2019

ANNUAL REPORT

ID4D

IDENTIFICATION FOR DEVELOPMENT

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SPOTLIGHTS

WELCOME MESSAGE

REFLECTING ON PROGRESS TOWARDS OUR IMPORTANT GOAL

Axel van Trotsenburg
Managing Director of Operations

US$**1.2 BILLION** in active and pipeline WB lending projects supporting ID and civil registration implementation

3500+ practitioners, policy makers, ID experts, and other stakeholders used the ID4D Practitioner's Guide in first 6 months

170+ innovative 'privacy by design' solutions submitted from 54 countries in Mission Billion Challenge

25 organizations have endorsed the Principles on ID for Sustainable Development

15 of the 30 countries with the largest ID coverage gaps globally to strengthen their civil registration and ID systems with ID4D support

20 countries receiving ID4D legal advisory to strengthen their ID-enabling legal and regulatory frameworks, including to boost safeguards against exclusion and the misuse of data

United Kingdom and France joined Australia as bilateral partners in the ID4D Partnership Platform, while catalytic initial investors—the Bill & Melinda Gates Foundation and Omidyar Network—renewed their support

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This Annual Report marks the third year since the launch of the World Bank Group's Identification for Development (ID4D) partnership platform and provides an opportunity to highlight the achievements of the past year and reflect on growing trends. As the new Chair of the ID4D High Level Advisory Council, I am pleased to report that 2019 was another successful year.

ID remains an important priority for the World Bank Group as we focus on the approximately one billion people around the world without any officially recognized ID, of whom half live in Africa.[1] For women in low-income countries, closer to one in two do not have an ID. They are effectively 'invisible' to providers of services and face a fundamental barrier to meaningful participation in their society and economy.

ID4D is playing a leading role in addressing this challenge. Through original research, advocacy, technical assistance, and arranging financing to countries, we are boosting the coverage of ID and civil registration systems as well as in increasing their quality and ensuring they are inclusive, trusted, and serve a wide range of development objectives.

As data and digital IDs become more widespread, the responsible use of technologies and managing threats to data protection become more critical. Good practice in this area is explained in ten *Principles on Identification for Sustainable Development*, developed and endorsed by 25 organizations,

including the World Bank Group, from the development, academic, and private sectors.

Much is being done toward this on the ground. The World Bank is currently supporting more than 40 countries to design and implement "good" digital ID and civil registration systems, often in collaboration with other development partners. This support includes more than US$1.2 billion in pipeline or committed IDA and IBRD financing for implementation.

For example, a new program in Nigeria will complete the rollout of a foundational ID system, so that it can support the delivery of financial, social protection, health, and other essential services. In the Philippines, ID4D has been advising on the introduction of the new Philsys ID system. This shows global leadership as the Philippines joins Morocco as an adopter of open source software that incorporates privacy-enhancing features to give people greater control over their personal data.

We are also working with Guinea, Burkina Faso, Benin, Togo, and Niger in the West Africa Unique Identification for Regional

Integration and Inclusion program. Other exciting foundational ID projects are at different stages of implementation in Mexico, Samoa, and Somalia.

This progress would not have been possible without the generous support and collaboration of The Bill & Melinda Gates Foundation, U.K. Government, Australian Government, and Omidyar Network. Furthermore, I wish to thank all our partners and the ID4D High Level Advisory Council for their crucial strategic guidance. I would also like to highlight the important contribution of the outgoing co-Chairs of the High Level Advisory Council, Kristalina Georgieva and Amina Mohammed, for their leadership and advocacy.

As we look ahead, our fast-changing world will present opportunities to seize and challenges to overcome. The ID4D coalition of governments, partners and stakeholders is well-placed to succeed in our efforts and equip people with the tools they need to easily prove who they are. Together, we can achieve our goals of helping people become visible so they can participate in their society and their economy.

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1 World Bank Group, 2018. *Global ID4D Dataset.*

ID4D INITIATIVE

OVERVIEW

The ID4D Initiative brings global knowledge, cross-sectoral expertise and financing to help countries realize the transformational potential of identification. ID4D's mission is to accelerate inclusive growth and the achievement of a wide range of development outcomes, by enabling all people to access services and exercise their rights.

Today, ID4D is shaping $1.2 billion in pipeline or committed financing for the implementation of digital ID and civil registration systems in more than 40 countries and has become a thought leader and knowledge hub on why ID matters for development, how to build "Good" digital ID and civil registration systems, and tracking of impact and progress. Links between our global and country-level work ensure that this knowledge is shared with our country clients and infused into practice. At the same time, the experience from on the ground implementation informs new analytics and surfaces new and practical good practices for broader dissemination.

ID4D's strength is that it cuts across all regions and across a range of global practices and units working on digital development, social protection, health, governance, gender, legal, financial inclusion, private-sector development, regional integration, data, and forced displacement. A High Level Advisory Council of eminent thought leaders provides a platform for advocacy and strategic guidance, and a Technical Experts Group of experienced practitioners provides leading-edge advisory services.

ID4D'S THREE PILLARS OF WORK

The ID4D Initiative consists of three mutually reinforcing pillars of work:

I.

Thought Leadership & Analytics

Advancing understanding of ID, and building evidence on key questions:

WHY ID MATTERS?
Researching the role of ID in development across sectors

HOW TO BUILD A GOOD SYSTEM?
Developing comprehensive knowledge resources that articulate and distill international good practices

WHAT PROGRESS HAS BEEN MADE?
Identifying gaps and measuring progress in the coverage and quality of ID systems, including through the Global ID4D Dataset and ID4D-Findex Survey

II.

Global Platforms & Convening

Driving the ID agenda at global, regional, and national levels by raising awareness, strengthening coordination among a wide range of actors, developing and supporting the creation of normative tools, and facilitating peer-to-peer learning

III.

Country & Regional Action

Providing technical and financial assistance to countries and regions and leveraging a wide-range of World Bank Group instruments in collaboration with other development partners and donors across three stages:

1 assessment and roadmap;

2 design and upstream advisory services; and

3 implementation

THE ID4D
THEORY OF CHANGE
& WORK TO DATE/2019

1 Understand gaps and improve knowledge

Thought Leadership & Analytics
▸ 28+ analytic pieces published

Generate evidence on what matters, what works, and why

Develop operationally relevant guidance

Progress on ID coverage and ID system quality can be tracked reliably

ID4D's Global Dataset provides the first systematic estimate of the global ID coverage gap

The **ID4D-Findex survey** provide the first nationally representative and gender-disaggregated data on 97 countries on national ID coverage, barriers, and use

2 Apply knowledge to strengthen ID systems

Country & Regional Action
▸ Technical assistance provided to 30+ countries

Diagnostics to assess strengths and weaknesses in ID landscape

Technical assistance, advisory services, roadmaps

Financing for country implementation

The World Bank and other stakeholders are aware of critical needs and good practices in identification and have the resources to implement them

Global alignment based on analysis and evidence on how the impact of the ID systems can be maximized for development

The **ID4D Practitioner's Guide** has been deployed in over 15 countries and downloaded over 3,000 times in less than 6 months

The **Principles on Identification for Sustainable Development** frame the WB's US$1.2 billon engagement on ID & CR across more than 40 countries and that of 25 endorsing organizations; it has been downloaded 15,000+ times

Global Platforms & Convening
▸ 15+ peer-to-peer knowledge exchanges on ID across all regions

Enable peer-to-peer knowledge exchange

Facilitate alignment of development community

Develop global public goods

ID policy makers and practitioners across the globe have adopted the Principles and best practices to promote inclusion, transparency, and trust

Somalia's Digital ID Policy commits to follow the *Principles* during implementation of the country's first digital, foundational ID system

The **Philippines'** new foundational ID system (PhilSys) leverages cutting edge privacy-by-design features, such as tokenization and hidden UIN

Nigeria has committed to simplifying the registration process for its foundational ID system to make it accessible to all residents, and to increase the number of ID enrollment points to boost the inclusivity of its ID system

3 Improved ID coverage, system quality and functionality

▸ More people have trusted, widely recognized, digitally enabled proof of identity

