



PEOPLE'S MONEY

HARNESSING DIGITALIZATION
TO FINANCE
A SUSTAINABLE FUTURE

SUMMARY REPORT

AUGUST 2020



THE UNITED NATIONS SECRETARY-GENERAL'S
TASK FORCE ON DIGITAL FINANCING
OF THE SUSTAINABLE DEVELOPMENT GOALS

About the Task Force

The UN Secretary General established the Task Force on Digital Financing of the Sustainable Development Goals (SDGs) as part of his broader Roadmap for Financing the 2030 Agenda for Sustainable Development: 2019-2021. The Task Force's mandate is to recommend and catalyse ways to harness digitalization in accelerating financing of the SDGs.

The Task Force's mandate, work and report are complementary to, and build on 'The Age of Digital Interdependence', that summarizes the findings and recommendations of the UN Secretary General's High-Level Panel on Digital Cooperation, and the associated Roadmap on Digital Cooperation.

The Task Force is co-Chaired by Achim Steiner and Maria Ramos. Its membership is Maiava Atalina Emma Ainuu-Enari, Henrietta H. Fore, Mats Granryd, Piyush Gupta, Natalie Jabangwe, Eric Xiandong Jing, Bradley Katsuyama, Pooma Kimis, Liu Zhenmin, Phumzile Mlambo-Ngcuka, Ambareen Musa, Patrick Njoroge, Ceyla Pazarbasioglu, Richard Samans, Aurelie Adam Soule Zoumarou.

Members have been supported by their Sherpas, including Matthew Blake, Cyriaque Edon, Alix Jagueneau, Gerald Lam, Mikkel Larsen, Laurence Latimer, Lanna Lome-Ieremia, Helene Molinier, Matu Mugo, Mack Ramachandran, Shari Spiegel, Mahesh Uttamchandani, Barry Wentworth, Meng Yan and Simon Zadek.

About the Report

'People's Money: Harnessing Digitalization to Finance a Sustainable Future' is the Task Force's final report. It summarizes the findings and recommendations developed and agreed by the Task Force since its inception in November 2018. It is based on an extensive engagement with stakeholders and research.

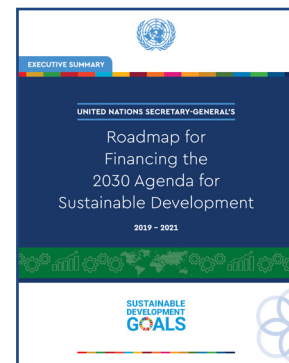
It builds on the Task Force's progress report, 'Harnessing Digitalization in Financing the Sustainable Development Goals', released on the occasion of the UN General Assembly in September 2019.

The report has been prepared for the Task Force by its Secretariat, including the Sherpa to the co-Chairs, Simon Zadek, and Vera Bersudskaya, Duygu Celik, Maya Forstater, Mimo He, Aiaze Mitha, and Arti Singh.

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The Task Force has drawn on research and extensive engagement with the financial community, policy-makers and regulators and experts and civil society groups.

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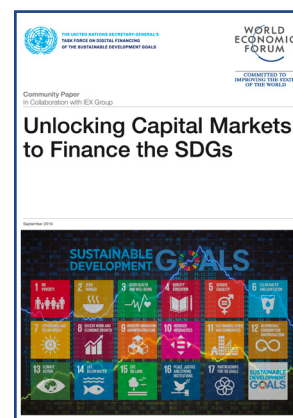
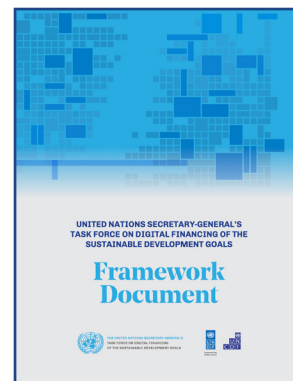
Funding for the Task Force has been provided through the generous support of the Governments of Germany, and Italy and Switzerland.

Further Information

Information about the Task Force and Downloads of this report, including action briefings for the stakeholders, a summary version, an extended bibliography and related reports can be accessed at www.digitalfinancingtaskforce.org.

Task Force members have participated in a personal capacity and are not expressing endorsements or commitments on behalf of their institutions

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LETTER FROM THE CO-CHAIRS

We must think to the future, even amidst our efforts to deal with the tragedy, turmoil, and uncertainties thrust upon us during the current crisis. Digital has proved to be a keystone in our handling of the crisis and will certainly emerge as a more important part of our collective futures.

With foresight, and fortuitously given today's context, the UN Secretary General mandated a task force to recommend how best to harness the forces of digitalization in accelerating financing of the Sustainable Development Goals (SDGs).

We are honoured to have been invited to co-Chair this task force, given both the importance of its mandate, and the exceptional leaders drawn to its ambitious goals from governments and regulators, financial, technology and international development communities.

The nexus between digitalization, finance and the SDGs is largely a new frontier of investigation and action. Fulfilling our mandate has therefore required us to catalyse a knowledge ecosystem and a community of practice, as much as making recommendations.

Core to the conclusions of the task force is that digitalization amplifies the potential for the financial system to better serve the interests of people, whose money it manages, and whose collective interest is expressed by the SDGs.

Our Action Agenda, we believe, offers an ambitious yet resolutely practical pathway for realising this potential, and closing the gap in financing the transition to an inclusive, sustainable development.

In conclusion, we would like to thank the UN Secretary General for the opportunity to play a role in advancing his broader strategy for financing the SDGs, and to thank the members of the Task Force for their extensive contributions, insights and conclusions reflected in this final report.



Achim Steiner



Maria Ramos



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EXECUTIVE SUMMARY

Digitalization can propel us towards achieving the Sustainable Development Goals, (SDGs).

Our response to today's unprecedented crisis demonstrates how digitalization can be harnessed to support vulnerable people, reduce inequalities, sustain livelihoods and strengthen solidarity. If unchecked, however, it could deepen exclusion, increase inequality and further divide us.

Digital disruption creates an historic opportunity to reshape finance. Mobile platforms and data analytics are bringing sophisticated financial services to mass markets. Tens of millions of businesses depend on more than two billion people spending trillions of dollars annually online. Governments are digitalizing public finance, and a growing portion of the world's public equities trades are executed by computer-managed funds.

Digitalization can have a transformative impact by empowering people in financing. The Task Force has focused on how digitalization can support financing that meets the priorities of the people it is intended to serve, by empowering them as savers, lenders, borrowers, investors, and taxpayers. These priorities are collectively represented by the SDGs, the shared agenda adopted by all United Nations Member States.

Catalytic opportunities can harness digitalization in aligning finance with the SDGs. The Task Force highlights that digitalization is already making a difference, but that far more can be achieved by realising keystone, catalytic opportunities. Notable is accelerating the use of domestic savings for long-term development, enhancing accountability of public financing, making SDGs count in global financial markets, financing small and medium enterprises, and promoting SDG-aligned consumer spending.

Barriers and digital risks need to be overcome in harnessing digitalization's potential in financing the SDGs, with barriers including inadequate digital infrastructure, and access, affordability and capabilities, and digital risks such as gender and minority biases, increased short-termism, cyber vulnerability, and market concentration.

Governance innovations are pre-conditions for harnessing digitalization in delivering financing of the SDGs. Regulations and standards governing digital financing need to be informed by SDG commitments and goals, with a particular need to ensure that the SDGs inform the governance of a new generation of global digital financing platforms with cross-border, spillover impacts.

The UN can play a key role in realizing opportunities, overcoming barriers and mitigating risks in harnessing digitalization in financing the SDGs. Centrally is support to Member States in realizing catalytic opportunities, aligning digitalized finance ecosystems with the SDGs, progressing governance innovations to mitigate risks, and advancing digital financing in the UN.

The historic opportunity to harness digitalization in reshaping finance must be grasped now, given the urgency to finance the SDGs, the short window of change resulting from a period of digital disruption, and the potential to maintain the digital momentum of the current crisis.



HISTORIC OPPORTUNITY AMIDST UNPRECEDENTED CRISIS

The long wave of digitalization is changing the fundamentals of how we live. Today, over half the world's population is online, a one hundred-fold increase since 1990.² Identities are formed, relationships maintained, and goods and services transacted online.³ Tens of millions of businesses depend on digital markets, with an estimated 1.9 billion people purchasing goods online in 2018.⁴

Digitalization is transforming finance, enabling services and markets to be automated, commoditized and customized. Mobile platforms and data analytics are bringing sophisticated financial services to mass markets.⁵ Governments are digitalizing public finance,⁶ whilst a third of US public equities trades are executed by computer-managed funds.⁷ Fintech-powered start-ups, financial service providers, and ecommerce, social media and search platforms are all part of the disruptive wave.⁸

The Task Force has focused on how digitalization can support financing that meets the priorities of people it is intended to serve. Citizens are the ultimate owners of the world's income and wealth, and the Sustainable Development Goals (SDGs) reflect their collective priorities. Today, the world is awash with finance, but it is not aligned with these priorities, due to gaps, weaknesses and distortions in institutions and markets.¹⁰



“Digital technologies are rapidly transforming society, simultaneously allowing for unprecedented advances in the human condition and giving rise to profound new challenges.”¹

UN Secretary General's
High-Level Panel on Digital
Cooperation



*"[there is an urgent need to] **return the financial services industry to what it is supposed to be - an industry that serves people.**"*

Kristalina Georgieva,
Managing Director,
International Monetary
Fund⁹

Digitalization offers an historic opportunity to overcome these shortfalls in aligning a new generation of financing instruments, markets and institutional arrangements with the SDGs.¹¹ Without decisive action during this period of disruptive transition, however, digitalization could result in finance becoming less rather than more aligned with sustainable development needs.¹²

Today's unprecedented crisis has made digitalization far more important. Digital finance has become a critical lifeline during the crisis for billions of people. Innovations and investments have underpinned rapid scaling of support to vulnerable groups, from extending the reach of social safety nets and health systems to new ways to secure digital livelihoods and undertake mutual support within families and communities.¹³

This surge in the digital world amplifies the opportunity and the need for it to be harnessed in the longer-term pursuit, and financing, of sustainable development. Success in building better beyond the crisis depends, however, on overcoming emerging digital risks of a deepening divide, a loss of privacy, and increased cyber risks and market concentration.¹⁴

This historic opportunity combined with this unprecedented crisis provides a unique moment and imperative to act in harnessing digitalization to accelerate financing of the SDGs. Failure to act would be a wasted opportunity and risk finance's divergence from the needs of citizens for an inclusive, sustainable development. Acting with purpose and ambition, on the other hand, opens the possibility of overcoming barriers to securing financing for the SDGs, whilst mitigating risks associated with digitalization of finance.

* Throughout the report, the word "citizens" refers to world's citizens and therefore does not exclude migrants or stateless persons.

Exhibit 1: Task Force in Brief

The Task Force has provided global leadership in helping to place sustainable development at the heart of finance's disruptive, digital evolution. Comprising 17 leaders drawn from the financial, technology, policy, regulatory and international development communities, the Task Force has been inspired and mandated by the UN Secretary General¹⁵ and guided by the work of his High-Level Panel on Digital Cooperation.¹⁶ Over 18 months, the Task Force convened around the world, engaging in dozens of countries with hundreds of financial institutions, governments and regulators, civil society organizations, think tanks and expert groups.¹⁷



The Task Force has catalysed a knowledge ecosystem at the nexus of digitalization, finance, and sustainable development. Through its call for contributions and extensive literature review, it has taken into account hundreds of papers, proposals and research pieces, as well as releasing papers, op-eds, blogs and videos, including its progress report, 'Harnessing Digitalization to Finance the Sustainable Development Goals', on the occasion of the UN General Assembly in September 2019.¹⁸

The Task Force's final report, 'People's Money: Harnessing Digitalization to Finance a Sustainable Future', is summarized in this report. It presents the main elements of the Task Force's analysis, conclusions and recommendations, including how barriers and risks might be overcome. It highlights who needs to do what in turning the recommendations into practice, exemplifying ambitious action with a portfolio of pathfinder initiatives the Task Force has helped to catalyse. The full report provides more depth across all of these elements, underpinned by an extensive, stand-alone bibliography.





