in West and Central Africa, 85% of respondents put their investment in cybersecurity at €500,000 a year.[29]

Balancing security, affordability and commercial viability is one of the key challenges facing FSPs globally, especially in an environment with increasing pressure for cost reduction.

5

Principle 5 | **Informed by data**

An inclusive financial system relies on using data from digital transactions in a safe and responsible manner to design financial inclusion policies, regulations, products and services.

Using data responsibly to make financial services relevant

Data from digitization plays a critical role in interconnected and interoperable digital ecosystems. Used intelligently and responsibly, it can help uncover insights, reduce information inequality and advance social good. Data offers a way to identify needs and opportunities so that companies can design more useful products and civic and government organizations can build more impactful financial inclusion strategies. With accelerating digitization, data will be the fuel of the next century of innovation. With equitable access to digital infrastructure, as discussed under Principle 3, data from digitization will be the driver for an inclusive financial system.

“ Some countries legitimately concerned about the risks posed by the use and movement of data have moved to impose restrictions on its cross-border movement.

Some countries legitimately concerned about the risks posed by the use and movement of data have moved to impose restrictions on its cross-border movement. Such approaches, while motivated by valid policy objectives, can have a negative effect on financial inclusion by: (1) increasing the risk of cybersecurity attacks by depriving FSPs of high-quality data infrastructure supported by providers with the skills and capabilities to protect the data; (2) increasing the operational cost and thus increasing the cost of financial services to the consumer or business or rendering financial services commercially unviable; and (3) reducing supply by discouraging new entrants.[30]

Areas of action

Data responsibility standards
Using individual and business data is associated with risks that should be mitigated by setting high standards for the responsible collection, storage, sharing and use of data that adheres to the principles of security and privacy, transparency, accountability, integrity, and consumer ownership and choice.

Cross-border data flows
Enabling cross-border data flows protects the system against cybersecurity threats by avoiding single points of failure and enabling threat detection. It also facilitates essential economies of scale that lower the cost of services, including remittances, by promoting digital collaboration and access to on-demand shared networks, servers, storage or applications through cloud computing solutions.

Responsible use of artificial intelligence
While AI-powered products and services can provide solutions for information asymmetry and lower the cost of financial services to the last mile, it is important to minimize algorithmic bias and ensure adherence to ethical standards and governance frameworks that guarantee that the algorithmic solution is trustworthy, transparent, explainable, fair and just.

BOX 5

Making data work for micro merchants through digital supply chain finance

In Kenya, small retail shops known as “dukas” supply roughly 80% of consumer goods and are often run by women or families. Like hundreds of millions of micro merchants across the world, they are seriously disadvantaged by the cash nature of their businesses. Every day, they can sell only what they can afford to buy, limiting revenue and growth. There is no opportunity to get ahead and build savings, much less wealth. Without a verifiable sales history, banks and lenders lack the data necessary to assess their creditworthiness.

Digital solutions that harness the collective power of entrepreneurs, their suppliers and financial institutions can help. Mastercard Track Micro Credit Program, an inclusive credit ecosystem, connects small retailers and micro businesses and fast-moving consumer goods (FMCG) companies – companies that sell everyday items such as soap and packaged foods – to banks and provides access to short-term credit utilizing sales data. It works by giving small stores digital credit accounts so they can purchase products from key suppliers.

The local name for the Kenya pilot is Jaza Duka, Swahili for “fill up your store,” and it launched in 2018 with Unilever and KCB Bank. It includes reports and reconciliation tools for FMCG companies and distributors, as well as a financial and credit management training program to enhance merchants’ education through the Mastercard Center for Inclusive Growth. In two years, 20,000 merchants in Kenya have signed up. The program has led to an overall 20% increase in sales orders to suppliers.

6

Principle 6 | **Trusted**

Cultivating trust by educating and protecting consumers; ensuring transparency of laws, regulations, products, services and data practices; providing reliable infrastructures; and implementing rigorous privacy and cybersecurity frameworks.