▸ ID systems are better equipped to support development outcomes, while mitigating risks
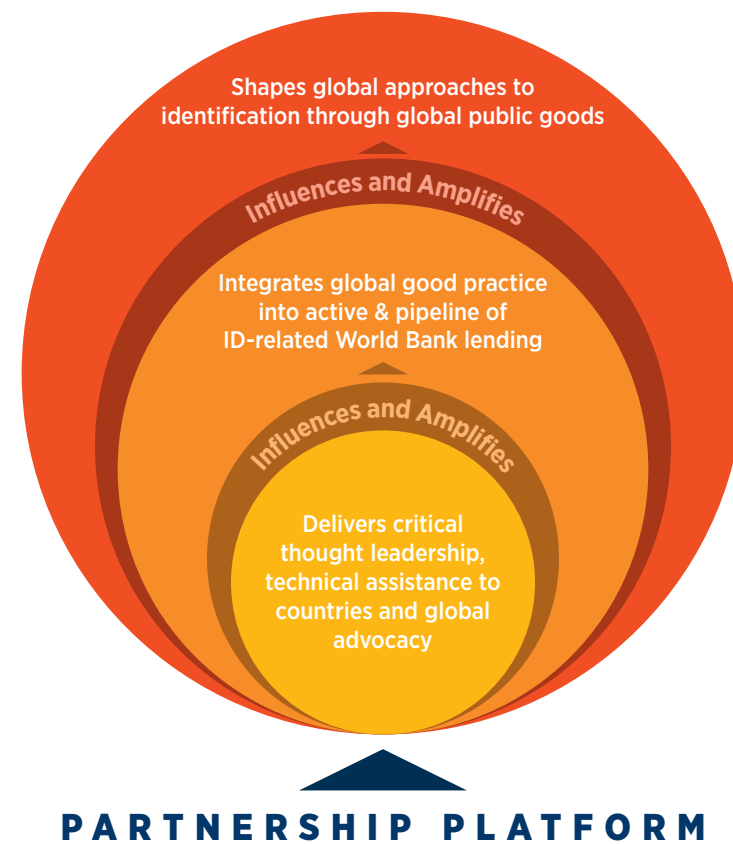
4 Improved development outcomes

▸ People have greater access to services, resources and opportunities

▸ Governments and the private sector deliver services more effectively and inclusively

PARTNERSHIP PLATFORM

The ID4D partnership platform was launched in 2016 to collectively shape ID4D's work and the broader digital ID agenda. Over the past three years, ID4D has capitalized on the intellectual partnership with the Bill & Melinda Gates Foundation, the Omidyar Network, and the Australian Government, with each organization bringing its own unique perspectives. This partnership has led to making an impact that is far greater than the sum of its parts, as evident in ID4D's progress across all three pillars and success in in influencing positive change at global and country levels.

The ID4D partnership platform was renewed at the end of 2019 and is positioned to scale up. The Bill & Melinda Gates Foundation and the Omidyar Network have recommitted their support for the second phase. In late 2019, the United Kingdom announced its investment in ID4D to help some of the world's poorest people have better access to essential services such as healthcare and banking.

ID4D works closely with a wide range of partners, such as international development and UN agencies, regional organizations, the private sector, and the academic and research communities. ID4D works with the African Union Commission and UN Economic Commission for Africa on a digital transformation strategy for Africa, UN Legal Identity Group, and several other organizations such as GSMA in the Commonwealth Digital Identity.

Shapes global approaches to identification through global public goods

Influences and Amplifies

Integrates global good practice into active & pipeline of ID-related World Bank lending

Influences and Amplifies

Delivers critical thought leadership, technical assistance to countries and global advocacy

PARTNERSHIP PLATFORM

# The Global Identification Challenge: ID4D—Findex Survey

The World Bank's ID4D Initiative partnered with the Global Findex team to include questions related to ID ownership, ID use, and barriers to access in the 2017 Global Findex Survey round, covering 97 countries. Initial analysis revealed particularly large gaps in ID coverage in low-income countries (LICs), where more than one in three adults lack a national ID or similar foundational ID credential. For women in LICs, the ratio of those without an ID is closer to one in two: 44 percent of women (compared to 28 percent of men) do not have such a document. In 2019, ID4D completed further analysis of the data to uncover more insights about who is least likely to have an ID and why. The surveys also reveal more about the relationship between ID ownership and financial inclusion and how people with IDs use their credentials.

Who is least likely to have an ID? People are more likely to have an ID when they are married, older and in the workforce, and less likely to have an ID when they have only a primary level of education, are female, live in a rural area, and are among the poorest 40 percent. The size of the association between these demographic characteristics and the likelihood of someone having an ID is greatest in LICs, and smaller in middle-income economies. All else being equal, an adult living in a LIC with primary education or less is 17.1 percentage points less likely to have an ID, compared with adults who have completed secondary school or above. In addition, a person living in a rural area in a LIC is about 10 percentage points less likely to have an ID than a person living in urban areas, while a person at the bottom of the income distribution is about 7.4 percentage points less likely to have an ID than a person in the top of the income distribution.

Why don't people have an ID? The gaps in coverage may be the result of overall supply constraints as well as multiple economic, social, and procedural barriers that affect people at the individual level and factors that influence demand for the ID. Supply-side barriers — namely that people say "it is too difficult to apply" and/or "people don't have the necessary documents"—are more commonly cited than demand-side factors — "that the person has have another form of ID" and/or "doesn't need an ID for any purpose" — in countries with large ID coverage gaps (>20 percent). However, the precise challenges people face varied by country. In Gabon, where difficulties with ID card printing and the scarcity of ID access points have been well documented, nearly 70 percent of adults without an ID do not have one because the process to apply for one was too difficult. In Lesotho, where under-five birth registration is less than 50 percent and an even higher share of adults have

FIGURE 1.
Individual-level predictors of the respondent having an ID (LICs only)

Difference in likelihood of having an ID, all else equal (percentage points)
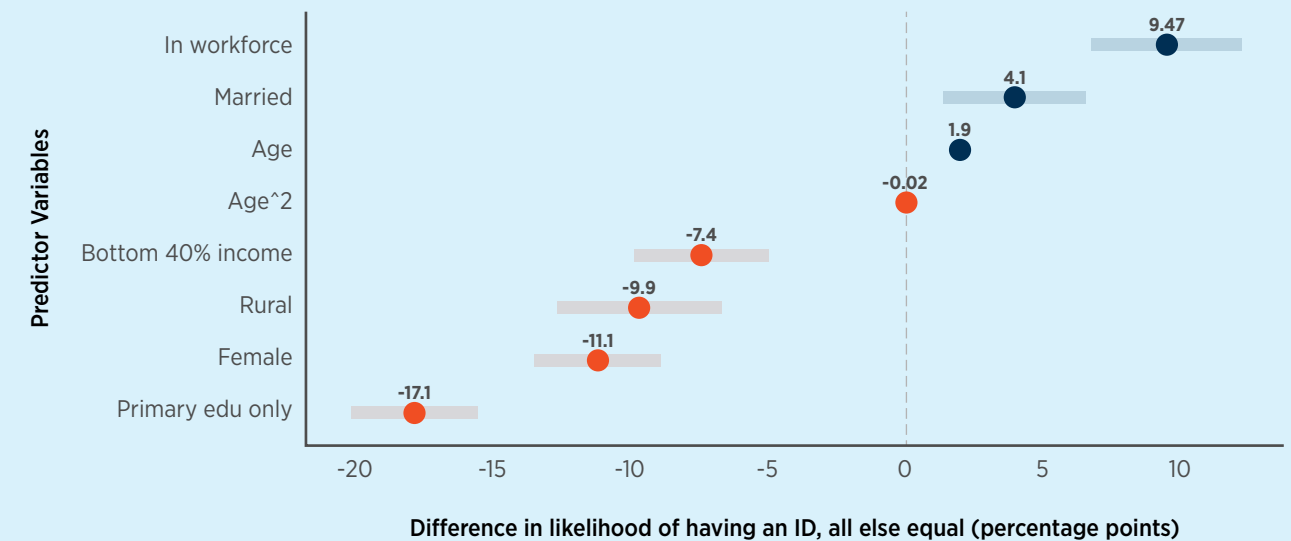
Graph shows marginal effects from a logit model with country-level fixed effects for LICs, where the dependent variable is whether the respondent has a national ID or equivalent. Models use survey weights and design-based standard errors. Results reported with 95% confidence intervals (all significant).