TODAY'S DIGITAL FINANCING OF THE SDGS

“Mobilizing sufficient financing remains a major challenge in implementing the 2030 Agenda for Sustainable Development”.¹⁹ The gap does not arise from a lack of financial resources. Financing is not aligned with the SDGs because of lack of data and standards, misaligned incentives and regulations, and gaps and weaknesses in institutions and markets.²⁰ Much is being done to overcome barriers to financing the SDGs, but we are still not on course.²¹ The current crisis deepens the shortfall, despite the exceptional level of public spending on stimuli and bailouts.²²

Digitalization will make a difference if it helps to overcome barriers to financing the SDGs.²³ It can do this through the combined and directed impacts of its three, essential features.

● ***More and better data*** which drives better accounting of SDG-related risks and impacts in financial product design, financial decisions by private and public financiers, and enhanced accountability. For example, it can improve the use of environmental data and increase the consideration of climate change, biodiversity loss, pollution and disaster risks in financing decisions.²⁴

● ***Reduced transaction and intermediation costs*** which enable broader access to financial services for groups that were previously difficult and expensive to serve. For example, it can reduce the cost of cross-border transfers, loan origination and other financial services to individuals and businesses through automating processes such as credit scoring and identity validation.²⁵

● ***Innovative digital business models*** for financing of sustainability and for responding to the growing demand by citizens concerned with SDG impacts.²⁶ For example, it can underpin new business and market approaches that enhance circularity, and facilitate shared and better use of capital, more distributed financing of infrastructure, and wider access through innovative credit and payment approaches.²⁷

Digitalization's transformational potential is to extend beyond financial inclusion in shaping a citizen-centric financial system.

Citizens care about far more than financial returns, with those wider concerns collectively expressed in the SDGs.²⁸

Digitalization can help citizens in directing the use of their money more effectively to realize their financial and non-financial goals, by delivering the right information, improved access, greater accountability and smarter financial services, as shown in Exhibit 2.²⁹

Greater citizen engagement in financial decision-making can be as individuals, e.g. as consumers, savers and investors, and collectively, e.g. as pension and insurance policy holders, as members of associations and communities, and as accounting agents – taxpayers and voters.

Exhibit 2: Citizens and digital financing of the SDGs



Digitalization is already enabling many individuals and small businesses to gain access to financial services, and we are seeing early signs of broader dimensions of digitally enabled financing of the SDG,³⁰ as highlighted in Exhibit 3.

- **Digitalization has increased financial inclusion**, helping hundreds of millions of women, rural residents, people on low incomes, youth and small business owners to seamlessly transact, safely save, cheaply borrow, securely invest, and more easily insure.³¹

- **Digitalization has helped to incorporate SDG-related risks** (sometimes termed ‘environment, social and governance’ factors, or ‘ESG’) into growing volumes of lending and investment, including climate-related risks most visibly in recent times, but also other environmental and some social factors that present a material risk to financial returns.³²
- **Digitalization helps people align the use of their money with their own interests and goals**, as witnessed by the rapid growth in impact and automated ‘robo’ investing, and the commensurate growth of SDG-aligned lending and investing opportunities.³³
- **Digitalization can empower citizens as taxpayers and users of public services** through both ease and accessibility of tax and payment systems for public services and greater transparency in the public allocation and use of funds.³⁴
- **Digitalization has enabled people to access capital-intensive services and optimize the use of their own assets**, through shared economy approaches such as product-as-a-service, smart metering, pay-as-you-go and rent-to-own.³⁵

Exhibit 3: Digitalization Supports Financing of the SDGs

	Economic	Environmental	Social
			
More and Better Data	<ul style="list-style-type: none"> • Transaction records • Credit scoring • IoT data / smart metering • Supply chain tracking • Open government data • Crowdsourced project accountability data • Open finance 	<ul style="list-style-type: none"> • Satellite imagery • IoT data / smart metering • ESG data • Data tokens for climate impact reporting 	<ul style="list-style-type: none"> • Gender-disaggregated data • Open public finance data • Transparent public records • Crowdsourced project accountability data • ESG data
Cheaper Intermediation and Aggregation	<ul style="list-style-type: none"> • Mass-market digital finance • Pay-as-you-go utility financing models • Digitalized value chain / trade finance • Fair trade, ethical, sustainable ecommerce/ digital marketplaces 	<ul style="list-style-type: none"> • Digital exchanges for carbon credits / bio-diversity offsets • Platforms for climate project financing • Aggregation / securitization of assets • Green banking products 	<ul style="list-style-type: none"> • Remittances / humanitarian transfers • Digital marketplaces / ecommerce platforms • Mass-market digital finance • Digital education / health care financing schemes • E-government services
Disintermediation and New Business Models	<ul style="list-style-type: none"> • Crowdfunding / P2P lending • Gamified ‘green’ consumption • Circular economy models • Fractional asset ownership • Digital currency-based project finance / community services • AI-enhanced tax optimization 	<ul style="list-style-type: none"> • E-trading of natural capital backed digital assets • Remote verification insurance and financing • Gamified sustainable behaviours • Sustainability robo-advisors 	<ul style="list-style-type: none"> • Gender-lens crowdfunding & investing robo-advisors • Bias detection algorithms • Robotized m-education / health • Digital micro-insurance • Participatory budgeting • Algorithmic illicit flow tracking • Digital donation platforms

- **There are significant barriers to advancing digital financing, and risks associated with its emergence.** Barriers include gaps in digital infrastructure and skills, and backward-looking or slow-moving policy and regulation.³⁶ Skills gaps, social norms and discrimination restrict women's access to and use of mobile technology and digital finance.³⁷ In addition, there are risks that, if unmitigated, could deepen the disconnect between finance and sustainable development. Digitalization opens new routes for breaches of identity data, embezzlement and fraud.³⁸ It can intensify short-termism,³⁹ undermining long-term value creation, and it may widen inequalities.⁴⁰

The barriers and risks, as well as the opportunities, are heightened by the coronavirus crisis. It deepens the damaging implications of being excluded from the digital world, and strengthens market power of digital infrastructure platforms and digital marketplaces.⁴¹

Exhibit 4: Digital Financing - Barriers and Risks

BARRIERS

Lack of basic access: 750 million people lack broadband connectivity,⁴² 1 billion lack formal IDs⁴³

Capability gaps: illiteracy, poverty, social norms and lack of digital capabilities hinder uptake in usage

Access to appropriate digital financial services: lack of affordable, secure, relevant digital financial services

Patchy data to support financial decision-making and digital financing innovation, particularly in relation to low-income countries

Siloed and non-interoperable IT systems hinder use of data to price risk, describe impacts and underpin accountability

Talent shortage hinders digital financing innovation, particularly in less developed countries

Weak regulatory capabilities undermine the establishment of enabling policy and regulatory environment for digital financing innovation

Incumbent resistance to disruption, disintermediation, and digitally enabled transparency of their activities and rewards

RISKS

Data security and privacy risks are amplified

New **fraud and money laundering**, for example on digital marketplaces, cryptocurrency exchanges, crowdfunding platforms

Irresponsible digital financial products with opaque or misleading terms and conditions and insufficient recourse mechanisms

Data monopolization or exploitative use of data can stifle future digital financing innovation and undermine consumer trust

Unfair treatment can arise from discriminatory algorithms based on biased data or hyper-personalization of financial services

Short-termism, volatility trading and herd behaviour has grown with digitalization and algorithmic trading

Market concentration and rent taking derives from ever increasing returns to scale and growing complexity and opacity

Lack of, incomplete or over-regulation stifles market innovation



TASK FORCE'S ACTION AGENDA

Harnessing digitalization in advancing a citizen-centric financial system is the core of the Task Force's call to action to accelerate financing for the SDGs. The Call to Action is underpinned by an Action Agenda comprising three linked sets of recommendations for actioning by market players, policy and regulatory authorities, international organizations and other stakeholders.



ADVANCING CATALYTIC OPPORTUNITIES

Catalytic opportunities are game-changing in both delivering financing and shaping finance. The Task Force has highlighted the importance of advancing catalytic opportunities for harnessing digitalization in aligning financing with the SDGs. Each can repurpose and redirect significant financial flows towards financing the SDGs. Beyond this, they can be catalytic in triggering broader, systemic changes by driving innovation, disrupting stagnant markets, undermining rent-taking, increasing accountability, and encouraging governance innovations.

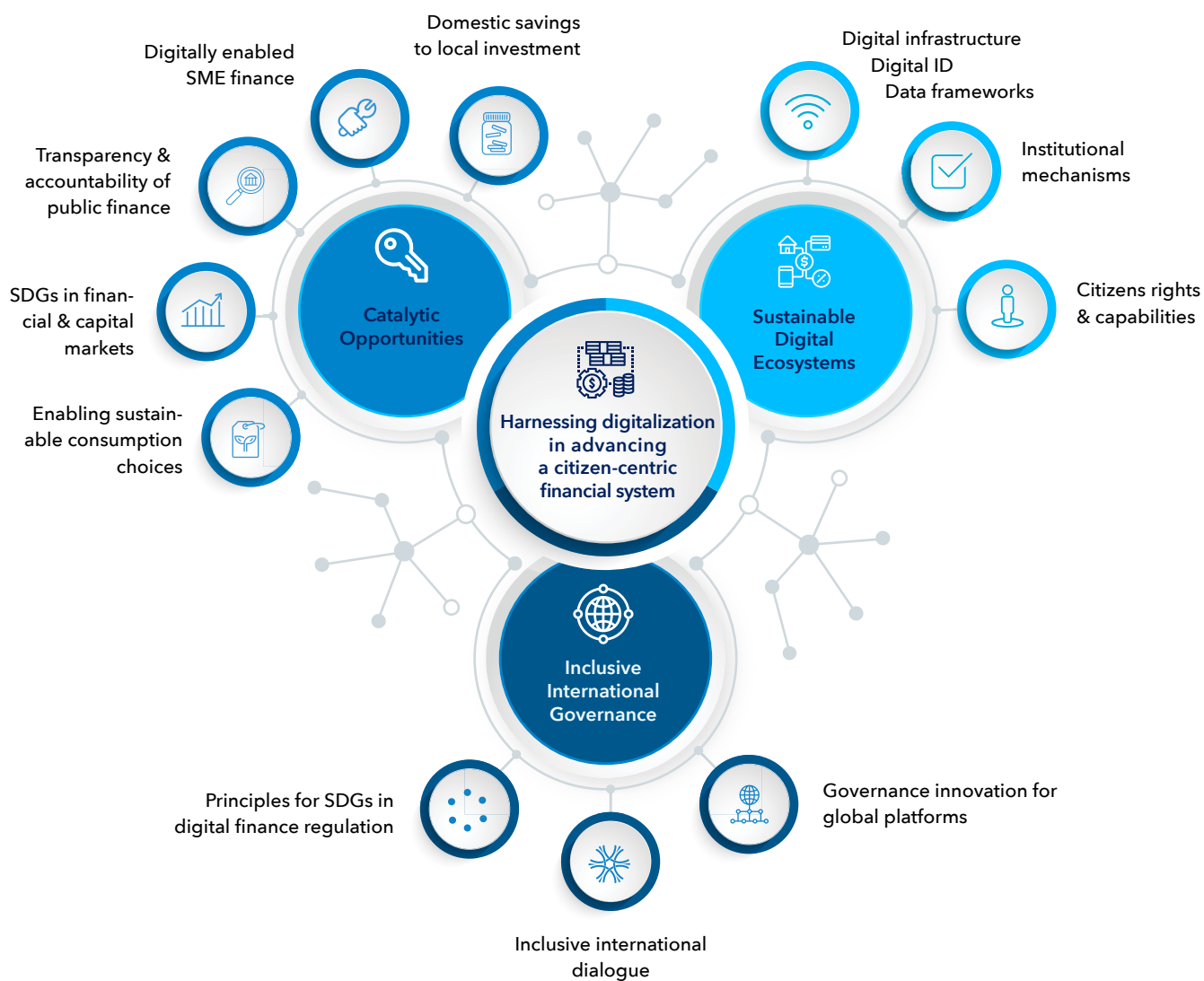
The Task Force has identified five catalytic opportunities for harnessing digitalization in aligning financing with the SDGs. Taken together, they cover much of global finance, from the vast pools flowing through global capital markets, to public finance that makes up a major part of the global economy, to the aggregated potential of citizens' savings and consumer spending, and the lifeblood financing for the employment and income-generating world of SMEs. These opportunities are systemically important, but are by no means exhaustive, and are intended to inspire further work in identifying additional opportunities.