Trust through technology, transparency and recourse

Distrust is a significant barrier to the adoption and use of financial services. 20% of the respondents surveyed in the 2017 Global Findex identified distrust in financial institutions as a reason for not maintaining a bank account. This factor is even more pronounced in certain regions such as Eastern Europe, Central Asia and Latin America.[31]

Users, especially those who are vulnerable and cannot afford even small losses, have genuine concerns when using financial services.

Users, especially those who are vulnerable and cannot afford even small losses, have genuine concerns when using financial services. There is fear regarding the security of the funds in the account, fear of fraud by insiders or others, concern about the fairness of the terms of the service and concern about how their data is being used.[32] The highest among customers' concerns is network unreliability. Network drops during transactions such as money transfers can result in users losing access to funds, delayed bill payments, double payments with no recourse and users having to pay multiple transaction fees unnecessarily.[33] The complexity of product information and user interfaces, including language barriers, are also major drivers of distrust.

The *G20 High-Level Principles on Financial Consumer Protection*,[34] issued in 2011, and the World Bank *Good Practices for Financial Consumer Protection*, first published in 2012 and revised in 2017,[35] converge on a number of key areas for regulatory and supervisory intervention and industry practice, including: disclosure and transparency on products and services; education and awareness raising; fair treatment and responsible business conduct; protection of data and privacy; and complaint handling and dispute resolution. Private sector initiatives, such as the GSMA Mobile Money Certification providers, also use a self-regulatory approach to educate, benchmark and measure industry participants' practices to protect consumers.[36]

Areas of action

Consumer protection
Enforcing a robust consumer protection framework that supports transparency and minimizes risks to privacy and data security.

Financial literacy and digital readiness
Promoting trust by improving the levels of digital readiness and financial literacy, including among the financially unserved and underserved, especially women and other vulnerable populations.

Security by design
Providing security by design for all products and services with special attention to last-mile solutions, and encouraging innovation in authentication, authorization and fraud prevention.

BOX 6

Security by design: a cost-effective solution to keystroke errors[37]

In low-tech communities, digital financial services are adapted for low-tech devices where transactions are conducted via Unstructured Supplementary Service Data (USSD). This tends to make the user interface rather complex and requires multiple steps to execute transactions. Keystroke errors are common and can be costly when money is transferred to the wrong user. Reversing the transaction and recovering the funds is often challenging. To address this problem in a cost-effective way and avoid reliance on costly and unpleasant recourse procedures, mobile money providers have resorted to technological solutions. They have integrated simple triggers to help the user validate that the money is being sent to the right recipient.

In Bangladesh, Dutch-Bangla Bank (DBBL) relies on a standard technique to identify data entry errors in information technology adding a "check digit" number to the end of the mobile number to create a unique account number. If the user enters the wrong telephone number, in most cases the "check digit" won't match, triggering failure of the transaction until the number is corrected.

In Uganda, Airtel integrated the mobile money interface with the user's address book, which allows for the recipient's name to be displayed when the telephone number is entered for a money transfer transaction. This again triggers correction when the name is not recognized or the wrong name is displayed.

7

Principle 7 | **Effectively regulated**

An inclusive financial system requires a non-discriminatory, technology-neutral, principle-based and risk-based approach to regulation and supervision that is committed to the standard of proportionality and transparency.

Enabling innovation and competition

A digitally-led financial system presents new trends that require financial system regulations to evolve.[38] These include the constantly growing array of actors involved in the delivery of financial services; the continuously evolving products, services, business models and delivery channels; and the fragmentation of financial value chains and, with it, the fragmentation of responsibility for risk management and liability for adverse events.

In a dynamic environment where solving financial exclusion requires technology deployment and innovation in product, service, delivery channel and business models, a principle-based approach to regulations serves the objective of creating an inclusive financial system that is better than a prescriptive rule-based system. Technology neutrality[39] of regulations also entails avoiding technology prescriptions and applying similar rules to similar activities, services and products regardless of the technology used.[40] This serves the purpose of levelling the playing field, enabling market access and innovation, and ensuring legal stability by reducing the pace of legal obsolescence.