Source: ID Coverage, Barriers, and Use by the Numbers: Evidence from the 2017 ID4D-Findex survey (2019)

no birth certificate, the lack of the necessary documents was cited by over half of those without an ID, and a total 16 percent of all adult in the country. In some countries, low demand also plays a significant role. In Afghanistan, for example, 70 percent of adults without an ID — the vast majority of whom are women — said they did not not have one because they had no need for it.

What is the relationship between ID and financial inclusion? Adults with IDs are more likely to have a financial account and own a mobile phone than those without one. In LICs, an estimated 65 percent of people with IDs have a mobile phone, compared with only 40 percent of those without an ID. Similarly, 33 percent of adults with an ID have an account at a financial institution and 22 percent have a mobile money

account, compared with only 12 percent and 9 percent of those without an ID, respectively. While having a specific foundational ID may not always be necessary or, on its own, sufficient to open a financial account, people without one face an additional constraint to accessing financial services: 33 percent of unbanked adults in LICs without an ID cited "lack of documents" as a reason for not having an account, compared with only 17 percent of those with an ID.

How do people who have IDs use their credentials? About 57 percent of adults with an ID had used it to apply for a SIM card or mobile phone service, and 45 percent had used it to access financial services. The higher reported use of IDs for mobile services is consistent with the fact that mobile services are more

FIGURE 2.

ID ownership and having a financial account and a mobile phone
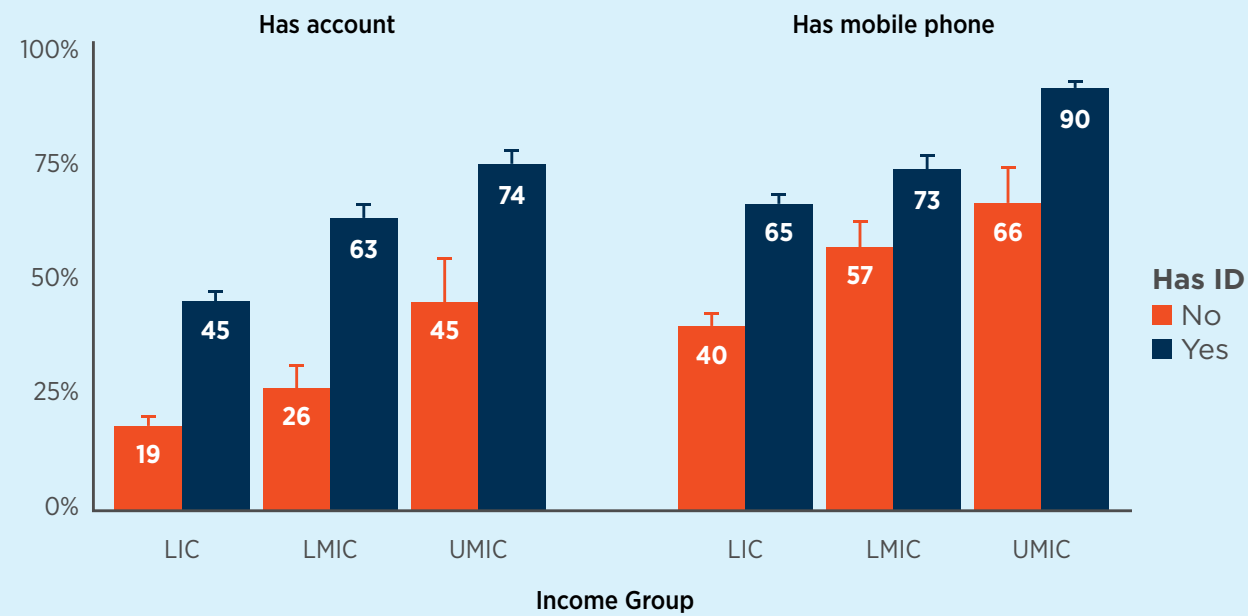
Graph shows proportion of adults (ages 15+, excluding those below the required/minimum age for obtaining the ID) who have an ID vs. those who own a financial account or mobile phone. Averages weighted to be globally representative and shown with 95% confidence-level error bars. Income groups reflect FY2017 World Bank classification.

Source: ID4D-Findex data (2017)

easily available than a bank account in most developing countries, and about 80 percent of the population surveyed owned a mobile phone. Furthermore, SIM card registration, which often requires an ID, is mandatory in over 150 countries. In addition to accessing financial services and mobile phones, one third of adults in LICs say they have used the ID to receive financial support from the government, and 16 percent say that have used it to apply for government services. ∎

2019

RESULTS

PILLAR I.
THOUGHT LEADERSHIP & ANALYTICS

Over the past year, the ID4D initiative has continued to build a rich set of tools and analytical reports including good practice guides, case studies, and analysis of qualitative and quantitative research focusing on how countries can build inclusive and trusted digital ID and civil registration systems.

ID4D has become a leading source of this knowledge and good practice on ID, which allows for the quick infusion of emerging lessons and standards into country and regional action. For example, ID4D's recent analyses on verification fees, data protection, and mass enrollment help enable policy makers and countries to better understand the complexities of ID systems and issues that are critical to the reduction of costs and risks. Case studies on ID systems in Argentina and thematic studies on gender and legal barriers, provide real-world examples and guidance on how countries can leverage their ID systems for maximum development impact across multiple sectors.

TOOLS FOR PRACTITIONERS

- **The ID4D Practitioner's Guide.** This guide synthesizes ID4D's knowledge in a comprehensive and user-friendly resource with step-by-step advice on designing and implementing inclusive and trusted ID systems. The guide was disseminated at ID4Africa 2019 to over 600 government officials at various levels and will form the basis of ID4Africa's continuing education curriculum. It was also presented at other regional events, including the Latin American and Caribbean Council of Civil Registry, Identity and Vital Statistics (CLARCEIV), and at technical workshops across the world, including workshops held recently in Lebanon, Mexico, and the Pacific Islands.

- **Putting People at the Center: Toolkit for Qualitative Research on ID.** This toolkit serves as a guide to reduce the startup costs for practitioners and researchers planning qualitative research on ID systems to better understand people's perspectives and experiences and inform system design. It summarizes and adapts a rich pool of methodologies used for social science research on ID and provides example instruments and tools used in qualitative studies.

HOW TO BUILD INCLUSIVE AND TRUSTED ID SYSTEMS

- **Achieving Universal Access to ID: Gender-Based Legal Barriers Against Women and Good Practice Reforms.** This paper explores how gender-based legal differences and nationality laws limit women's ability to obtain IDs and nationality for themselves, their children, and their spouses. It brings together data and analysis produced by agencies working on legal barriers that pertain to their mandates.

- **Argentina ID Case Study: The Evolution of Identification.** This country case study highlights the transformations undertaken in Argentina's ID landscape since 2009 and lessons for other countries. It covers legal reforms, establishing linkages between state civil registries and the national ID system, designing an enrollment process to steadily register over an eight-year period, and building an interoperability platform that allows the private and public sector relying parties to verify information and authenticate identities.

- **Disability and ID.** As a result of national consultations in three countries and accompanying desk research, this note describes the barriers faced by people with disabilities in accessing identification and makes recommendations to support systematic and sustainable interventions for disability-inclusive ID projects.

- **ID Enrollment Strategies:** Practical Lessons from Around the Globe. This note presents lessons learned from countries' experiences of undertaking nation-wide registration campaigns for foundational and functional ID systems. It provides guidance for countries embarking on ID programs to determine appropriate strategies for different contexts. Case studies from Bolivia, Rwanda, Malawi, and Pakistan are included.

- **Practitioner's Note Series:** Provides brief, operationally specific insights on a variety of topics including:

  - **Identity Authentication and Verification Fees: Overview of Current Practices.** This note summarizes country experiences and good practices related to fees charged by ID authorities to public and private sector relying parties for identity authentication and verification services. It contains information from Argentina, Chile, Colombia, Ecuador, India, Kenya, Malaysia, Pakistan, Panama, Peru, Tanzania, and Thailand.

  - **Digital ID and the Data Protection Challenge.** This note summarizes the risks digital ID systems can pose data privacy and security and presents concrete steps to minimize them while harnessing the full potential of digital ID for development.