Pathfinder initiatives developed through and with the Task Force exemplify how to realize such catalytic opportunities. The Zimbabwean payments platform, EcoCash, has designed and piloted a world-first stock exchange that draws on payments data to provide robust due diligence and credit ratings for prospective listings, opening a debt and equity financing window for Zimbabwean SMEs operating in difficult economic conditions. Bangladesh is exploring how to harness digitalization to channel domestic micro-savings into investments in sustainable infrastructure, and then use blockchain to improve effectiveness and accountability in the use of funds. Domestic savers could choose SDG projects from which they would benefit, the approach could deliver significant reductions in the cost of capital, as well as economic multiplier effects as dividends flow to poorer Bangladeshi citizens. Refinitiv, a Task Force knowledge partner, is aggregating 25 years of data on project finance, deals, loans, due diligence, risk profiles, and macroeconomic, geopolitical and operational risk with ESG metrics to create a comprehensive online view of over 60,000 infrastructure projects globally.⁴⁴

Exhibit 5: Task Force Action Agenda

Harnessing digitalization in advancing a citizen-centric financial system is the core of the Task Force's call to action to accelerate financing for the SDGs.

The Call to Action is underpinned by an Action Agenda comprising three, linked sets of recommendations for actioning by market players, policy and regulatory authorities, international organizations and other stakeholders.



- **Advance catalytic opportunities** to deliver financing for specific sustainable development goals.
- **Build foundations for sustainable digital financing ecosystems**, including:
 - Infrastructure: accessible, affordable connectivity, digital ID and data markets.
 - Planning, institutions, and learning: developing national and in some cases regional ecosystems that steer the evolution of SDG-aligned digital financing.
 - Capabilities: building people's capacity to benefit from online connectivity and digital finance, ensuring rights and protections.
- **Strengthen inclusive international governance** to develop policies, regulations, standards and corporate governance arrangements at the international level, suited for securing SDG-aligned global digital financing platforms and markets.

Exhibit 6: Catalytic Opportunities

Opportunities	 <p>Channel domestic savings into development financing</p>	 <p>Enhance financing for small and medium-sized businesses (SMEs)</p>	 <p>Digitize public financing and make public budgets and contracts transparent</p>	 <p>Embed SDGs into decisions financial and capital markets</p>	 <p>Shape consumption decisions through improved information and choice architecture</p>
Scale	<p>Global savings pool has grown over two decades from US\$7.5 to US\$23.3 trillion.⁴⁵</p>	<p>Potential to meet the US\$5.2 trillion a year need for SME financing in developing countries.⁴⁶</p>	<p>Governments in developing countries could gain US\$220 to US\$320 billion annually from digitalizing payments.⁴⁷</p>	<p>The outstanding value of global equity and bond markets is US\$185 trillion.⁴⁸</p>	<p>Annual global consumption expenditure is US\$47 trillion.⁴⁹</p>
SDGs					
Citizens as..	<p>Small savers and co-beneficiaries of sustainable infrastructure</p>	<p>Borrowers, entrepreneurs, employees</p>	<p>Tax-payers, voters, public service users</p>	<p>Savers, investors</p>	<p>Consumers, asset owners</p>
Next Steps	<p>Policy makers should form national coalitions with infrastructure, finance and payment platform businesses to build 'low-cost-high integrity' digital financing solutions to enable micro-savers (including women and youth) to finance local, sustainable infrastructure.</p>	<p>Policy makers and regulators should encourage market innovation to develop SME lending and investment platforms, which integrate sustainability criteria and client protections, and avoid algorithmic discrimination against women-owned businesses.</p>	<p>Policy makers should make commitments and work with civil society and the private sector to increase transparency of public finances and use open government data to pursue SDG priorities.</p>	<p>Regulators should set requirements for pension and insurance companies to consult policyholders on the use of funds and publish stress tests of all material SDG-related risks and impacts.</p>	<p>Policy makers should work with industry and provide incentives to encourage and facilitate sustainable choices by consumers and enable digital markets for sustainable assets.</p>



BUILDING SUSTAINABLE DIGITAL FINANCING ECOSYSTEMS

Harnessing digitalization to empower people to accelerate financing for the SDGs requires the development of the appropriate digital financing ecosystem. The Task Force identifies necessary action in three areas:⁵⁰



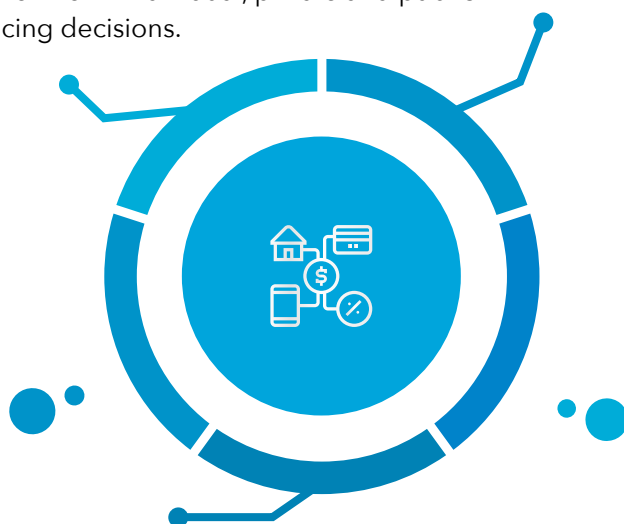
Building core digital foundations made up of:

- (i) Universal, accessible, affordable connectivity and payments infrastructure,
- (ii) Reliable, secure, private, unique digital IDs and,
- (iii) Data to inform individual, private and public financing decisions.



Enabling digital financing ecosystems to flourish made up of:

- (i) Robust, dynamic planning of the financing needs associated with SDG priorities,
- (ii) Institutional mechanisms for incentivizing the development of SDG-aligned digital financing,
- (iii) A framework for diagnosing, monitoring and learning how the nexus between digital financing and SDGs is developing.



Empowering people to use their finances by building their individual and collective capability to impact financing decisions as consumers, savers, taxpayers, borrowers, investors and service users, including:




- (i) Legal rights to be consulted (e.g. as pension and insurance policy holders),
- (ii) Protection of consumer rights, and against fraud, misuse, discrimination and exploitation,
- (iii) Development of awareness and capabilities, individually but also crucially through collective approaches (e.g. communities, associations, unions).

Task Force members and partners are accelerating digital financing ecosystem development at national and regional levels through a series of pathfinder initiatives. In The Gambia, EcoCash, UN Women and GSMA, with support from UNCDF, are strengthening the digital financing ecosystem by advancing a supportive policy environment and promoting private sector investments in digital infrastructure and citizen-centric products and services. The Central Bank of Kenya is working to foster a regional digital financing ecosystem, setting the context for larger-scale adoption and development of sustainable digital financing innovations. The Green Digital Finance Alliance, a Task Force knowledge partner, has developed a measurement framework that reviews the status of digital and data infrastructure, policy and regulatory environment, and market applications that support financing for SDGs.⁵¹

The framework will help shape policies and regulations that align digital financing solutions with national SDG priorities, while generating knowledge about emerging sustainable digital financing practices. In undertaking this, the promotion of digital and financial inclusion for women and other excluded groups should be a specific policy objective.

Exhibit 7: Sustainable Digital Financing Ecosystems



Element	 <p>Core Digital Foundations</p>	 <p>Digital Financing Ecosystems</p>	 <p>Citizen Rights and Capabilities</p>
Recommendation	<p>Accelerated investment in citizen centric digital finance that must include universal, affordable, accessible connectivity;⁵² universal secure, private, portable digital IDs,⁵³ open interoperable payments and data networks⁵⁴ and citizen controlled personal data and decision relevant SDG data.⁵⁵</p>	<p>Develop national sustainable digital financing ecosystems that integrate SDG priorities and planning with the governance and market development of digital financing solutions.</p>	<p>Invest in the capabilities and rights needed to empower citizens in making individual and collective decisions regarding the use of their money, in particular those most left behind (women, youth, displaced, aged).⁵⁶</p>

Next Steps	<p>Priority actions should</p> <ol style="list-style-type: none"> 1. Accelerate existing investment programs in digital infrastructure, particularly leveraging COVID-19 stimulus-related learning and investments. 2. Converge on standards for a 'good' digital ID and relevant certification and safeguards. 3. Extend data governance discussions to a broader set of regulators, including financial, telecom and data regulators, competition and tax authorities, and key market players. 4. Develop comprehensive data privacy and protection legal frameworks. 5. Develop a country-based index that provides visibility on, and supports systematic planning for, citizen-centric and open market 	<p>Priority actions should</p> <ol style="list-style-type: none"> 1. Integrating SDG goals into financial inclusion, digital economy, and digital finance strategies and planning. 2. Build SDG-related guidance and incentives into fintech innovation hubs and communities. 3. Strengthen awareness by central banks and financial regulators of the linkage between SDGs and digital financing, drawing SDGs into regulatory sandboxes. 4. Establish a platform for financial players and private sector to discover, test, invest in and consume SDG-aligned digital financing innovations. 5. Build and converge on a common framework for assessing the alignment of digital financing developments with SDG priorities. 	<p>Priority actions should</p> <ol style="list-style-type: none"> 1. Develop a coalition of citizen representatives committed to ensuring citizen voice in decisions of financial intermediaries. 2. Financial regulators to extend citizens' rights to information and involvement in financing decisions regarding the use of their money. 3. Governments to reinforce their commitments to a goal of transparency of public finance, including budgets, procurement, and spending, and provide roadmaps for achieving that goal. 4. Financial regulators and supervisory authorities to develop strong consumer protection frameworks for digital financial services. 5. Central banks and financial supervisory authorities to work with financial service providers and consumer protection groups to develop digital financial literacy strategies.
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The UN Secretary General's High-Level Panel on Digital Cooperation pointed to the need for stronger international leadership and governance

in building an inclusive digital economy and society; strengthening human and institutional capacity; protecting human rights and agency; and ensuring trust, security, and stability.⁵⁷ Building on this landmark report, the UN Secretary General has issued a capitalise roadmap that describes how the United Nations can support international digital cooperation in these areas.⁵⁸

Aligned with the Roadmap on Digital Cooperation is the need to strengthen the international governance of digital financing solutions to ensure they deliver financing for the SDGs.