To avoid stifling innovation or increasing the compliance cost in a way that undermines the economic viability of an inclusive business model,[41] proportionality[42] and a risk-based approach[43] are important instruments. Proportionality entails tailoring the rules to fit the nature, scale and complexity of supervised entities. Risk-based regulation and supervision, as instruments of proportionality, use a risk profile of different products, services, delivery channels, business models and users to identify the risks, assess probability and determine the level of regulation and supervision accordingly.[44]

“ An inclusive financial system requires the regulator to adopt a regulatory framework that encourages innovation and creates a culture of experimentation in the interest of inclusion.

Areas of action

Tiered customer due diligence

Effective regulation that does not undermine financial inclusion requires implementing clear frameworks for jurisdiction-specific and risk-adjusted customer due diligence procedures, including alternative identification methods, applied proportionally to all providers in the industry.

Promoting competition

Adopting a pro-competition framework and mindset to guarantee both fair competition and responsible collaboration is a key regulatory action area for an inclusive financial system to develop.

Levelling the playing field

Levelling the playing field to ensure existing and new participants are able to operate, compete and innovate.

Innovation and experimentation

An inclusive financial system requires the regulator to adopt a regulatory framework that encourages innovation and creates a culture of experimentation in the interest of inclusion.

BOX 7

Effective regulations for an inclusive financial system: the case of Mexico[45]

Mexico’s low levels of financial inclusion (36.9%) are not consistent with its per capita income and level of economic development. They are also much lower than the levels of financial inclusion achieved by countries with a lower income status. Many factors contribute to this puzzling reality, including poverty, informality, and lack of trust. Yet, the regulatory framework has been part of the problem. Recent regulatory initiatives are early signs of dynamism despite regulatory restrictions relating to bank account requirements and technology specifications still imposing bottlenecks.

A risk-based approach to customer due diligence (CDD). Mexico enforces a risk-based CDD tiered system with four levels for banking institutions and three levels for fintechs, including Electronic Money Institutions (EMI). The introduction of this tiered approach has led to a 14% increase in bank account ownership, with 77% of these new accounts opened under a simplified due diligence procedure.

Competition and levelling the playing field. Despite strong mobile phone penetration (60% of adults) and mobile network coverage (95% of the population), only 4.1% of adults report having a mobile money account. This is due to regulations that require mobile network providers to obtain a banking licence to offer mobile money services. Analysts attribute this to regulatory capture by banks, which restricts competition. This lack of competition also results in low investment in banking infrastructure (87% of rural municipalities lack an ATM) leading many to cite distance as an impediment. Young Mexican adults are also more likely than their counterparts in Latin America to describe the cost of banking services as too high.

Innovation and experimentation. Mexico adopted the Fintech Law of 2018, which aims to bring new players into the market and promote innovation. To that end, the law created regulatory sandboxes. A survey of fintech firms suggests that unbanked and underbanked consumers and businesses represent over 50% of their customers.

Conclusion

With a set of broad-based and adaptive principles, this paper is an invitation to all financial ecosystems' participants to integrate these principles into their operations and to engage in consensus-building conversations about what it takes to make financial inclusion a standard outcome of the usual course of business in healthy financial ecosystems.

The effort to connect every individual to basic financial services has been a top development agenda priority for the better part of three decades. So much progress has been achieved, but the reality of 1.7 billion people remaining without access still calls for a rethink. The question that motivated The EDISON Alliance to work towards a set of shared principles for an inclusive financial system is not how to bring the financially excluded into the financial system but how to design a financial system that does not produce exclusion as an outcome of its operation.

COVID-19 is an inflexion point. The ubiquity and promise of digital has never been more apparent. Yet the digital divide is persistent. The EDISON Alliance members believe that if we do not lead with digital, we will risk leaving behind large segments of people and businesses. Many are already falling back into poverty or shutting down operations. The members also believe that the only way towards sustained financial inclusion is via economically sustainable approaches and commercially viable alternatives. Over-reliance on philanthropy or excessive government subsidies can bring some into the financial system but cannot create a financial system that does not exclude.