  - **Public Digital Platforms.** This note describes how digital ID is an important element of a "stack" of digital public platforms that can help underpin digital transformation in government and the economy more broadly.

TRACKING PROGRESS

- **Improving data collection on ID coverage and quality:** In 2019, ID4D has scaled-up its data collection effort vis-a-vis country authorities, receiving direct data on foundational ID coverage and the capabilities of ID systems from over 65 countries. In parallel, ID4D initiated a comprehensive methodology review of the Global ID4D Global Dataset, taking into account the growing number of data sources on ID coverage (including both direct administrative data, survey data, and voter registration), with the aim of releasing an expanded and improved Dataset by mid-2021. This new release will integrate new data sources and allow for meaningful changes in global ID coverage to be captured more accurately.

- **Global ID Coverage, Barriers, and Use by the Numbers: Evidence from the ID4D-Findex Survey:** Based on survey data gathered in partnership with the Global Findex team across 97 countries, this paper expands on a previous note to provide more in-depth, rigorous analysis of the country and individual-level predictors of who has an ID and how IDs are used.

PILLAR I. Thought Leadership & Analytics

3-year Target Results 2017-2019	Results Achieved 2019	Results Achieved Over Three Years (2017-2019)
At least 10 original analytical pieces to be produced	• ID4D Practitioner's Guide • Putting People at the Center: Toolkit for Qualitative Research on ID • Achieving Universal Access to ID: Gender-Based Legal Barriers Against Women and Good Practice Reforms • Argentina ID Case Study: The Evolution of Identification • ID Enrollment Strategies: Practical Lessons from Around the Globe • Disability and ID • Practitioner's Note Series: – Identity Authentication and Verification Fees: Overview of Current Practices – Digital ID and the Data Protection Challenge – Public Digital Platforms	• More than **28** original analytical pieces completed, including practitioner notes, case studies, in-depth reports on key issues in identification, and eight more in advanced stages to be completed early in FY20
Global ID4D Dataset to be updated annually	• Updated in 2019 • Published Findex paper and accompanying note with expanded data in the new note - Global ID Coverage, Barriers, and Use by the Numbers: Evidence from the ID4D-Findex Survey	• ID4D has continued to **update the dataset annually** and improve its accuracy through methodology improvements, increasing the number of countries providing direct data and comparing the data compared to other sources (for example Findex) • In addition to the dataset, ID4D has partnered with the World Bank's Global Findex team to **collect survey data** on ID coverage, barriers, and use across 97 countries in the 2017 data collection round. This data collection will be extended for the 2020 Findex round.
Two impact evaluations to be completed	• Implementing impact evaluations in Bangladesh and Pakistan • Launched design of new impact evaluation in Guinea	• Impact evaluation effort launched in collaboration with WBG's Development Impact Evaluation (DIME) team through a workshop to develop proposals for the impact evaluations in May 2017 • Concept notes for **potential IEs in seven countries** were reviewed against technical and policy criteria • Four new impact evaluations initiated in Bangladesh, Guinea and Pakistan (2)

Putting People at the Heart of ID Systems to Improve Inclusion

Even the best designed ID systems can be exclusionary, particularly for marginalized and vulnerable groups such as the rural poor, women, displaced persons, and people with disabilities, among others, who typically face higher barriers to obtaining and using identification.

To understand experiences of exclusion and how to make ID systems better, the ID4D Initiative launched a stream of work on inclusion that focuses on providing the necessary research, background, and guidance to ensure that all foundational ID systems bring the people into the system with dignity and respect. This has led to the creation of a series of studies, tools, and guidance notes that can help practitioners address exclusion and build better ID systems. This stream of work is anchored in research engaging with people about their attitudes toward ID and their experiences in accessing and using IDs. It is bolstered by consultations with civil society groups and by country-specific social risks analysis as part of the World Bank's Environmental and Social Framework (ESF).

Human Centered Qualitative Research

Since 2018, ID4D has been carrying out qualitative studies on attitudes, barriers, and use of IDs, including new ones during 2019 in Nigeria, the Philippines, and Rwanda. These studies aim to inform both the government and World Bank teams on how to design and implement ID systems that are human-centered and inclusive.

The countries studied so far are vastly different, with ID systems at various points of maturity, yet some common barriers and needs have emerged. Across countries and regions, IDs serve a fundamental purpose of pride and empowerment for people. IDs empower people to cross borders within economic communities without the need of a passport and to access critical services from welfare benefits and pensions to SIM cards and bank accounts. People across the world express pride at being able to prove who they are.

Barriers to accessing or using ID are also similar across countries, with people citing informal costs such as transport and the time it takes to obtain an ID, and formal costs such as fees, as key deterrents. Women in many countries are less motivated than men to obtain IDs unless it is tied directly to the welfare of their family, and particularly that of their children. With additional responsibilities such as childcare, cooking, and cleaning and limited incomes, IDs need to be valuable for women.

The series of qualitative research studies carried out since 2018 has led to the creation of a global toolkit for anyone to launch similar studies in new countries building on tested methods and tools. The toolkit ensures that ID system implementers, donor partners, and development banks across the world can put people at the center of the design of ID systems to ensure greater inclusion.

Engaging with Marginalized Communities

Well implemented social risks analyses in ID projects can further ensure that exclusion and privacy risks are addressed head-on and form a backbone for technical project design. ID4D has conducted social risks analyses to consider the potential for exclusion of key groups based on the country context. For example, in Nigeria, the social assessment provided a baseline for

In 2019, ID4D supported a number of qualitative research studies in different countries which are seeking to understand people's perspectives on identity, privacy, and access, and use of foundational ID documents.

In Madagascar and the Philippines, studies have aimed to put people at the center of the design of new foundational ID systems by focusing on the human experience and current gaps in implementation of civil registration and functional ID systems.

In Nigeria, a national study has employed a gender lens to understand the barriers to access and how they differ for women and certain marginalized groups.

In Rwanda, a national qualitative research was launched to understand people's perspectives on identity, privacy, and their ability to use national ID to access services. This study will inform how to improve service delivery linked to ID as well as the rollout of the new digital birth registration.

ID access and exclusion among marginalized groups and has informed the design of the foundational ID project which centers on four pillars of inclusion and direct engagement with civil society both as enrollment partners and as monitors of the ID system.

Putting people at the center also means engaging with civil society and marginalized groups directly in consultations on specific ID systems. Persons with disabilities, for example, often go uncounted, yet they frequently form substantial parts of national populations. In Nigeria, persons with disabilities are estimated to make up 25 million of the 200 million strong population. To achieve near universal coverage, an ID system has to make concerted efforts to reach this population in the appropriate manner and to treat them with dignity and respect.

When the World Bank held national consultations in three West African countries with persons with disabilities, a number of universal issues emerged. These ranged from physical accessibility issues to biometric capture failure, with the greatest issue being negative treatment by enrollment officers.

Recognizing that universal barriers exists for persons with disabilities regardless of the context or maturity of the ID system, ID4D and the World Bank's Global Advisor on Disability developed a guidance note on the inclusion of persons with disabilities in ID systems. The note provides simple guidance during all stages of planning and execution of an ID system to ensure that persons with disabilities have unimpeded access and are treated with respect.

Similarly, the World Bank has made a special effort to engage with sexual and gender minorities in several countries, as these groups often face extensive discrimination based on their IDs. With the support of the World Bank's Global Advisor on Sexual Orientation and Gender Identity, consultations were held with civil society organizations representing LGBTI+ people to understand their barriers to accessing IDs and their concerns around personal data privacy. ∎

Practitioner's Guide

ID4D developed the Practitioner's Guide to serve as a central and comprehensive resource for country counterparts, World Bank Group staff, development partners, and others involved in planning, managing, and financing ID systems in line with the *Principles on Identification for Sustainable Development*.

Building on previous ID4D publications and tools, World Bank operational experience, and input from ID experts and practitioners, the Practitioner's Guide provides a comprehensive introduction to core topics and good practices for designing and implementing inclusive and trusted ID systems. Rather than advocating any specific model, the guide promotes an outcomes-based approach to building ID systems that are fit-for-purpose for development goals and the digital era. It presents key decisions and technical options relevant for designing an entirely new ID system or improving an existing one, and then highlights the implications of different design choices in terms of cost and sustainability, data protection, the risk of exclusion, context appropriateness, and other considerations.