International financial governance is a complex system of inter-governmental and regulatory coalitions and organizations that together advance normative frameworks, standards, norms and performance metrics. The governance ecosystem has increasingly incorporated the SDGs into their analysis and rule-setting, notably financial inclusion and more recently climate action. Exemplifying this important development is the work of initiatives such as the Financial Stability Board's Task Force on Climate-related Financial Disclosures,⁵⁹ and the Network of Central Banks and Supervisors for Greening the Financial System,⁶⁰ as well as national and regional initiatives, such as China's framework for greening its financial system⁶¹ and the European Commission's International Platform on Sustainable Finance.⁶²

Building on these developments, the Task Force makes three recommendations that improve governance at the nexus of digital finance and the broader agenda of financing the SDGs.

- ▶ **A principles-based approach** could advance international policy, regulations and standards. Financial governance is informed by principles that cascade into frameworks, standards, assessment models and metrics. A number of principles have been developed around inclusive digital finance (e.g. Bali Fintech Agenda,⁶³ G20's Global Partnership for Financial Inclusion,⁶⁴ Sochi Accord on Fintech for Financial Inclusion,⁶⁵ G20 AI Principles⁶⁶) and sustainable finance (e.g. Principles for Responsible Investment,⁶⁷ Principles for Responsible Banking,⁶⁸ Principles for Sustainable Insurance⁶⁹). This work needs to be synthesized, expanded and strengthened to establish a set of principles that can inform coherent norm-setting at the nexus of digital financing and the SDGs.
- ▶ An inclusive approach, particularly involving developing nations, could enhance the **governance of global digital financing platforms** with cross-border sustainable development impacts. Digitalization drives increasing returns to scale and is likely to lead to increased market concentration and globally significant digital finance platforms.⁷⁰ Their cross-border spill-over impacts may be intended and beneficial or problematic depending on country characteristics such as the level of private and financial sector development.⁷¹ Current regulatory discussions and practice concerning these global digital finance platforms have been limited in scope and participation, albeit incorporating windows of public consultations.⁷²
- ▶ **Corporate governance innovations** can ensure that SDG considerations are taken into account. Regulatory oversight of digital financing platforms needs to adapt, but it could also be complemented by corporate governance innovation. Some digital companies are already experimenting in soft or non-fiduciary governance innovations to secure public interest outcomes.⁷³ Building on and amplifying these early experiences, the development of more systematic 'public utility' corporate governance arrangements could complement policy and regulatory measures in strengthening the SDG-alignment of global digital financing platforms.

Task Force members have convened a Dialogue on Global Digital Finance to facilitate inclusive discussion and rule-setting on digital financing platforms with cross-border effects. Under the leadership of Kenya and Switzerland, the international Dialogue on Global Digital Finance seeks to facilitate a balanced and more inclusive dialogue, particularly involving developing nations, on SDG-aligned governance of global digital finance platforms. It will convene regulators from various domains and representatives from key institutions to advance governance innovations and policy responses to evolving global digital finance, appropriate for developing economies.

Exhibit 8: Inclusive International Governance

Element	 Principles	 Inclusive Rule-Setting	 Governance Innovations
Recommendation	<p>Develop a set of principles that guide national and international rulemaking and also directly market behaviour in aligning digital financing with the SDGs.</p>	<p>Ensure a more effective, permanent voice of developing countries in the development of governance of digital financing, particularly pertaining to global digital finance platforms that will have cross-border spill-over impacts.</p>	<p>Develop and deploy corporate governance frameworks to secure 'public utility' aspects of digital finance platforms that are large, market dominant, and have cross-border spill-over effects.</p>
Next Steps	<p>UN with Bretton Woods institutions to advance such a set of principles in consultation between policy makers, regulators, international organizations, fintech companies and financial institutions, draw on existing principles (e.g. Bali Fintech Agenda) and to be adopted by key international platforms, such as the G20.</p>	<p>Establish a platform led by developing country policymakers and regulators to engage with international rule and standard-setting bodies shaping the next generation of governance of global digital financing actors. It should leverage existing platforms for developing country engagement with standard setters and include finance, telecommunications, competition, tax and data regulators.</p>	<p>Establish a working group including financial policy makers and regulators, corporate governance groups, public interest bodies and global digital finance platforms to develop and encourage take up of possible frameworks.</p>

The Task Force's recommendations help in addressing barriers and risks. There are barriers and risks in harnessing digitalization, which left unattended could worsen the misalignment of financing with the SDGs. The recommendations in the Task Force's Action Agenda help to address many of these barriers and risks. Some may however remain less impacted in implementing the recommendations, from the growing problem of online fraud⁷⁴ to cross-border issues such as taxing digital services,⁷⁵ aspects of illicit financial flows,⁷⁶ and the challenges of effective regulation of high-speed, automated financial market trading.⁷⁷ There remains much to be done, with key action areas and practical steps highlighted by the UN Secretary General's Roadmap on Digital Cooperation.⁷⁸

Exhibit 9: Action Agenda Helps Overcome Barriers and Risks

OVERCOMING BARRIERS

Increased investment in digital foundations will help overcome **access barriers**, enhance **data availability** and increase **citizen participation** in financing decisions.

Advancing digital financing ecosystems will ease the development of **relevant innovations**, increasing citizen interest and agency.

Regional approaches to these ecosystems will drive partnerships, knowledge exchange and support **local talent development**.

International cooperation in inclusive governance and policy dialogue will help build **regulatory capabilities** and support **innovation in digital financing**.

Empowering citizens, individually and collectively, by advancing digital financial literacy programs, access to information, and increased transparency, including addressing barriers for specific groups such as women and older people, will drive **greater usage of digital financial services** and citizen involvement in financing decisions.

Pursuing catalytic opportunities will result in increased innovation, disruption, disintermediation and transparency, potentially helping to **overcome incumbent resistance**.

ADDRESSING RISKS

Specific consideration of data access, usage and sharing in the design of robust digital foundations, will help mitigate **data privacy** and data **monopolization risks**.

Development of local regulatory and supervisory tools and capabilities, as part of advancing digital financing ecosystems, will address new risks such as **algorithmic biases and unfair treatment**.

Advancing digital financing ecosystems will drive innovation that **undermines rent-taking**.

International cooperation in governance will help address risks such as **data monopolization** and advance solutions to systemic risks, such as **cybersecurity**, posed by large platforms through greater dialogue and information sharing on threats.

Securing citizen rights and capabilities and ensuring adequate protection mechanisms will contribute to **reducing fraud** and building trust. Furthermore, this will strengthen citizens' role as accountability agents, which will contribute to curbing such risks as **short-termism and volatility trading**.

Pursuing catalytic opportunities will redirect significant financial flows towards long-term sustainable investments, away from **short-termism**. It will also drive innovation that **undermines rent-taking**.



4 NEXT STEPS



Implementing the Task Force's Action Agenda can close the gap in financing the SDGs. The Action Agenda sets out how digitalization can be harnessed to deliver the financing needed by investing in digital infrastructure, encouraging market development, empowering citizens and enabling the necessary governance innovations.

Implementing the Action Agenda will undoubtedly be a challenge. The call is for systemic changes in finance, citizens' capabilities and the practice of institutional innovations. Digitalization and its disruptive effects open the way to this systemic change, if guided to overcome barriers, avoid risks, and seize SDG-aligned opportunities. The current health and economic crisis related to COVID-19 increases the challenge of addressing long-term needs. At the same time, its impact in accelerating all aspects of digitalization may ultimately make it easier to implement the Action Agenda.

Every country can and should advance digitally enabled, citizen-centric financing of the SDGs. The Call to Action and Action Agenda are ambitious and achievable and are relevant to all countries. Specific aspects and focus areas, however, depend on national priorities, the maturity of digital infrastructure, public financing and financial markets, capabilities and financial governance arrangements. There is a sequencing dependent on a country's stage of development:

<p>Less developed countries might focus on building affordable digital infrastructure, developing digital skills, providing secure digital IDs, and ensuring access to core financial services.</p>	<p>Countries that have these foundations in place might place more emphasis on secure savings, SME borrowing and more transparent and efficient public finance and tax collection.</p>	<p>Countries with significant pools of domestic savings might emphasize new channels for aggregating savings to be used for longer term sustainable development financing.</p>	<p>Countries with sophisticated financial and capital markets might prioritize improved risk pricing, impact investing, and operationalizing the rights of shareholders and pension policyholders in shaping investment policies.</p>
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Whilst the basic digital infrastructure needs to be in place, less developed countries can without doubt harness catalytic opportunities in leapfrogging to more sophisticated, impactful financing arrangements. For example, it is demonstrably possible to harness digitalization to connect domestic savings to infrastructure investment in the face of weak or absent capital markets, and leverage data from payment platforms to advance algorithmic lending to SMEs, or digital approaches to developing stock exchanges.

Empowering people in financial decision-making will not happen automatically. The detachment of public and private finance from citizens has become an embedded feature of global finance.⁷⁹ There is much to do in overcoming the resistance of those who are sceptical or cynical about citizens being agents of change, or who have vested interests in the status quo. Citizens need capabilities and education to make informed decisions. Inclusion will not happen automatically. Decision makers should consider the particular barriers for women, older people, youth and other excluded groups. Policymakers and regulators will need to secure the right data flows, and the rights and opportunities for citizens to shape financing decisions. Market actors have a key role to play in empowering citizens by offering specialized products and services.

Ambitious action requires connecting the dots between several communities across public and private actors. Policymakers and regulators, and market and civil society actors will have to work together to realize the catalytic opportunities, build sustainable digital financing ecosystems, and foster international cooperation and governance innovations. Advocates of sustainable finance need to get more digital.⁸⁰ Digital finance innovation communities and data providers need to get more savvy about sustainable development.⁸¹ Financial regulators need to place more emphasis on the SDGs⁸² and to cooperate closer with policy-makers and non-financial regulators, including those responsible for data, taxation, competition policy and telecommunications.⁸³

Exemplary initiatives, including those the Task Force has catalysed, illustrate potential. The Task Force has identified many relevant and inspiring use cases as part of its landscape mapping⁸⁴ and has highlighted some of these in its report. It has also catalysed a small portfolio of pathfinder initiatives that exemplify ambitious and innovative projects aligned with its Action Agenda.

Collectively, these initiatives demonstrate how key features of digitalization - more and better data, cheaper transactions and financial intermediation, and innovative digital business models - could be harnessed toward financing sustainable development by giving citizens more options to make informed and purposeful decisions.

The United Nations has a key role to play in implementing the Action Agenda. The UN supports Member States in implementing the 2030 Agenda for Sustainable Development. As part of this, there are three ways in which the UN can advance the Task Force's Action Agenda.