The Principles presented here have been created as a private sector-led set of principles with public sector input to guide cross-industry collaboration and public-private partnerships in pursuit of an inclusive financial system. The Principles draw on and integrate several key, high-level statements on financial inclusion including: *G20 High-Level Principles for Digital Financial Inclusion;* the Maya Declaration on Financial Inclusion; BTCA *Responsible Digital Payments Guidelines*; and Payment Aspects of Financial Inclusion Guidance (PAFI) as adapted for the fintech era. They approach the issue from a solution-design perspective at the core: how can mainstream financial services expand their reach to the maximum number of people and businesses within an economically sustainable economic model?

How can the Principles be used?
The Principles provide a platform for engagement with the increasing number of new players entering financial services ecosystems. With increasing fragmentation and decentralization in financial services, there is a need for a flexible and adaptive set of principles that different participants in the value chain can agree upon and implement to ensure that the financial system serves the maximum number of people and businesses possible.

Industry participants who are engaging in private-private dialogue and cross-industry collaboration will find that the Principles offer a good foundation. Similarly, public-private collaboration will benefit from using the Principles as a basis for building consensus and designing partnerships.

Contributors

This publication is the result of a collaborative effort coordinated by a core team under the guidance of a multistakeholder advisory group that has been fundamental for the development and validation of the Principles presented here. Special thanks to Heba Shams for giving shape to the insights and input collected during the creation of this document. We would also like to thank the Champions of the EDISON Alliance for their ongoing support, particularly those leading the teams that made a direct contribution to the development of these Principles. Details about the EDISON Alliance can be found on www.weforum.org/the-edison-alliance.

Mastercard

Dan Barker
Vice-President, Research, Mastercard Center for Inclusive Growth

Michael Froman
Vice-Chairman and President, Strategic Growth

Heba Shams
Vice-President, Public Policy; Fellow, Policy Center for the Digital Economy (PCDE)

Barclays

Ashok Vaswani
Chief Executive Officer, Consumer Banking and Payments

GSMA

Max Cuvellier
Head, Mobile for Development

Saad Farooq
Senior Advocacy Manager, Mobile Money

Ashley Olson Onyango
Head, Financial Inclusion and AgriTech

United Nations Economic Commission for Africa

Tunde Fafunwa
Lead Adviser, Digital Centre for Excellence

Vista Equity Partners

Amitabh Desai
Director, Office of the Chief Executive Officer

Burke Norton
Senior Managing Director; Co-Head, Perennial Investing

Western Union

Jean Claude Farah
President Europe, Middle East and Africa and Asia-Pacific

Ana Radivojevic
Strategy Planning Manager

World Economic Forum

Rodrigo Arias
Content Lead, Digital Economy and New Value Creation Platform

Isabelle Mauro
Head, Digital Communications Industry

Derek O'Halloran
Head, Shaping the Future of Digital Economy and New Value Creation