A first draft of the guide for public consultation officially launched at the ID4Africa Annual Meeting in Johannesburg, June 2019, where it was distributed to over 600 government officials from across African countries. It was downloaded more than 3,000 times in the first six months and used as a key resource for ID4D training, workshops, and country missions, including in Afghanistan, Brazil, El Salvador, Honduras, Indonesia, Lebanon, Mexico, the Pacific Islands, the Philippines, Rwanda, and Somalia, and at the CLARCIEV Annual Meeting in Santiago de Chile.
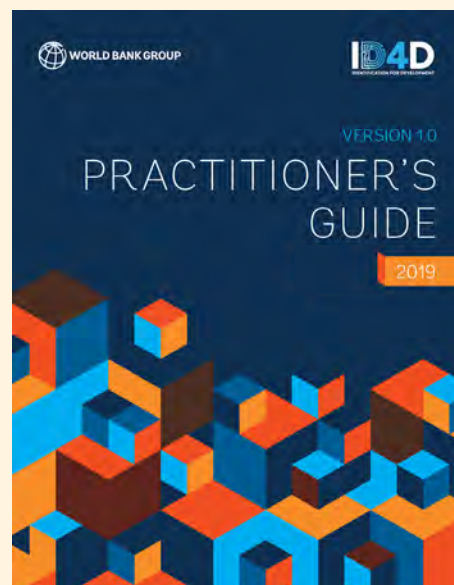
Feedback from practioners on the guide:

"This is probably the most valuable document that has ever been produced for CR and ID practitioners. It is very impressive[...]. I appreciate the fact that it is very user friendly."

"I wanted to express my gratitude for having mounted such a comprehensive, well-structured and informative guide. I am working in [Africa] on ways of improving identification for clients [...]. This guide is very helpful. And with your formatting of starting every paragraph with the key sentence in bold, I managed to read through 233 pages in an hour. Wonderful."

Based on feedback from clients and partners to date, the guide has helped fill a need for concrete operational guidance to help put the *Principles on Identification* into practice and is becoming widely referenced and cited in the ID community.

The guide is meant to be a living document and will be updated periodically to reflect new lessons, standards, and resources. Version 1.0 was released in October 2019 to include feedback received on the draft for consultation released in June. The guide will soon be be available as a micro-website to improve navigation, facilitate browser-based translation, and enable easy sharing (visit http://id4d.worldbank.org/guide). In 2020, ID4D will work to further enhance the guide and use it to develop new e-learning and training modules on good practices in ID. ∎

PILLAR II.
GLOBAL PLATFORMS & CONVENING

Realizing the transformational potential of digital ID and civil registration depends on harmonized action by a wide-range of stakeholders. The ID4D Initiative helps steer and strengthen global commitment to the ID agenda around the critical themes of inclusion, transparency and trust—the foundation of "Good ID"—by raising awareness, strengthening coordination among a wide range of actors, developing and supporting the creation of normative tools, and facilitating peer-to-peer learning.

Three challenges have remained at the forefront of the global effort to improve ID systems: inclusion, data protection and privacy, and technology and vendor lock-in. Addressing these concerns proactively often means the difference between a successful, pro-developmental ID system and one that fails.

ID4D has published a range of seminal tools that synthesize good practices, enhance transparency around ID system technology and procurement, and provide frameworks for analysis and action. This includes:

- Catalog of Technical Standards
- Costing Model for ID project and operational investments
- ID4D Diagnostic methodology for a country's ID foundational and functional ID ecosystem
- ID Enabling Environment Assessment (IDEEA) methodology for legal frameworks
- Procurement Guide and Checklist
- Toolkit for People-Centered Qualitative Research

These tools are used directly in the World Bank's support for countries and are also freely and openly available to others as global public goods.

ID4D developed or supported a number of important efforts this year to make it easier for countries to design and implement inclusive and trusted ID systems, including:

- **Reflecting on the Principles on Identification for Sustainable Development:** The Principles were developed with a broad group of development partners, UN agencies, and the private sector. It was launched in 2017 to create a shared vision and guiding framework for ID systems in the digital era, and a powerful advocacy tool for countries and development

partners. To date, 25 organizations have endorsed the Principles. The ID4D workshop in Washington, DC, October 2019 kicked off a consultative process to reflect on the Principles and update them to reflect new lessons—as agreed upon in 2017—and will continue this process in 2020.

- **The Mission Billion Innovation Challenge:** For this inaugural innovation challenge, ID4D started with an issue at the heart of digital ID: privacy and user control. As countries and development partners strive to build digital ID systems, there is an opportunity to inform their design to enhance data protection and provide people with greater control over their data. ID4D held this challenge to incentivize innovation in the area of data protection by crowdsourcing a range of new ideas and solutions that can be embedded into digital ID systems during their design and implementation. The challenge was also a global effort to advocate the importance of "Good ID" as articulated in the Principles.

- **The Financial Action Task Force (FATF) Guidance on Digital ID:** As part of a World Bank team, ID4D contributed to the development of global guidance on how digital ID systems can be used to comply with FATF Recommendation 10 on customer due diligence (CDD), which requires reliable and independent identification and verification of a customer's identity. The draft guidance was released by the FATF Secretariat for public comment and is intended to help governments, financial institutions, and other relevant entities apply a risk-based approach to the use of digital ID for CDD.

- **Procurement Guide and Checklist:** This complements ID4D's work on technical standards by developing a user-friendly guide and checklist on procurement. The guide and checklist aim to help practitioners avoid common pitfalls that can lead to vendor lock-in or other issues that can plague the performance of a digital ID system and substantially increase cost. The guide and checklist is designed to be useful for countries planning a new ID system (that is, a "greenfield" ID system), as well as for countries planning to modernize legacy ID systems (that is, a "brownfield" ID system).

- **Capacity building and facilitating peer-to-peer knowledge exchange:** ID4D continued to facilitate and support peer-to-peer knowledge exchange and capacity building for policy

makers and technical staff through a variety of platforms, including in-country study tours, workshops, and virtual meetings. These interactions help client countries stay current with good practices and recent developments, and benefit from the experiences of other countries.

COUNTRY EXAMPLES OF PEER-TO-PEER KNOWLEDGE SHARING
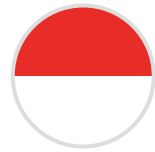
Indonesia: During a visit by a government delegation to Estonia joined by ID4D, government decision makers learned about digital identity, mobile ID, data exchange and interoperability, and developing human capital for managing a complex civil registration and national ID ecosystem.

Mexico: An in-country workshop highlighted best practices from LAC, Canada, India, and the European Union (EU), and facilitated discussion between federal agencies on options for authentication, enrollment, and data governance.

Pacific Islands: A regional workshop on Use Cases for Digital ID in the Pacific was organized in Fiji, focusing on the use of digital ID for better social protection, healthcare, humanitarian assistance, and more accessible financial services. The workshop featured cases from Australia, India, the Republic of Korea, and New Zealand.

Rwanda: At the government's request, a series of virtual country-to-country learning sessions were organized to share the experience and lessons learned by ID practitioners from the United Kingdom, India, Moldova, and Thailand.

Somalia: ID4D supported the participation of government officials in the Fifth Conference of African Ministers Responsible for Civil Registration to increase in-country awareness of, and capacity for, building integrated civil registration and identification systems as the country embarks on reestablishing its foundational ID infrastructure.

Uzbekistan: A series of in-country knowledge sharing events with ID practitioners from the Kyrgyz Republic and Moldova focused on lessons learned from introduction of smart cards, establishing digital authentication infrastructure, and mobile ID.