Finally, **the UN should develop a mechanism for stewarding the implementation of the Task Force's recommendations.**



Exhibit 10: The Action Agenda for Different Actors



ACTORS	KEY ROLES
Policy makers and regulators	Provide standards and regulatory certainty, advance cooperation with innovators, steer market development in support of national sustainable development priorities, empower citizens and mitigate risks brought by digitalization of finance.
Member states, as part of the UN system	Cooperate to share experience, coordinate and advance ambition and develop common principles and approaches, while building capacity, infrastructure, regulations and industry support at home.
Fintech companies and global digital platforms	Innovate products and services which meet consumer demand to channel finance to sustainable development goals. Commit to principles of SDG-aligned digital financing and develop corporate governance mechanisms to ensure they operationalize them.
Financial Institutions	Identify and advance opportunities in own products and systems, advance interoperable digital ID and data systems. Engage with international standard setting and explore corporate governance options for stewarding the SDGs.
International development community	Technical assistance and disseminating learning, supporting governance innovation. Provide support for development of inclusive infrastructure and the capacity of citizens
Development finance institutions	Offer solutions to share risk to enable the development of catalytic solutions. Share knowledge to help governments design risk capital projects aligned to sustainable development and provide incentives via conditionality for corporate governance innovations.
Civil society organisations	Across civic, religious, youth, women's, worker, trader consumer and other interest groups: mobilize collective voice, documenting problems and solutions to hold the powerful accountable. Build the capacity of citizens.z
The United Nations	Support Member States in realizing catalytic opportunities and establishing digital financing ecosystems aligned with SDG priorities. Advance inclusive international norm-setting and governance innovations to mitigate risks. Exemplify good practice on digital financing internally. Develop a mechanism for stewarding the implementation of Task Force recommendations.

EPILOGUE

Multiple crises and uncertainties characterize the unprecedented state of the world as the Task Force completes its work. Human tragedy; the fears of a volatile, indefinite health crisis; the implosion of local and national economies with resulting unemployment, poverty and inequality; an extraordinary scale of fiscal and monetary stimuli by those countries that can afford them, and a public finance and sovereign debt crisis for those who cannot. Amidst such turmoil, the persistent and growing threats of climate change and biodiversity loss; and the challenges in securing the national, regional and international cooperation needed to come through this period and build better, with dignity, humanity and hope.

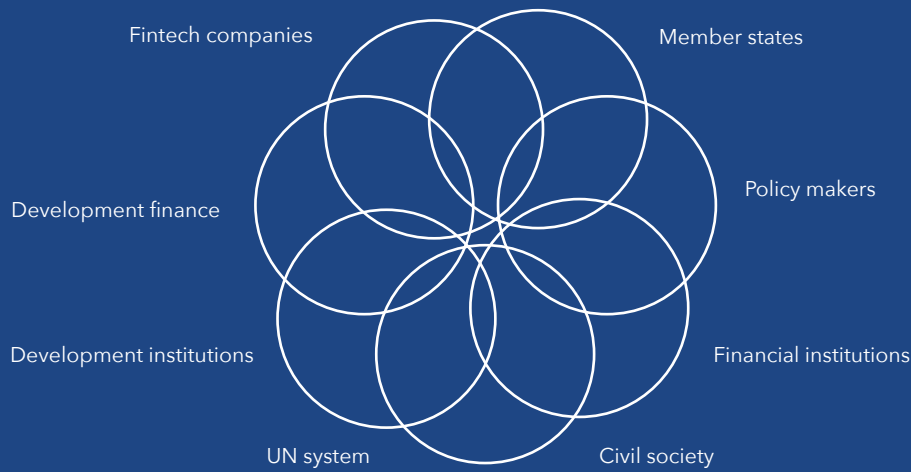
Digitalization, already part of our world, has through this crisis come into its own. Over 1.5 billion children in 188 countries have been affected by school closures due to the pandemic, with many resorting to some form of online learning.⁸⁵ Digital finance in particular has become a lifeline for many, and the positive hotspot of a global economy on pause.⁸⁶ Digital rails have become the superhighways for large cash transfers by governments to citizens in the face of income losses associated with mandatory lockdowns.⁸⁷

Online shopping has surged through the crisis, with many surveys pointing to a permanent shift in consumer behaviour towards digital purchases.⁸⁸ Customer spending through Amazon has surged during the crisis to US\$11,000 per second, driving the value of the Seattle-based company up to almost US\$1.2 trillion.⁸⁹ Alibaba, which emerged as China's leading ecommerce platform after the 2003 SARS outbreak, is now offering billions of dollars in loans to SMEs at a time when many others are retrenching.⁹⁰



The coronavirus crisis and its economic aftermath have not created but have without doubt super-charged the trends towards digitalization. In this context, the Task Force's mandate and recommendations are more important than ever and represent a more urgent agenda to action.





Realizing the opportunity of implementing the Action Agenda will be a challenge. It requires ambitious action, connecting the dots between several communities across public and private actors. Short, specific briefings on the action agenda for seven key sets of actors are available from www.digitaltaskforce.org

Catalytic opportunities for harnessing digitalization to accelerate financing for the SDGs have never been greater.

Many governments have committed to greener and more equitable, short term public stimuli and bailouts, and longer-term recovery plans, driving impact-focused public spending and investments that will require enhanced transparency and accountability underpinned by real-time, digital tagging and assessment.⁹¹ Sustainability-aligned investments in public traded equities have performed remarkably well throughout the crisis, and are expected to grow rapidly, requiring better data and improved financial products.⁹² SME access to finance will be a critical factor in the short and longer-term recovery, with algorithmic lending providing an ever-more important basis for targeting and moving funds quickly and safely.⁹³



Digital risks will also be more present than ever before.

Access to a phone, a bank account and a digital ID is increasingly core to economic health and for some a matter life or death. Yet one or more parts of this digital survival kit are still unavailable to almost half the adult population, disproportionately women, across most developing countries.⁹⁴ The rapid digitalization of public finance makes the need more urgent for robust systems, strong institutions and effective accountability.⁹⁵ Cybersecurity and privacy threats represent a growing concern, often affecting the most vulnerable with less advanced capabilities.⁹⁶ The accelerated growth of digital financing and global platforms, makes it more pressing to secure the international cooperation and governance innovations needed to ensure that their global, cross-border effects benefit communities in delivering SDG-aligned outcomes.⁹⁷



Endnotes

1. UN Secretary-General's High-level Panel on Digital Cooperation, 'The Age of Digital Interdependence', June 2019, <https://digitalcooperation.org/>
2. Roser M. and others, 'Internet', Ourworld in Data, <https://ourworldindata.org/internet>; GSMA Mobile Connectivity Index, <https://www.mobileconnectivityindex.com/>
3. Statista, 'Global Digital Population as of April 2020', <https://www.statista.com/statistics/617136/digital-population-worldwide/>
4. GSMA, '2019 Mobile Industry Impact Report: Sustainable Development Goals', September 2019, <https://www.gsmaintelligence.com/research/?file=a60d6541465e86561f37f0f77ebee0f7&download>
5. Frost, J. and others, 'BigTech and the Changing Structure of Financial Intermediation', BIS, April 2019, <https://www.bis.org/publ/work779.pdf>
6. Cangiano, M., Gelb, A. and Goodwin-Groen, R. 2019. "Public Financial Management and the Digitalization of Payments." CGD Policy Paper 144. <https://www.cgdev.org/sites/default/files/public-financial-management-and-digitalization-payments.pdf>
7. The Economist, "The Stock Market is Now Run by Computers, Algorithms and Passive Managers", 5 October 2019. <https://www.economist.com/briefing/2019/10/05/the-stockmarket-is-now-run-by-computers-algorithms-and-passive-managers>
8. Committee on Payments and Market Infrastructures / World Bank Group, 'Payment Aspects of Financial Inclusion in the Fintech Era', April 2020, <https://www.bis.org/cpmi/publ/d191.pdf>
9. Georgieva, K., 'The Financial Sector in the 2020s: Building a More Inclusive System in the New Decade', IMF, 17 January 2020, <https://www.imf.org/en/News/Articles/2020/01/17/sp01172019-the-financial-sector-in-the-2020s>
10. UN Secretary-General's Strategy for Financing the 2030 Agenda. <https://www.un.org/sustainabledevelopment/sg-finance-strategy/>
11. Castilla-Rubio, J. C. and others, 'Fintech and Sustainable Development: Assessing the Implications', UNEP, December 2016, https://90bf1b73-3763-483f-abf5-1e464e9f1319.filesusr.com/ugd/3d4f2c_f57f7bc8bab34ecc8600cb19d3b52469.pdf

12. Secretary General's Task Force on Digital Financing of the Sustainable Development Goals, 'Harnessing Digitalization in Financing the Sustainable Development Goals', September 2019, <https://digitalfinancingtaskforce.org/pr-report/>; Buckley, R. and others, "The Dark Side of Digital Financial Transformation: The New Risks of FinTech and the Rise of TechRisk", Law Working Paper Series Paper Number 2019-009, Faculty of Law, Economics and Finance, November 2019, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3478640&download=yes; UNCTAD, 'Digital Economy Report 2019. Value Creation and Capture: Implications for Developing Countries', 4 September 2019. https://unctad.org/en/PublicationsLibrary/der2019_en.pdf
13. See for example, FinDev Gateway. FinDev Guide to Data - Tracking the Global Response to COVID-19. <https://www.findevgateway.org/guide/findev-guide-data-tracking-global-response-covid-19>; OECD, 'Tackling coronavirus (COVID-19)', n.d., <https://www.oecd.org/coronavirus/en/>; IMF, 'Policy Responses to COVID-19: Policy Tracker', <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>.
14. UN Secretary-General's High-Level Panel on Digital Cooperation, 'Special Update: Digital Cooperation in the Time of COVID-19', 31 March 2020, <https://digitalcooperation.org/special-update-digital-cooperation-in-the-time-of-covid-19/>; Harari, Y., 'Yuval Noah Harari: The World After Coronavirus', Financial Times, 20 March 2020, <https://www.ft.com/content/19d90308-6858-11ea-a3c9-1fe6fedcca75?sharetype=blocked>
15. United Nation's Secretary General's Roadmap for Financing the 2030 Agenda for Sustainable Development, 2019 - 2021, <https://www.un.org/sustainabledevelopment/wp-content/uploads/2019/07/UN-SG-Roadmap-Financing-the-SDGs-July-2019.pdf>
16. UN Secretary-General's High-level Panel on Digital Cooperation, 'the Age of Digital Interdependence' June 2019. <https://digitalcooperation.org/>
17. UN Secretary General's Digital Financing Task Force. <https://digitalfinancingtaskforce.org/dtff/news/>
18. Secretary General's Task Force on Digital Financing of the Sustainable Development Goals, 'Harnessing Digitalization in Financing the Sustainable Development Goals', September 2019, <https://digitalfinancingtaskforce.org/pr-report/>
19. UN DESA Inter-Agency Task Force on Financing for Sustainable Development, Financing for Sustainable Development Report, 2019, https://developmentfinance.un.org/sites/developmentfinance.un.org/files/FSDR2019_Overview.pdf
20. UNEP 'The Financial System We Need', The UNEP Inquiry Report Aligning the Financial System with Sustainable Development', 2015. [https://investmentpolicy.unctad.org/uploaded-files/document/Background%20UNEPInquiry_The_Financial_System_We_Need_EN_October2015%20\(2\).pdf](https://investmentpolicy.unctad.org/uploaded-files/document/Background%20UNEPInquiry_The_Financial_System_We_Need_EN_October2015%20(2).pdf); Institute of International Finance, 'Sustainable Finance Policy & Regulation: The Case for Greater International Alignment', <https://www.iif.com/Portals/0/Files/content/Regulatory/IIFStaffPaper-Sustainable%20Finance%20Case%20for%20Greater%20International%20Alignment-2020%2003%2002-Final.pdf>; UN Global Compact Action Platform on Financial Innovation for the SDGs, 'Corporate Finance: A Roadmap to Mainstream SDG Investments', UN Global Compact/ UNEP Finance Initiative, 2019, <https://www.unglobalcompact.org/library/5712>
21. OECD, 'Global Outlook on Financing for Sustainable Development 2019. Time to Face the Challenge', 2018, <https://www.oecd.org/dac/financing-sustainable-development/development-finance-topics/Global-Outlook-on-Financing-for-SD-2019.pdf>
22. UN DESA Inter-Agency Task Force on Financing for Sustainable Development, 'Financing for Sustainable Development Report 2020', https://developmentfinance.un.org/sites/developmentfinance.un.org/files/FSDR_2020.pdf; Battersby, B. and others, 'Tracking the \$9 Trillion Global Fiscal Support to Fight COVID-19', 20 May 2020, <https://blogs.imf.org/2020/05/20/tracking-the-9-trillion-global-fiscal-support-to-fight-covid-19/>
23. Castilla-Rubio, J. C. and others, 'Fintech and Sustainable Development: Assessing the Implications', UNEP, December 2016, https://90bf1b73-3763-483f-abf5-1e464e9f1319.filesusr.com/ugd/3d4f2c_f57f7bc8bab34ecc8600cb19d3b52469.pdf