Endnotes

1. "Digital Transformation in the Age of COVID-19: Building Resilience and Bridging Divides", Digital Economy Outlook 2020 Supplement, *OECD*, https://www.oecd.org/digital/digital-economy-outlook-covid.pdf. (Last visited 29 June 2021); "How COVID has pushed companies over the technology tipping point and transformed business forever", *McKinsey & Company*, 5 October 2020, https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever. (Last visited 29 June 2021).
2. "A systemic approach to financial inclusion: training for funders", *CGAP*, 2018, https://www.cgap.org/topics/collections/market-systems-approach. (Last visited 29 June 2021); von Bertalanffy, Ludwig, *General System Theory: Foundation, Development Applications,* George Braziller, 1968.
3. "The Maya Declaration", AFI Global Policy Forum: Maya-Mexico, *The Alliance for Financial Inclusion*, 2011, https://www.afi-global.org/global-voice/maya-declaration/. (Last visited 29 June 2021).
4. "Payment aspects of financial inclusion", Committee on Payments and Market Infrastructures and World Bank Group, *BIS,* 5 April 2016, https://www.bis.org/cpmi/publ/d144.htm. (Last visited 29 June 2021).
5. "Payment aspects of financial inclusion in the fintech era", Committee on Payments and Market Infrastructures and World Bank Group, *BIS,* April 2020, https://www.bis.org/cpmi/publ/d191.pdf. (Last visited 29 June 2021).
6. G20 High-Level Principles for Digital Financial Inclusion, Principle 3, p.11, *GPFI*, (undated), https://www.gpfi.org/sites/gpfi/files/documents/G20%20High%20Level%20Principles%20for%20Digital%20Financial%20Inclusion%20-%20Full%20version-.pdf. (Last visited 29 June 2021).
7. "What is inclusive design?" *in* Inclusive Design Toolkit, *University of Cambridge*, (undated), http://www.inclusivedesigntoolkit.com/. (Last visited 29 June 2021).
8. "State of Industry Report on Mobile Money", *GSMA*, 2021, p. 45, https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2021/03/GSMA_State-of-the-Industry-Report-on-Mobile-Money-2021_Full-report.pdf. (Last visited 29 June 2021).
9. On ecosystems in financial services *see* "The phoenix rises: Remaking the bank for an ecosystem world", *McKinsey Global Banking Annual Review,* 2017, pp. 33-48; Lochy, Joris "Ecosystems: The key to success for all future financial services companies", *Finextra,* 16 November, 2020, https://www.finextra.com/blogposting/19537/ecosystems---the-key-to-success-for-all-future-financial-services-companies. (Last visited 29 June 2021).
10. On the network economics of financial services integration *see* Berger, Allen N., "The integration of the financial services industry: Where are the efficiencies?", *SSRN,* January 1, 2001, https://ssrn.com/abstract=239402 (Last visited 29 June 2021).
11. On the trade-offs between open standards and innovation *see* Berger, "The integration of the financial services industry: Where are the efficiencies?".; Claessens, Stijn, Gergely Dobos, Daniela Klingebiel and Luc Laeven, 2003; ibid., 6 "The growing importance of networks in finance and its effects on competition", 2003, https://www.researchgate.net/publication/240629106_6_The_Growing_Importance_of_Networks_in_Finance_and_its_Eects_on_Competition. (Last visited 29 June 2021).
12. "Guidelines for on-tap licensing of small finance banks in the private sector", *Reserve Bank of India*, 27 November 2014, Reserve Bank of India - Press Releases (rbi.org.in). (Last visited 29 June 2021).
13. Ibid.
14. For a more detailed discussion *see* "India Digital Financial Inclusion: Journey Map Report", *USAID*, March 2019, pp. 16-19. https://www.usaid.gov/digital-development/india-digital-financial-inclusion-journey-map-report. (Last visited 29 June 2021).
15. "Digital Development Partnership", *World Bank*, (undated), https://www.worldbank.org/en/programs/digital-development-partnership. (Last visited 29 June 2021).
16. "Principles on Identification for Sustainable Development: Toward the Digital Age - Second Edition (English)", *World Bank Group,* 23 March 2021, http://documents.worldbank.org/curated/en/213581486378184357/Principles-on-Identification-for-Sustainable-Development-Toward-the-Digital-Age-Second-Edition. (Last visited 29 June 2021).
17. Pazarbasioglu, Ceyla et al., "Digital financial services", *World Bank*, April 2020, p. 3, https://pubdocs.worldbank.org/en/230281588169110691/Digital-Financial-Services.pdf. (Last visited 29 June 2021).
18. This case study illustrates how the need for high touch, at least in parts of the customer journey, remains essential in providing financial services for the base of the pyramid, even in the context of digital adoption. Korynski, Piotr, "The tech-and-touch mix in microfinance: Case study", *Microfinance Centre*, December 2018, Microsoft Word - The Fintech Challenge graphic (mfc.org.pl). (Last visited 29 June 2021; *See also,* Murthy, Gayatri and Ruben Barreto, "Fintech for the poor: not all virtual, not all apps", *CGAP*, 18 January 2018, FinTech for the Poor: Not All Virtual, Not All Apps (cgap.org). (Last visited 29 June 2021).
19. Ibid., p. 36.

20. This perspective – shifting mobile money providers beyond the single transaction fee perspective towards diversification and the bundling of products and services matching the user's financial journey – was born out of GSMA Profitability 2.0. *See* "Profitability 2.0: Ecosystem-driven business modelling and the future of mobile money", *GSMA*, 2021, https://www.gsma.com/mobilefordevelopment/resources/profitability-2-0-ecosystem-driven-business-modelling-and-the-future-of-mobile-money-margins/. (Last visited 29 June 2021).