3-year Target Results 2017-2019	Results Achieved 2019	Results Achieved Over Three Years (2017-2019)
Principles on Identification for Sustainable Development would be finalized and endorsed by major international organizations	▪ ID4D organized the "From Good ID in Practice" workshop, which brought together more than 100 representatives of a wide range of stakeholders to share knowledge and insights. This workshop launched a new process to reflect and update the Principles. ▪ ITU became the 25th organization to endorse the Principles.	▪ The Principles were developed and have been endorsed by 25 organizations, including regional development banks (ADB, AfDB), key UN agencies working on ID and CRVS (UNECA, UNICEF, UNHCR, UNDP, IOM, WFP), and the private sector (GSMA, Mastercard, SIA). ▪ Several countries (e.g. Somalia, West Africa, etc) and others (e.g. MOSIP) have made specific mention of the Principles as a framework to guide their system.
3 Countries benefiting from peer-to-peer knowledge exchanges	▪ Several learning exchanges were facilitated including Mexico, Pacific Islands, Rwanda, Somalia, Uzbekistan, and Indonesia.	▪ More than 20 countries have benefited from country-specific knowledge exchanges and many others have benefited from virtual knowledge exchanges, regional workshops, and participation in ID4Africa.
High-Level Advisory Council and ID4D Multi-Donor Steering Committee Established	▪ The ID4D High-Level Advisory Council met virtually in July and with country clients for a roundtable during the World Bank Group/IMF Annual Meetings in October. ▪ Two MDTF Steering Committee meetings were held.	▪ The High-Level Advisory Council was established in 2017 as a platform for advocacy and to provide strategic guidance to the ID4D Initiative. The Council has since met biannually including a roundtable with African Head of States at the United Nations Headquarters on the sidelines of UNGA in 2018 and two Ministerial roundtables at the World Bank Spring and Annual meetings. ▪ The MDTF Steering Committee was established in 2017 and continues to meet biannually to collaboratively shape the Initiative's work.
Catalog of Technical Standards for Digital Identification Systems	▪ Procurement Guide and Checklist—As a complement to ID4D's work on the Technical Standards guide, this user-friendly guide and checklist was developed to help practitioners avoid common pitfalls that can lead to vendor lock-in, plague the performance of ID systems, and substantially increase cost.	▪ The Catalog of Technical Standards combined with the Procurement Guide and Checklist serve as a powerful set of tools to assist countries in the development of ID systems.

Global Discussions Highlight

Championing and Accelerating Good ID for All High-Level Roundtable

ID4D hosted a roundtable with representatives of ten countries and members of the ID4D High-Level Advisory Council (HLAC) during the World Bank Group/IMF Annual Meetings October 2019 in Washington, DC Ministers of Finance, Central Bank Governors, other Ministers and high-level representatives from the African Union, Burkina Faso, Djibouti, Guinea, Mexico, Niger, Nigeria, the Philippines, Samoa, and Somalia, shared their experiences and ideas on the importance of digital ID for the development of their country or region and lessons from their journey.

The major themes that emerged included the role of IDs in stimulating access to finance and digital economies; strategies for incremental rollout and scaling up ID enrollment; designing ID systems for interoperability; ensuring that ID systems are human-centric; providing access to vulnerable populations; mitigating gender gaps in access to IDs and downstream services; and developing robust supporting infrastructure to ID platforms.

Some perspectives from Ministers included:

"We observed many years ago that the lack of having a unified identification system was inhibiting [...] economic growth, and the ability of banking sector to grow the economy."

"What we have decided to do is to not look at the digital ID as a silo, but really to use it as a tool, even as a foundation for digital transformation."

"We have embarked on a very ambitious plan, aiming at really transforming the whole country into a digital society. With this transformation, we have adopted a one government approach."

Apart from boosting their own national development and digital transformation, many of the plans and commitments shared by the countries indicated they are also positioned to be standard-setters, possibly serving as a reference for other countries.

HLAC member Nandan Nilekani, former Chairman of the Unique Identification Authority of India (UIDAI), gave a presentation on digital ID as a platform. HLAC members, Ms. Carolina Trivelli (former Minister of Development and Social Inclusion, Peru), Dr. Benno Ndulu (former Governor of the Bank of Tanzania), and Mr. Iqbal Quadir (founder of Grameenphone), furthered the discussion on how the global ID agenda is at a crossroads with a growing number of developing countries investing in strengthening existing ID systems, or building new ones, including modernizing their civil registration systems. The event also benefited from insights from donors and partners including the Bill & Melinda Gates Foundation, the U.K. Government, the Omidyar Network, UNDP, and the Canadian Government.

Mission Billion: Innovative Ideas of Digital Identification

The Mission Billion Innovation Challenge attracted media attention worldwide, as the first competition to surface practical and cost-effective solutions on privacy-by-design features for ID systems. This was a unique challenge to foster innovative privacy-by-design features that can be embedded into digital identification systems and empower users to control their data.

During the submission phase of the challenge, several "solveathons" to foster engagement among competitors were facilitated by MIT Solve in collaboration with the World Bank. These events were held in Nairobi, Bangalore, Mexico City, Cape Town, and San Francisco. In total, more than 170 solutions were submitted by academics, entrepreneurs, scientists, and technologists in 54 countries.

The Challenge culminated at the World Bank Group/IMF Spring Meetings in April 2019 with a high-level panel discussion and pitch event. The panel explored how to seize the opportunities of "Good" digital ID systems and included Her Majesty Queen Màxima of the Netherlands (the United Nations Secretary-General's Special Advocate for Inclusive Finance for Development (UNSGSA)), Kristalina Georgieva (then CEO of the World Bank), Hassan Ali Khayre (Prime Minister of Somalia), Paula Ingabire (Rwanda Minister of ICT & Innovation), Filippo Grandi (United Nations High Commissioner for Refugees), Niale Kaba (Côte d'Ivoire Minister of Planning and Development), and Makhtar Diop (World Bank Vice President for Infrastructure).

The panel discussion was followed by six finalists giving a live pitch to a packed audience and a panel of expert judges. The winner of the Mission Billion Innovation Challenge was Simprints, for its open source toolkit that uses audio messages during registration to help people understand how their data is going to be used and provide meaningful informed consent. Second place was taken by Solid, which uses existing World Wide Web Technology to build a decentralized digital ID and data storage platform. And tied for third place was Blockcerts, an open standard that empowers people with control over sharing and verifying their documents and credentials, and Sthan, which replaces postal addresses with a privacy-protecting reimagination of what it means to localize a person or place.

All the winners brought new ideas to a quickly changing digital landscape and inspired critical thinking and commitment to ensure people and their privacy are at the heart of the next digital frontier. "Innovations that help safeguard privacy and make it easier for people to understand how their data is used are critical for building inclusive and responsible digital ID systems that can help people access economic opportunities and financial services more easily and create lasting development impact," said H.M. Queen Máxima.

Moving forward, ID4D will continue to work with the winning team, as well as the runners-up and other teams to further develop their ideas and identify options for pilots and implementation. ■

PILLAR III.
COUNTRY & REGIONAL ACTION

From analytics and advisory services to financing, the ID4D Initiative has effectively leveraged the full range of the World Bank's instruments to bring the best advice, knowledge, and financial support to countries on all aspects of their ID ecosystems. The activities supported by the ID4D Multi-Donor Trust Fund have been designed to support a virtuous feedback loop by bringing global good practices and knowledge to country operations, while surfacing and addressing country needs and exploring innovative approaches to inform new global priorities.

In the past three years, the ID4D Initiative has provided advisory support to over 40 countries, of which 27 will also be supported by financing for implementation. In 2019, country demand continued to grow, with new engagements in Angola, Benin, Burkina Faso, Brazil, Ethiopia, Honduras, Lebanon, Madagascar, Mexico, Mozambique, Niger, Rwanda, Togo, and Vietnam. We have also seen ongoing dialogue and technical support turn into actual implementation, with a growing portfolio of investments in digital ID and civil registration system of more than US$1.2 billion.

Country and regional action in 2019 focused on:

1. BUILDING INCLUSIVE AND TRUSTED DIGITAL ID SYSTEMS

In Nigeria, a long history of one-off efforts by various agencies has resulted in an ID landscape that is highly fragmented with incomplete coverage. World Bank support is based on four pillars of inclusion which ensure that the ID system will be accessible to all people in Nigeria, regardless of their origin, citizenship, or legal residency status, and Nigerians abroad, so that no one will be excluded for lack of breeder documents or because of an inability to provide the required biographic or biometric data, and that all National Identity Management Commission (NIMC) services shall be equally accessible to all national ID number (NIN) holders. In 2019, technical assistance included advice to NIMC around business processes and technical specifications for the new ecosystem enrollment model designed to leverage public and private sector partners to rapidly increase NIN coverage. Previous support has included the development of the Strategic Roadmap for Developing Digital Identification, which was endorsed by the Nigerian Federal Executive Council. The World Bank,

the European Investment Bank, and the Agence Française de Développement are cofinancing the Government of Nigeria's Digital Identification for Development program to implement and realize the vision of the country's strategic roadmap, including reforms to the national ID system and laying the building blocks for modernizing the civil registration system.