24. Jun, M. and others, 'Improving the Availability and Usefulness of Publicly Available Environmental Data for Financial Analysis' G20 Green Finance Study Group, July 2017, http://unepinquiry.org/wp-content/uploads/2017/07/Improving_the_Availability_and_Usefulness_of_Publicly_Available_Environmental_Data_for_Financial_Analysis.pdf; Merrill, R. and others, 'Sustainable Digital Finance in Asia: Creating Environmental Impact Through Bank Transformation', 2018, https://90bf1b73-3763-483f-abf5-1e464e9f1319.filesusr.com/ugd/3d4f2c_3803e5d1630b4349b6c2a3ca86f2f46c.pdf; Investec/WWF, 'Sustainability & Satellites: New Frontiers in Sovereign Debt Investing', June 2019, https://www.wwf.org.uk/sites/default/files/2019-06/Investec_Sustainability_and_satellites_June_2019.pdf; World Bank, 'Data-Driven Development. 2018 Information and Communications for Development', 2019, <https://www.worldbank.org/en/topic/digitaldevelopment/publication/data-driven-development>; Falk, J. and Gaffney, O. 'Exponential Roadmap: Scaling 36 Solutions to Halve Emissions by 2030', September 2019, https://exponentialroadmap.org/wp-content/uploads/2019/09/ExponentialRoadmap_1.5_20190919_Single-Pages.pdf
25. EY, 'Global Fintech Adoption Index 2019', 2019, <https://fintechauscensus.ey.com/2019/Documents/ey-global-fintech-adoption-index-2019.pdf>; Financial Stability Board, 'FinTech and Market Structure in Financial Services: Market Developments and Potential Financial Stability Implications', February 2019, <https://www.fsb.org/2019/02/fintech-and-market-structure-in-financial-services-market-developments-and-potential-financial-stability-implications/>
26. Eccles, R. and Klimenko, S. 'The Investor Revolution', HBR, May-June 2019, <https://hbr.org/2019/05/the-investor-revolution>; Morgan Stanley, 'Sustainable Signals: Individual Investor Interest Driven by Impact, Conviction and Choice', September 2019, https://www.morganstanley.com/pub/content/dam/msdotcom/infographics/sustainable-investing/Sustainable_Signals_Individual_Investor_White_Paper_Final.pdf; UBS, 'Return on Values: Most Sustainable Investors Expect Better Performance, Bigger Impact', UBS Investor Watch, Volume 2, September 2018, <https://www.ubs.com/content/dam/ubs/microsites/ubs-investor-watch/IW-09-2018/return-on-value-global-report-final.pdf>; Yeoh, N., "Sustainable Investing? Here's What Millennials Need to Know in the U.S.", Forbes, 26 October 2019, <https://www.forbes.com/sites/neilyeoh/2019/10/26/sustainable-investing-heres-what-millennials-need-to-know-in-the-u-s/#8901ee51e8ab>
27. IMF, 'Fintech: The Experience So Far', June 2019, <https://www.imf.org/en/Publications/Policy-Papers/Issues/2019/06/27/Fintech-The-Experience-So-Far-47056>; OECD, Blockchain Technologies as a Digital Enabler for Sustainable Infrastructure. September 2019, <http://www.oecd.org/finance/blockchain-technologies-as-digital-enabler-for-sustainable-infrastructure.htm>; OECD/UNEP/World Bank, Financing Climate Futures, 2018, <https://www.oecd.org/environment/financing-climate-futures-9789264308114-en.htm>; Bayat-Renoux, F, 'Digital Technologies for Mobilizing Sustainable Finance: Applications of Digital Technologies to Sustainable Finance' Sustainable Digital Finance Alliance, October 2018, https://docs.wixstatic.com/ugd/3d4f2c_6767ef5b999c4e3fa42c0e05e6ea2ac3.pdf; World Economic Forum/PwC, 'Unlocking Technology for the Global Goals', January 2020, http://www3.weforum.org/docs/Unlocking_Technology_for_the_Global_Goals.pdf
28. van der Lugt, C, 'Digital Finance and Citizen Action In Financing the Future of Climate-smart Infrastructure', Organisation for Economic Co-operation and Development, 2018, <https://www.oecd.org/environment/cc/climate-futures/case-study-digital-finance-and-citizen-action.pdf>; The 17 Goals. <https://www.globalgoals.org/>
29. van der Lugt, C, 'Digital Finance and Citizen Action In Financing the Future of Climate-smart Infrastructure', Organisation for Economic Co-operation and Development, 2018, <https://www.oecd.org/environment/cc/climate-futures/case-study-digital-finance-and-citizen-action.pdf>; Panzar, M. and others, 'Sustainable Consumption - Policy Approaches for Systems Change', THINK 2030, <https://ieep.eu/uploads/articles/attachments/6ba62504-96f4-463a-b077-b37cb739043a/Think%202030%20Sustainable%20consumption.pdf?v=63710011359>; O'Rourke, D. and Ringer, A., "The Impact of Sustainability Information on Consumer Decision Making", Journal of Industrial Ecology, August 2016, Volume 20. Issue 4, pp. 882-892. <https://onlinelibrary.wiley.com/doi/abs/10.1111/jiec.12310>
30. UNSGSA/Better Than Cash Alliance/UNCDF/World Bank, Igniting SDG Progress Through Digital Financial Inclusion, 2018, https://btca-prod.s3.amazonaws.com/documents/346/english_attachments/SDG_Compendium_Digital_Financial_Inclusion_September_2018.pdf?1536952408

31. See for example, Naghavi, N. 'State of the Industry Report on Mobile Money 2019', GSMA, March 2020, <https://www.gsma.com/sotir/wp-content/uploads/2020/03/GSMA-State-of-the-Industry-Report-on-Mobile-Money-2019-Full-Report.pdf>; World Bank, Financial Inclusion on the Rise, But Gaps Remain, Global Findex Database Shows, 19, April 2019, <https://www.worldbank.org/en/news/press-release/2018/04/19/financial-inclusion-on-the-rise-but-gaps-remain-global-findex-database-shows>; UN Women, 'Leveraging Digital Finance for Gender Equality and Women's Empowerment', September 2019, <https://www.unwomen.org/en/digital-library/publications/2019/09/discussion-paper-leveraging-digital-finance-for-gender-equality-and-womens-empowerment>; Buckley, R. and others, 'Sustainability, FinTech and Financial Inclusion', May 2019, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3387359; CGAP, "Impact and Evidence in Financial Inclusion: Taking Stock", 2019, <https://www.cgap.org/blog/series/impact-and-evidence-financial-inclusion-taking-stock>; World Bank, 'Disruptive Technologies in the Credit Information Sharing Industry: Developments and Implications', 2019, <http://documents.worldbank.org/curated/en/587611557814694439/pdf/Disruptive-Technologies-in-the-Credit-Information-Sharing-Industry-Developments-and-Implications.pdf>; Brook, N. and others, 'How Technology Can Help Bridge the Protection Gap', Insurance Development Forum, 2019, <https://www.insdevforum.org/sites/default/files/Final%20How%20technology%20can%20help%20bridge%20the%20protection%20gap%20report%20.pdf>; African Union, "Promising Projections for the New Decade of African Women's Financial and Economic Inclusion", 14 February 2020, <https://au.int/en/pressreleases/20200214/promising-projections-new-decade-african-womens-financial-and-economic>
32. Watson, F., 'Global carbon markets grow 34% in 2019, led by Europe: Refinitiv', 23 January 2020, <https://www.spglobal.com/platts/en/market-insights/latest-news/coal/012320-global-carbon-markets-grow-34-in-2019-led-by-europe-refinitiv>; Global Sustainable Investment Alliance, '2018 Global Sustainable Investment Review', 2018, http://www.gsi-alliance.org/wp-content/uploads/2019/03/GSIR_Review2018.3.28.pdf; Muething, L., "Market Blog #38 - annual GBs a record USD255bn: Strong EM issuance: Banco Pichincha makes Ecuador's GB debut", 23 January 2020, <https://www.climatebonds.net/2020/01/market-blog-38-230120-2019-annual-gbs-record-usd255bn-strong-em-issuance-banco-pichincha>; GIIN, 'Sizing the Impact Investing Market', April 2019, <https://thegiin.org/research/publication/impinv-market-size>; Haahr, M. and others, 'Blockchain: Gateway for Sustainability Linked Bonds', 2019, HSBC and Sustainable Digital Finance Alliance, https://90bf1b73-3763-483f-abf5-1e464e9f1319.filesusr.com/ugd/3d4f2c_a8d74cac6f974984a67f7b8c05146fbe.pdf
33. For example, Betterment, F1 Finance, Personal Capital, Wealthsimple, Aspiration, CNote, EarthFolio, Grow, Motif, Ellevest, OpenInvest, Stash, Swell, WiseBanyan, WorthFM, Fintego, Liquid, Selma Finance, Simple Wealth, TrueWealth, VIAC, VisualVest, Wealthify, Yova; Abraham, F. and others, 'Robo-Advisors: Investing through Machines', February 2019, <http://documents.worldbank.org/curated/en/275041551196836758/pdf/Robo-Advisors-Investing-through-Machines.pdf>
34. Tsai, L. and others, 'Information and Accountability: Evidence Syntheses of Within-Government and Citizen-Government Accountability Pathways' Transparency and Accountability Initiative/ MIT Governance Laboratory, March 2020, <https://mitgovlab.org/results/information-and-accountability-evidence-syntheses-of-within-government-and-citizen-government-accountability-pathways/>; Kahn, T. and others, 'Digital Technologies for Transparency in Public Investment: New Tools to Empower Citizens and Governments', November 2018, https://publications.iadb.org/publications/english/document/Digital_Technologies_for_Transparency_in_Public_Investment_New_Tools_to_Empower_Citizens_and_Governments.pdf; Cangiano, M. and others, 'Public Financial Management and the Digitalization of Payments', June 2019, <https://www.cgdev.org/sites/default/files/public-financial-management-and-digitalization-payments.pdf>; OECD, 'Compendium of Good Practices on the Use of Open Data for Anti-Corruption: Towards Data-Driven Public Sector Integrity and Civic Auditing', 2017, <https://www.oecd.org/gov/digital-government/g20-oecd-compendium.pdf>
35. UNSGSA/Better Than Cash Alliance/UNCDF/World Bank, Igniting SDG Progress Through Digital Financial Inclusion, 2018, https://btca-prod.s3.amazonaws.com/documents/346/english_attachments/SDG_Compendium_Digital_Financial_Inclusion_September_2018.pdf?1536952408; Pierto-Sandoval, V. and others, "Towards a Consensus on the Circular Economy", Journal of Cleaner Production, Volume 179, April 2018, pp. 605-615, <https://www.sciencedirect.com/science/article/pii/S0959652617332146>; Hedberg, A. and others, 'Creating a Digital Roadmap for a Circular Economy', July 2019, <https://www.climate-kic.org/wp-content/uploads/2019/07/DRCE.pdf>