21. Parker, Andrew and Sunil Sachdev, "The commercial viability of financial inclusion", *Journal for Payments Strategy and Systems*, vol. 9:3, 2015, pp. 294-304; Gokran, Subir, "Financial inclusion - A consumer centric view", Speech by Dr. Subir Gokan, Deputy Governor of the Reserve Bank of India, at the VIth V Narayanan Memorial Lecture, Kumbakonam, 21 March 2011, Subir Gokarn: Financial inclusion - a consumer centric view (bis.org). (Last visited 29 June 2021).

22. "Payment aspects of financial inclusion in the fintech era", *Committee on Payments and Market Infrastructures,* World Bank Group, April 2020, para. 141, pp. 51, https://www.bis.org/cpmi/publ/d191.pdf. (Last visited 29 June 2021).

23. Morgan, Steve, "2021 Report: Cyberwarfare in the C-Suite", *Cybersecurity Ventures*, 21 January 2021, p. 1, Cyberwarfare-2021-Report.pdf (netdna-ssl.com). (Last visited 29 June 2021).

24. Crisanto, Juan Carlos and Jeremy Premio, "Regulatory approaches to enhance banks' cyber-security frameworks", *FSI Insights on Policy Implementation No.2,* Financial Stability Institute, August 2017, Cyberwarfare-2021-Report.pdf (netdna-ssl.com). (Last visited 29 June 2021).

25. "Pursuing cybersecurity maturity at financial institutions", *Deloitte*, 2019, pp. 4-5, https://www2.deloitte.com/content/dam/Deloitte/ec/Documents/financial-services/DI_Pursuing-cybersecurity-maturity-at-financial-institutions.pdf. (Last visited 29 June 2021).

26. Bernard, Julie and Mark Nicholson, "Reshaping the cybersecurity landscape", *Deloitte Insights*, 24 July 2020, Reshaping the cybersecurity landscape | Deloitte Insights. (Last visited 29 June 2021).

27. *Ibid.* Figure 5.

28. Emi, Ishioma, "Cybercrime costs Africa billions of dollars per year", *Ventures*, 3 December 2020, Cybercrime costs Africa billions of dollars per year - Ventures Africa. (Last visited 29 June 2021).

29. Berrada, El Mehdi, "Cybercrime: West African banks are under-protected", *The Africa Report*, 11 February 2020, Cybercrime: West African banks are under-protected (theafricareport.com). (Last visited 29 June 2021).

30. Dias, Denise and Juan Carlos Izaguirre, "Regulator's friend or foe? Cloud computing in financial inclusion", *CGAP*, 16 September 2019, Regulator's Friend or Foe? Cloud Computing in Financial Inclusion (cgap.org) (Last visited 29 June 2021); Baur-Yazbeck, Silvia, "3 Myths about data localization", *CGAP*, 21 August 2018, 3 Myths About Data Localization (cgap.org). (Last visited 29 June 2021).

31. Demirguc-Kunt, Asli; Leora Klapper; Dorothe Singer, Saniya Ansar and Jake Hess, "*Global Findex Database 2017 : Measuring Financial Inclusion and the Fintech Revolution*", *World Bank*, 2017 https://openknowledge.worldbank.org/handle/10986/29510. (Last visited 29 June 2021).

32. On the risks associated with digital financial services that can inhibit financial inclusion, *see* Pazarbasioglu, Ceyla et al., "Digital financial services", World Bank, April 2020, p. 3, https://pubdocs.worldbank.org/en/230281588169110691/Digital-Financial-Services.pdf. (Last visited 29 June 2021).

33. McKee, Katherine, Michelle Kaffenberger and Jamie M. Zimmerman, "Doing digital finance right: The case for stronger mitigation of customer risks", *CGAP*, Focus Note No. 103, June 2015, pp. 4-5, Focus-Note-Doing-Digital-Finance-Right-Jun-2015.pdf (cgap.org). (Last visited 29 June 2021).