In Somalia, a country with one of the lowest ID coverage rates in the world, ID4D has been supporting the government in the development of its Digital ID Policy as part of the Somalia Capacity Advancement, Livelihoods and Entrepreneurship, through the Digital Uplift Program (SCALED-UP) project. This policy provides a framework for the implementation of an inclusive, privacy-conscious, and development-oriented foundational ID system. In addition, technical advisory services informed the design of an inclusive enrollment strategy for the country's first digital foundational ID system. Having a unique and verifiable ID will enable Somalis to access formal financial services and ensure continued access to remittances—a critical lifeline for the population.

In West Africa (Phase I: Côte d'Ivoire, Guinea; Phase II: Benin, Burkina Faso, Niger, and Togo), technical assistance has focused on the design of foundational ID platforms to provide government-recognized proof of unique identity for close to 90 million people and facilitate more inclusive access to services, including accessing them across borders. ID4D also provided support to the ECOWAS secretariat through dedicated technical assistance for the mutual recognition and interoperability of ID systems to improve crossborder service delivery and economic integration.

2. ADVISING ON NEXT GENERATION ID SYSTEMS AND EMERGING ISSUES

In 2019, ID4D experts advised on several emerging areas of support such as the development of digital authentication mechanisms, mobile ID, federated ID architecture, open source technologies, and the mainstreaming of privacy-by-design features in a number of countries, including:
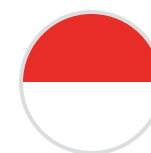
In Indonesia, support has included a study of relying parties' perspectives in leveraging the current national ID system for identity authentication, which led to recommendations on areas where service levels and performance could improve. Other advisory work with the Ministry of Home Affairs included developing methods to use social assistance programs to identify individuals who are unregistered, and advice on the adoption of mobile ID and decentralized data storage and sharing.

In Morocco, the first country to select the Modular Open Source Identity Platform (MOSIP) platform as its core technology solution, ID4D technical assistance has advised on various design aspects of a new digital ID and National Population Registry (NPR) that leverages the open source software. This will underpin efforts to reform the social safety net (SSN) system and to introduce presence-less, paper-less, and cash-less transactions.

In the Philippines, until the passing of the Philippine Identification (PhilSys) Act in August 2018, the Philippines was one of the few countries around the world without a foundational ID system, apart from its civil registry. Continuing the comprehensive advisory program that began with an ID4D Diagnostic study and knowledge exchange with Thailand in 2017, ID4D technical assistance in 2019 focused on supporting the Philippine Statistics Authority (PSA) to develop a five-year implementation strategy, write technical design documents, pilot MOSIP, conduct a Privacy Impact Assessment, and develop a data governance framework. These activities have influenced key decisions regarding the type of credentials and the adoption of several key privacy-enhancing features such as tokenization and concealing the permanent PhilSys Number (PSN).

In Uganda, technical advisory services have focused on developing a new way to establish digital authentication and e-signature capability in the country, as well as the introduction of mobile ID for improved service delivery. Implementation is being financed by the Regional Communications Infrastructure project.

In Uzbekistan, advisory services focused on emerging models of digital authentication, various implementation modalities of mobile ID, and linkages with improved service delivery. This was done to inform the design of the new Digital CASA: Uzbekistan Investment Project.

3. DEVELOPMENT OF ROBUST LEGAL AND REGULATORY FRAMEWORKS

In 2019, ID4D provided legal support and technical assistance in more than 21 countries by leveraging the ID Enabling Environment Assessment (IDEEA) tool. These engagements covered the analysis of the existing laws, including potential gaps and deviations from common practice and recommendations regarding potential reforms. Some examples include:

In Ethiopia, technical assistance focused on providing guidance on laws and regulations for the introduction of a foundational digital ID system, including ID law, e-transactions, data protection, and cybercrime. The recommendations are intended to help Ethiopia manage the transition to a digitized ID system supported by a robust data protection regime and alignment with the Principles.

In Nigeria, technical assistance included an in-depth review of the privacy, data protection and cybersecurity legal and regulatory frameworks. The findings of the legal assessment have directly informed the design of the Nigeria Digital Identification for Development Project, which includes a component to strengthen the legal and regulatory framework around the foundational ID system. These findings and recommendations have also informed the development of a new data protection law, which is expected to be passed into law in 2020.

In Lesotho, support identified issues with the existing legislation on the use of ID data for the administering of salary or pension payments to public servants. In turn, technical assistance was provided that proposed recommendations for resolving these issues, while following the good practices of data sharing and interoperability.

In Morocco, legal support included a review of the enabling legal framework and data protection. The engagement will result in the adoption of new NPR laws and regulations, aligned with good practices on inclusion.

In Somalia, preparation of a preliminary ID Enabling Environment Assessment provided counterparts with recommendations for strengthening key laws and regulations. The team also provided technical assistance for the development of an enabling policy framework for the country's proposed digital ID system. New ID and data protection legislation were included in the policy as a result.

COUNTRY ENGAGEMENTS

Country	Diagnostic	Active Technical Advice	Pipeline Project Preparation	Financing & Implementation
Afghanistan		■		■
Angola	✔	●	●	
Bangladesh	✔			
Benin		■	■▲	
Brazil	✔			
Burkina Faso	✔	■	■	●
Cameroon	✔			●
Côte d'Ivoire	✔			■▲
Democratic Republic of the Congo	✔			●
El Salvador	✔			
Ethiopia	✔	■		●
Federated States of Micronesia			■	
Gabon			■	
Gambia		●	●	
Guinea	✔	■●		■●▲
Honduras	✔			
Indonesia		■●		
Kenya	✔			●
Lao PDR			●	
Lebanon	✔			
Lesotho	✔	■●		■

Country	Diagnostic	Active Technical Advice	Pipeline Project Preparation	Financing & Implementation
Liberia	✔			●
Madagascar	✔	■●	■	●
Marshall Islands			■	
Mexico	✔		■	
Morocco	✔	■		■
Mozambique	✔		■	●
Nepal	✔			●
Niger	✔	■	■▲	
Nigeria	✔	■●	■●	
Philippines	✔	■		
Rwanda	✔	■●	■	●
Samoa		■●		■●
Somalia	✔	■		■
Togo	✔	■	■▲	
Tonga	✔	■●		■●
Tunisia	✔	■		■
Uganda	✔	■	■	●
Uzbekistan		■	■	
Vietnam		■		
Zambia	✔			

■ ID projects   ● Civil Registration (IDA and/or GFF)   ▲ Regional

PILLAR III. Country & Regional Action

3-year Target Results 2017-2019	Results Achieved 2019	Results Achieved Over Three Years (2017-2019)
Technical assistance provided to six countries and at least five countries have developed action plans / implementation roadmaps	▪ Technical assistance provided to: Afghanistan, Ethiopia, The Gambia, Honduras, Indonesia, Lesotho, Madagascar, Mexico, Morocco, Nepal, Nigeria, the Philippines, Rwanda, Somalia, Samoa, Togo, Tonga, Tunisia, Uganda, Uzbekistan, WURI I (Côte d'Ivoire, Guinea), WURI II (Benin, Burkina Faso, Niger, and Togo) ▪ Action plans in the Philippines, Samoa, and Somalia	▪ Technical assistance provided to over 25 countries ▪ 8 action plans/roadmaps developed ▪ Regional roadmap for the East African Community (EAC)
At least three countries have conducted an ID4D Diagnostic	▪ 5 completed: Central African Republic, Ethiopia (updated), Honduras, Tunisia, and Uganda ▪ 5 in progress/launched: Angola, Brazil, El Salvador, Lebanon, and Mozambique	▪ 12 country assessments completed with 5 more in progress over the past 3 years and 20 completed previously
At least two follow-on WBG projects (IDA/ IBRD financed) to support implementation	▪ The WB Board approved projects for Afghanistan, Somalia, Tonga, and Tunisia. ▪ Samoa project restructured with ID and civil registration component. ▪ Pipeline projects are planned for approval in the coming months: Nigeria, and WURI II (Benin, Burkina Faso, Niger, and Togo), and Federated States of Micronesia	▪ Over the three years, ID4D has been involved in supporting preparation of now-active digital ID and civil registration projects in 14 countries.