36. World Bank/IMF, "The Bali Fintech Agenda: A Blueprint for Successfully Harnessing Fintech's Opportunities", 11 October 2018, <https://www.imf.org/en/News/Articles/2018/10/11/pr18388-the-bali-fintech-agenda>; UNCDF, *Enabling Policy and Regulation: Leaving No One Behind in the Digital Era*, UNCDF, 2019, <https://www.uncdf.org/article/4944/enabling-policy-and-regulation-leaving-no-one-behind-in-the-digital-era>; UNCDF, 'Empowered Customers: Leaving No One Behind in the Digital Era', UNCDF, <https://www.uncdf.org/article/4935/empowered-customers-leaving-no-one-behind-in-the-digital-era>; UN Women, 'Leveraging Digital Finance for Gender Equality and Women's Empowerment', September 2019, <https://www.unwomen.org/en/digital-library/publications/2019/09/discussion-paper-leveraging-digital-finance-for-gender-equality-and-womens-empowerment>
37. UN Women, 'Leveraging Digital Finance for Gender Equality and Women's Empowerment', September 2019, <https://www.unwomen.org/en/digital-library/publications/2019/09/discussion-paper-leveraging-digital-finance-for-gender-equality-and-womens-empowerment>
38. Buckley, R. and others, "The Dark Side of Digital Financial Transformation: The New Risks of FinTech and the Rise of TechRisk", Law Working Paper Series Paper Number 2019-009, Faculty of Law, Economics and Finance, November 2019, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3478640&download=yes
39. Acquilina, M. and others, 'Quantifying the High-Frequency Trading "Arms Race": A Simple New Methodology and Estimates', Financial Conduct Authority, January 2020, <https://www.fca.org.uk/publication/occasional-papers/occasional-paper-50.pdf>; Budish, E. and others, "A Theory of Stock Exchange Competition and Innovation: Will the Market Fix the Market?", December 2019, <http://www.people.fas.harvard.edu/~robinlee/papers/ExchangeComp.pdf>; Oxera, 'The Design of Equity Trading Markets in Europe: An Economic Analysis of Price Formation and Market Data Services', 2019, Federation of European Securities Exchanges, <https://fese.eu/app/uploads/2019/03/190321-The-design-of-equity-trading-markets-in-Europe-full-report.pdf>
40. da Silva, L. and others, 'Welfare Implications of Digital Financial Innovation', 5 November 2019, <https://www.bis.org/speeches/sp191120.htm>; Conceição, P., 'Human Development Report 2019: Beyond Income, Beyond Averages, Beyond Today: Inequalities in Human Development in the 21st Century', United Nations Development Programme, 2019, <http://hdr.undp.org/sites/default/files/hdr2019.pdf>
41. UNCTAD, 'Coronavirus Reveals Need to Bridge the Digital Divide', 6 April 2020, <https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=2322>
42. GSMA, 'Connected Society: The State of Mobile Internet Connectivity 2019', July 2019, <https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/07/GSMA-State-of-Mobile-Internet-Connectivity-Report-2019.pdf>; GSMA, 'Connected Women: The Mobile Gender Gap Report 2019', 2019, <https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/02/GSMA-The-Mobile-Gender-Gap-Report-2019.pdf>
43. World Bank, 'ID4D Data: Global Identification Challenge by the Numbers', <https://id4d.worldbank.org/global-dataset>
44. Refinitiv, 'Belt & Road Initiative: The Infrastructure Project of the Century', <https://www.refinitiv.com/en/belt-road-initiative-data-insight>
45. World Bank data, 1998 - 2018. <https://data.worldbank.org/indicator/NY.GDS.TOTL.CD>.
46. IFC and SME Forum, 'MSME Finance Gap Report: Assessment of the Shortfalls and Opportunities in Financing Micro, Small and Medium Enterprises in Emerging Markets', 2018, <https://www.smefinanceforum.org/post/msme-finance-gap-report>; ILO, 'Small Matters: Global evidence on the contribution to employment by the self-employed, micro-enterprises and SMEs', 2019, https://www.ilo.org/global/publications/books/WCMS_723282/lang-en/index.htm
47. Gupta, S. and others, 'Chapter 13: The Value of Digitalizing Government Payments in Developing Economies', *Digital Revolutions in Public Finance*, IMF, 2017, https://www.elibrary.imf.org/view/IMF071/24304-9781484315224/24304-9781484315224/Other_formats/Source_PDF/24304-9781484316719.pdf?redirect=true

48. IEX and the World Economic Forum, 'Unlocking Capital Markets to Finance the SDGs', September 2019, <https://digitalfinancingtaskforce.org/wp-content/uploads/2019/09/UNDFTF-IEX-WEF-Unlocking-Capital-Markets-to-Finance-the-SDGs.pdf>
49. World Bank data, 2018. <https://data.worldbank.org/indicator/NE.CON.PRVT.KD?view=chart>
50. Better Than Cash Alliance, *Building Inclusive Digital Payments Ecosystems: Guidance Note for Government*, G20/Global Partnership for Financial Inclusion, 2017, https://www.gpfi.org/sites/gpfi/files/documents/GPFI%20Guidance%20Note%20Building%20Inclusive%20Dig%20Payments%20Ecosystems%20final_0.pdf; Center for Global Development, "Rails and Guardrails of an Inclusive Digital Economy: Identity, Payments and Data Empowerment", 17 October 2019, <https://www.cgdev.org/event/rails-and-guardrails-inclusive-digital-economy-identity-payments-and-data-empowerment>; Committee on Payments and Market Infrastructures/World Bank Group, 'Payment Aspects of Financial Inclusion (PAFI)', Bank for International Settlements, 2016, <http://pubdocs.worldbank.org/en/963011459859364335/payment-systems-PAFI-Report2016.pdf>
51. Haahr, M. and Ginsel, D., 'A Green and Sustainable Digital Finance Landscape: Market Analysis for the Netherlands', October 2019, https://90bf1b73-3763-483f-abf5-1e464e9f1319.filesusr.com/ugd/3d4f2c_7f12ba6f484c4ee5a3e25f786f71aa21.pdf; Green Digital Finance Alliance/Fair Finance Institute/Institute for Social Banking/Conscious FinTech, 'Current Landscape and Key Opportunities: Country Report #2: Germany', January 2020, https://90bf1b73-3763-483f-abf5-1e464e9f1319.filesusr.com/ugd/3d4f2c_51116a50d5474154aead6bad87163426.pdf
52. Broadband Commission Working Group on Broadband for All: A "Digital Infrastructure Moonshot" for Africa, 'Connecting Africa Through Broadband: A Strategy for Doubling Connectivity by 2021 and Reaching Universal Access by 2030', October 2019, https://www.broadbandcommission.org/Documents/working-groups/DigitalMoonshotforAfrica_Report.pdf; ITU, 'SDG Digital Investment Framework: A Whole-of-Government Approach to Investing', February 2019, https://www.itu.int/dms_pub/itu-d/opb/str/D-STR-DIGITAL.02-2019-PDF-E.pdf
53. Key institutions working on good digital identity standards include Omidyar Network, <https://www.omidyar.com/our-work/digital-identity>; the Open Society Foundations, <https://www.justiceinitiative.org/publications/community-based-practitioner-s-guide-documenting-citizenship-and-other-forms-legal>; the Rockefeller Foundation, <https://www.rockefellerfoundation.org/our-work/initiatives/data-technology/>; UNSGSA, https://www.unsgsa.org/files/2615/3141/7750/Digital_Identity.pdf; Bill & Melinda Gates Foundation, https://docs.gatesfoundation.org/documents/InclusiveDigitalFinancialServices_ReferenceGuide.pdf; the Center for Global Development, <https://www.cgdev.org/event/rails-and-guardrails-inclusive-digital-economy-identity-payments-and-data-empowerment>; the United Nations Development Programme, <https://www.undp.org/content/undp/en/home/blog/2017/6/1/Moving-towards-digital-technology-for-legal-identity.html>; the World Bank Group's ID4D initiative <http://documents.worldbank.org/curated/en/213581486378184357/pdf/Principles-on-identification-for-sustainable-development-toward-the-digital-age.pdf>; and the World Economic Forum, http://www3.weforum.org/docs/WEF_Digital_Identity_Strategic_Imperative.pdf
54. CGAP, 'Open APIs: Unlocking Innovation in Digital Finance', <https://www.cgap.org/blog/series/open-apis-unlocking-innovation-digital-finance>; UNCDF, 'Open Digital Payment Ecosystem: Leaving No One Behind in the Digital Era', 2020, <https://www.uncdf.org/article/5292/open-digital-payment-ecosystem-leaving-no-one-behind-in-the-digital-era>; Naghavi, N., 'Embracing Payments as a Platform for the Future of Mobile Money', GSMA, February 2019, <https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/02/Embracing-payments-as-a-platform-for-the-future-of-mobile-money.pdf>
55. GSMA, 'Smart Data Privacy Laws: Achieving the Right Outcomes for the Digital Age', June 2019, https://www.gsma.com/publicpolicy/wp-content/uploads/2019/06/GSMA_Smart-Data-Privacy-Laws_Report_June-2019.pdf; Medine, D. and Murthy, G., "3 Data Protection Approaches That Go Beyond Consent" CGAP Blog, 7 January 2019, <https://www.cgap.org/blog/3-data-protection-approaches-go-beyond-consent>
56. OECD, 'G20/OECD Policy Guidance on Financial Consumer Protection Approaches in the Digital Age', OECD/G20/GPFI, 2018, <https://www.oecd.org/finance/G20-OECD-Policy-Guidance-Financial-Consumer-Protection-Digital-Age-2018.pdf>; UNCDF, 'Empowered Customers: Leaving No One Behind in the Digital Era', UNCDF, <https://www.uncdf.org/article/4935/empowered-customers-leaving-no-one-behind-in-the-digital-era>; The Smart Campaign, 'Putting the Principles to Work: Detailed Guidance on the Client Protection Principles', June 2019, https://www.smartcampaign.org/storage/documents/2019_06_19_Principles_Guidelines_FINAL2.pdf