34. "G20 High-Level Principles on Financial Consumer Protection", *OECD*, October 2011, https://www.oecd.org/daf/fin/financial-markets/48892010.pdf. (Last visited 29 June 2021).

35. "Good practices for financial consumer protection", *Committee on Payments and Market Infrastructures with the World Bank,* 2017, https://openknowledge.worldbank.org/bitstream/handle/10986/28996/122011-PUBLIC-GoodPractices-WebFinal.pdf?sequence=1&isAllowed=y. (Last visited 29 June 2021).

36. "Mobile money certification principles", *GSMA*, https://www.gsma.com/mobilefordevelopment/mobile-money/certification/. (Last visited 29 June 2021).

37. McKee, Katherine, Michelle Kaffenberger and Jamie M Zimmerman, "Doing digital finance right: The case for stronger mitigation of customer risks", CGAP, Focus Note No. 103, June 2015, at pp. 4-5, Focus-Note-Doing-Digital-Finance-Right-Jun-2015.pdf (cgap.org). (Last visited 29 June 2021).

38. For one industry perspective *see* "The Mobile Money Regulatory Index", *GSMA*, (undated) https://www.gsma.com/mobilemoneymetrics/#regulatory-index?y=2020. This is an index that "scores countries based on the extent to which their regulatory framework enables widespread mobile money adoption. Scores range between 0-100, with a higher score associated with more enabling regulation". (Last visited 29 June 2021).

39. "Payment aspects of financial inclusion in the fintech era", *Committee on Payments and Market Infrastructures and World Bank Group*, April 2020, https://www.bis.org/cpmi/publ/d191.pdf. (Last visited 29 June 2021).

40. Maxwell, Winston and Marc Bourreau, "Technology neutrality in internet, telecoms and data protection regulation", *Computer and Telecommunications L. Rev.,* November 23, 2014, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2529680. (Last visited 29 June 2021).

41. "Proportional supervision for digital financial services", *CGAP,* (undated), https://www.cgap.org/topics/collections/proportional-supervision-digital-financial-services. (Last visited 29 June 2021).

42. "Global standard-setting bodies and financial inclusion for the poor: toward proportionate standards and guidance", *GPFI,* October 2011, https://www.gpfi.org/publications/global-standard-setting-bodies-and-financial-inclusion-poor. (Last visited 29 June 2021); Carvalho, Ana Paula Castro et al.,"Proportionality in banking regulation: a cross-country comparison", FSI Insights on Policy Implementation No.1, *BIS,* August 2017, https://www.bis.org/fsi/publ/insights1.htm. (Last visited 29 June 2021).

43. "G20 High-Level Principles for Digital Financial Inclusion", *GPFI*, 2016, Principle 3, p. 11, https://www.gpfi.org/sites/gpfi/files/documents/G20%20High%20Level%20Principles%20for%20Digital%20Financial%20Inclusion%20-%20Full%20version-.pdf. (Last visited 29 June 2021).

44. Dias, Denise and Juan Carlos Izaguirre, "Risk-based supervision is key to financial inclusion in 2020 and Beyond", *CGAP*, 20 February 2020, https://www.cgap.org/blog/risk-based-supervision-key-financial-inclusion-2020-beyond. (Last visited 29 June 2021).

45. Navis, Kyle et al., "The puzzle of financial inclusion in Mexico: A closable gap?", CGD Note, *Centre for Global Development*, January 2020, The Puzzle of Financial Inclusion in Mexico: A Closeable Gap? (cgdev.org). (Last visited 29 June 2021).

WORLD ECONOMIC FORUM

COMMITTED TO IMPROVING THE STATE OF THE WORLD

The World Economic Forum, committed to improving the state of the world, is the International Organization for Public-Private Cooperation.

The Forum engages the foremost political, business and other leaders of society to shape global, regional and industry agendas.

World Economic Forum
91–93 route de la Capite
CH-1223 Cologny/Geneva
Switzerland

Tel.: +41 (0) 22 869 1212
Fax: +41 (0) 22 786 2744
contact@weforum.org
www.weforum.org