57. UN Secretary-General's High-level Panel on Digital Cooperation, 'The Age of Digital Interdependence' June 2019. <https://digitalcooperation.org/>
58. Report of the Secretary General, 'Roadmap for Digital Cooperation', June 2020, https://www.un.org/en/content/digital-cooperation-roadmap/assets/pdf/Roadmap_for_Digital_Cooperation_EN.pdf
59. Task Force on Climate-related Financial Disclosure. <https://www.fsb-tcf.org/>
60. Network of Central Banks and Supervisors for Greening the Financial System (NGFS). <https://www.ngfs.net/en>
61. DRC Finance Research Institute/International Institute for Sustainable Development, 'Greening China's Financial System', 2015, <https://www.iisd.org/sites/default/files/publications/greening-chinas-financial-system.pdf>
62. European Commission. International Platform on Sustainable Finance (IPSF). https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en#ipsf; EU Technical Expert Group on Sustainable Finance, Report on EU Green Bond Standard, June 2019, https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/190618-sustainable-finance-teg-report-green-bond-standard_en.pdf; European Commission, EU Taxonomy for Sustainable Activities, 2019, https://ec.europa.eu/info/publications/sustainable-finance-teg-taxonomy_en
63. World Bank/IMF, "The Bali Fintech Agenda: A Blueprint for Successfully Harnessing Fintech's Opportunities", 11 October 2018, <https://www.imf.org/en/News/Articles/2018/10/11/pr18388-the-bali-fintech-agenda>
64. Global Partnership for Financial Inclusion/G20, 'G20 High-Level Principles for Digital Financial Inclusion', 2016, <https://www.gpfi.org/sites/gpfi/files/G20%20High%20Level%20Principles%20for%20Digital%20Financial%20Inclusion.pdf>
65. AFI, 'Sochi Accord Fintech for Financial Inclusion', September 2018, https://www.afi-global.org/sites/default/files/publications/2018-09/Sochi_FS18_AW_digital.pdf
66. G20 AI Principles, <https://www.mofa.go.jp/files/000486596.pdf>
67. Principles for Responsible Investment. <https://www.unpri.org/pri/an-introduction-to-responsible-investment/what-are-the-principles-for-responsible-investment>
68. UNEP Finance Initiative, 'Principles for Responsible Banking', September 2019, <https://www.unepfi.org/banking/bankingprinciples/>
69. UNEP Finance Initiative, 'Principles for Sustainable Insurance', June 2012, <https://www.unepfi.org/psi/wp-content/uploads/2012/06/PSI-document.pdf>
70. UNCTAD, 'Digital Economy Report 2019. Value Creation and Capture: Implications for Developing Countries', 4 September 2019. https://unctad.org/en/PublicationsLibrary/der2019_en.pdf
71. BIS, "III. Big Tech in Finance: Opportunities and Risks," Annual Economic Report, June 2019, <https://www.bis.org/publ/arpdf/ar2019e3.htm>; Committee on Payments and Market Infrastructures / World Bank Group, 'Payment Aspects of Financial Inclusion in the Fintech Era', April 2020, <https://www.bis.org/cpmi/publ/d191.pdf>; G7 Working Group on Stablecoins, 'Investigating the impact of global stablecoins', October 2019, <https://www.bis.org/cpmi/publ/d187.pdf>; Financial Stability Board, 'Decentralised Financial Technologies: Report on Financial Stability, Regulatory and Governance Implications', June 2019, <https://www.fsb.org/2019/06/decentralised-financial-technologies-report-on-financial-stability-regulatory-and-governance-implications/>
72. Jones, E. and Knaack, P., 'Global Financial Regulation: Shortcomings and Reform Options', Global Policy, Volume 10, Issue 2, May 2019, pp. 193-206, <https://onlinelibrary.wiley.com/doi/full/10.1111/1758-5899.12656>
73. See for example, GSMA Digital Declaration, <https://www.digitaldeclaration.com/>; Thomson Reuters. The Trust Principles. <https://www.thomsonreuters.com/en/about-us/trust-principles.html>; Facebook Independent Oversight Board, <https://www.oversightboard.com/>.

74. Arkose Labs, 'Arkose Labs Reveals 20% Spike in Fraud as Digital Behavior Shifts During Covid-19', 28 April 2020, <https://www.globenewswire.com/news-release/2020/04/28/2023282/0/en/Arkose-Labs-Reveals-20-Spike-in-Fraud-as-Digital-Behavior-Shifts-During-COVID-19.html>
75. OECD, 'Action 1. Tax Challenges Arising from Digitalisation', <https://www.oecd.org/tax/beps/beps-actions/action1/>
76. Cartwright, R. and Bones, F., 'Transnational Organized Crime and the Impact on the Private Sector: The Hidden Battalions', The Global Initiative Against Transnational Organized Crime, December 2017, https://www.unodc.org/res/cld/bibliography/transnational-organized-crime-and-the-impact-on-the-private-sector_the-hidden-battalions_html/gitoc_tocprivatesector_web-3.pdf; Ugale, G., 'Analytics for Integrity: Data-Driven Approaches for Enhancing Corruption and Fraud Risk Assessment', Organisation for Economic Co-operation and Development, 2019, <http://www.oecd.org/gov/ethics/analytics-for-integrity.pdf>
77. Budish, E. and others, "A Theory of Stock Exchange Competition and Innovation: Will the Market Fix the Market?", December 2019, <http://www.people.fas.harvard.edu/~robinlee/papers/ExchangeComp.pdf>; Acquilina, M. and others, 'Quantifying the High-Frequency Trading "Arms Race": A Simple New Methodology and Estimates', Financial Conduct Authority, January 2020, <https://www.fca.org.uk/publication/occasional-papers/occasional-paper-50.pdf>
78. Report of the Secretary General, 'Roadmap for Digital Cooperation', June 2020, https://www.un.org/en/content/digital-cooperation-roadmap/assets/pdf/Roadmap_for_Digital_Cooperation_EN.pdf
79. Georgieva, K., 'The Financial Sector in the 2020s: Building a More Inclusive System in the New Decade', IMF, 17 January 2020, <https://www.imf.org/en/News/Articles/2020/01/17/sp01172019-the-financial-sector-in-the-2020s>
80. Gauss, M., 'The EU's Sustainable Finance and FinTech Agenda: Breaking the Silos', Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), December 2019, https://guidehouse.com/-/media/www/site/downloads/energy/2020/ap4_linking-the-eu-sf-and-fintech-agenda_bmu_final.pdf
81. Examples include UK FCA's Green Fintech Challenge, <https://www.fca.org.uk/firms/innovation/green-fintech-challenge>; GSMA Mobile for Development Innovation Funds, <https://www.gsma.com/mobilefordevelopment/innovation/>; Future of Sustainable Data Alliance, <http://solutions.refinitiv.com/futureofsustainabledata>
82. For example, Network for Greening the Financial System, 'A Call for Action: Climate Change as a Source of Financial Risk', April 2019, https://www.banque-france.fr/sites/default/files/media/2019/04/17/ngfs_first_comprehensive_report_-_17042019_0.pdf; IOSCO, "Emerging Market Regulators Issue Recommendations Related to Sustainable Finance," 5 June 2019, <https://www.iosco.org/news/pdf/IOSCONEW534.pdf>
83. UNSGSA FinTech Working Group and CCAF, 'Early Lessons on Regulatory Innovations to Enable Inclusive FinTech: Innovation Offices, Regulatory Sandboxes, and RegTech', 2019, https://www.unsgsa.org/files/3515/5007/5518/UNSGSA_Report_2019_Final-compressed.pdf; CGAP, 'Regulation for Inclusive Digital Finance', 2019, <https://www.cgap.org/topics/collections/regulation-inclusive-digital-finance>; OECD, 'Regulatory Effectiveness in the Era of Digitalisation', June 2019, <https://www.oecd.org/gov/regulatory-policy/Regulatory-effectiveness-in-the-era-of-digitalisation.pdf>; Select Committee on Communications appointed by the House of Lords, Regulating in a Digital World, 2019, <https://publications.parliament.uk/pa/ld201719/ldselect/ldcomuni/299/299.pdf>; UNCDF, Enabling Policy and Regulation: Leaving No One Behind in the Digital Era, UNCDF, 2019, <https://www.uncdf.org/article/4944/enabling-policy-and-regulation-leaving-no-one-behind-in-the-digital-era>
84. Accenture Development Partnership, 'Harnessing the Digitalization of Finance for the Sustainable Development Goals', June 2019, <https://digitalfinancingtaskforce.org/wp-content/uploads/2019/07/DFET-White-Paper-Final-08-17-afa.pdf>
85. UNICEF. COVID-19 and Children. <https://data.unicef.org/topic/covid-19-and-children/>
86. FinDev Gateway. COVID-19. <https://www.findevgateway.org/topics/covid-19>
87. FinDev Gateway. FinDev Guide to Data - Tracking the Global Response to COVID-19. <https://www.findevgateway.org/guide/findev-guide-data-tracking-global-response-covid-19>

88. Davis, S. and Toney, L., 'How Coronavirus is Impacting Ecommerce', June 2020, <https://www.roirevolution.com/blog/2020/06/coronavirus-and-ecommerce/>
89. Neate, R., "Amazon Reaps \$11,000-a-second Coronavirus Lockdown Bonanza", The Guardian, 15 April 2020, <https://www.theguardian.com/technology/2020/apr/15/amazon-lockdown-bonanza-jeff-bezos-fortune-109bn-coronavirus>
90. Horwitz, J., "Alibaba Extends its Reach in China as Coronavirus Outbreak Opens Doors", Reuters, 28 May 2020, <https://www.reuters.com/article/us-health-coronavirus-alibaba-analysis/alibaba-extends-its-reach-in-china-as-coronavirus-outbreak-opens-doors-idUSKBN2340TG>
91. Simon, F., " 'Do No Harm': EU Recovery Fund Has Green Strings Attached", Euractiv, 27 May 2020, <https://www.euractiv.com/section/energy-environment/news/do-no-harm-eu-recovery-fund-has-green-strings-attached/>
92. AON, "Why ESG Is Even More Important In a Crisis Like COVID-19", The One Brief, 6 May 2020, <https://theonebrief.com/why-esg-is-even-more-important-in-a-crisis-like-covid-19/>
93. Kamal-Chaoui, L., "Rescuing SMEs from the COVID Storm: What's Next?", The Forum Network, 26 May 2020, <https://www.oecd-forum.org/users/406151-lamia-kamal-chaoui/posts/rescuing-smes-from-the-covid-storm-what-s-next>
94. Center for Global Development, "As Governments Turn to Digital Payments to Cushion Coronavirus's Blow, New Report Finds Many Developing Countries Not Ready", 31 March 2020, <https://www.cgdev.org/article/governments-turn-digital-payments-cushion-coronaviruss-blow-new-report-finds-many-developing>
95. Una, G. and others, "Digital Solutions for Direct Cash Transfers in the COVID-19 Crisis", IMF Public Financial Management Blog, 29 April 2020, <https://blog-pfm.imf.org/pfmblog/2020/04/-digital-solutions-for-direct-cash-transfers-in-the-covid-19-crisis-.html>
96. PYMNTS.com, "Deep Dive: Preventing Financial Crime Amid The COVID-19 Pandemic", 25 May 2020, <https://www.pymnts.com/fraud-prevention/2020/preventing-financial-crime-covid-19-pandemic/>; Pipikaite, A. and Davis, N., "Why Cybersecurity Matters More Than Ever During the Coronavirus Pandemic", World Economic Forum, 17 March 2020, <https://www.weforum.org/agenda/2020/03/coronavirus-pandemic-cybersecurity>; OECD, "Ensuring Data Privacy as We Battle COVID-19", OECD Policy Responses to Coronavirus (COVID-19), 14 April 2020, <http://www.oecd.org/coronavirus/policy-responses/ensuring-data-privacy-as-we-battle-covid-19-36c2f31e/>; Alliance for Financial Inclusion, 'Cybersecurity For Financial Inclusion: Framework & Risk Guide', Guideline Note No. 37, October 2019, https://www.afi-global.org/sites/default/files/publications/2019-11/AFI_GN37_DFS_AW_digital_0.pdf
97. Mitha, A., Zadek, S. and Arner, D. *Governing Global Digital Finance*. forthcoming.

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