2020+

ACCELERATING IMPACT

THE NEXT PHASE OF ID4D

The digital ID field is still relatively new, especially in the context of using digital ID as a platform for development. For this reason, the first phase of ID4D prioritized deepening its understanding of different approaches, good practices and risks across the world, and documenting these through research and tools. This foundational knowledge has been instrumental in ID4D's progress so far and is being channeled by a first wave of countries beginning implementation (for example, Morocco, Nigeria, the Philippines, Samoa, and Somalia).

The ID4D Initiative's second phase is focused on accelerating impact. This means working to remain at the vanguard of the ID field, reaching more countries with solutions, traditional or innovative, to work in their unique contexts. These solutions will be backed by financing and resources to pilot, implement, and bring systems to scale.

ID4D will continue publishing research and practical resources to enhance knowledge transfer between countries and, importantly, to leverage the effect the first wave of countries to implement digital ID systems can have as motivators and providing benchmarks for others.

ID4D will also work with countries and other partners to promote global public goods and paradigm-shifting innovations, adapting these so that they work for developing countries. These include data empowerment tools, tokenization, and authentication models for both federated and decentralized ID technologies.

The ID field as a whole is evolving to go beyond digitization or the automation of paper-based systems and manual processes to new ways of thinking about and asserting identity in the digital era.

ID4D is learning from and contributing to paradigm shifts on key issues such as:

- data governance and giving people control over their data,

- transitioning from data-heavy, nationality-oriented ID systems to platforms for service delivery, characterized by minimal data, interoperability, and universal-accessibility;

- using mobile and other personal devices as credentials—instead of or in addition to physical ID cards—to increase convenience and security, reduce costs, and decentralize the storage of personal data;

- using tokenization and virtual identifiers instead of making a permanent unique ID number public and ubiquitous; and

- moving from fully centralized ID systems to federated or decentralized digital ID and authentication frameworks or ecosystems.

These shifts have the potential to improve data protection and privacy and will help make ID systems more useful in terms of their development impact. For example, federated authentication models, in which a digitized ID is linked to several services, and decentralized authentication models, give the people and parties relying on them more choice, and the competition they generate provides incentives for better systems.

Developing such alternatives to fully centralized ID systems depend, however, on something many developing countries still lack, which is the government's ability, as well as the private sector's, to leverage foundational ID systems or other authoritative sources of identity data for onboarding new users or increasing the integrity of existing data.

ID4D is working with Brazil, Indonesia, the Philippines, and Vietnam to explore how federated models could work for them, and is closely learning from systems emerging in Australia, Canada, and Thailand. Applying some of these innovations, many of which come from high-income countries where conditions are different, requires careful thought and localization, particularly to ensure that developing countries do not adopt context-inappropriate technology that would further exacerbate the digital divide.

GOING FORWARD

As ID4D continues to move from principles to practice and learn from experience, the following five areas have emerged as critical areas requiring additional focus:

GROWING DEMAND FROM COUNTRIES FOR SUPPORT

ID4D continues to receive requests from countries for technical assistance and financing, including from the countries noted below, whose requests cannot be met due to resource limitations. With additional support from our partners ID4D will:

- **Increase the availability and scope of technical assistance and provide countries with expert advice and share knowledge on good practices** on specific areas of interest or digital ID and civil registration systems as a whole during the design stage for a new or to-be-upgraded ID or civil registration system. Technical assistance may be provided as a standalone engagement, as part of a WBG project preparation, or in conjunction with ID- or civil registration-related engagements supported by other development partners.

- **Scaling-up advocacy, knowledge sharing, and global convening:** Build on the Initiative's existing role as facilitator for peer-to-peer knowledge sharing, its experience with supporting the development and dissemination of global public goods, and its successful track record in organizing learning and capacity building events around ID and civil registration.

- **Operationalize solutions to emerging issues in ID:** There are several emerging issues that require further exploration both in terms of analytic work and country and regional engagements.

ENSURING INCLUSION FOR UNIVERSAL COVERAGE AND ACCESSIBILITY

A growing body of on both quantitative and qualitative evidence shows that vulnerable and marginalized populations, such as people among the poorest income quintiles, marginalized women and girls, residents of rural areas, people with disabilities, internally displaced persons, refugees, and others, are more likely to be left behind by ID and civil registration systems. To provide a proof of identity for all, additional interventions are needed to make ID systems accessible and easy-to-use for all and to enable improved access to services for those who need them the most:

- **Addressing exclusion risks and improving understanding around the limitations of technology:** The adoption of new technologies and the removal of legal, administrative, and economic barriers may help ensure inclusion and facilitate more equitable access to services. At the same time, there could be unintended consequences which lead to exclusion both at time of enrollment or during access to critical services (e.g. due to biometric authentication failures at the point of service if no alternatives or exception-handling mechanisms are available). More applied research is needed to understand exclusion risks and to identify people-centric solutions to mitigate them. To address knowledge gaps and improve

advice in this area, ID4D will: (1) scale up its qualitative and quantitative end-user research and consultations with vulnerable populations in country; and (2) pilot new enrollment approaches, with a focus on improving access to IDs for rural and marginalized populations.

- **Closing the gender gap and improving women's access to IDs:** The ID4D-Findex survey data show that there is a large gender gap in ID ownership in the low-income countries surveyed, with 44% of women lacking an ID compared to 28% of men. There is also a disparity of ID coverage between less educated women and men. Girls and women face barriers such as restrictions on freedom to travel outside the home or community; financial cost; time constraints; illiteracy; lack of information and lack of awareness; and, lack of support or opposition from other family members. To date, ID4D has focused on in-country research and analytical work on gender-relevant issues to raise awareness. Going forward, the Initiative will double down on its efforts to provide support to governments in addressing barriers to women's access and use of ID systems. This support, which can be provided through WBG operations, will focus on addressing various cultural, legal and procedural barriers to women's access and use of ID and civil registration systems, designing information and communication campaigns that create demand from women and fine-tuning enrollment strategies that are user-centric and women friendly.

- **Engagement with civil society:** To improve the coverage and impact of ID and civil registration systems, ID4D will identify, engage and partner with civil society organizations (CSOs) who work on digital rights and privacy, the empowerment of women and girl's and gender equality, people with disabilities, pastoralists, Internally Displaced Peoples (IDPs) or other hard to reach populations with the aim of partnering with them at a country level. Depending on the specific CSO, the collaboration and activities could be designed

to fit within their existing programs or ID4D could help them build programs that increase enrollment for people who face particularly high barriers.

- **ID in humanitarian contexts:** With forced displacement at historic highs and a growing number of protracted refugee situations, there is an urgent need to understand the unique considerations for affected populations and how ID and civil registration systems could be better used to respond to forced displacement and natural disasters. ID and civil registration play a critical role in delivering humanitarian assistance, but a key challenge is the lack of interoperability among the wide range of ID systems that are used in humanitarian contexts as well as host country systems. Working closely with UNHCR, WFP and other partners, ID4D will: (1) carry out research on appropriate models for incorporating refugees and asylum seekers into government-managed ID systems and on unique data protection considerations for these populations with a view to piloting these models in appropriate WBG operations; and (2) place a priority on including displaced persons in end-user research, where applicable.

- **Authentication for high levels of assurance without connectivity:** As developing countries adopt ID systems, a lack or limited availability of Internet connectivity to connect to a central database or mobile connectivity to authenticate means that those who have the most to gain are often left behind. Likewise, smartcards and readers that can provide reliable 'offline' methods of authentication are typically expensive and it can be difficult to maintain their security as new threats emerge. So as not to create new 'digital divides', countries need a way to offer identity authentication with high levels of assurance in low and no connectivity environments securely and at low cost. Any solution must be simple and suitable for public and private sector to implement and integrate into their business processes, easy for people with low literacy to use, and safeguard the privacy and rights of the people who use it. Several solutions exist or are being developed, particularly innovative ways of using barcodes (e.g. QR codes), but some of these are proprietary. With new innovations and more work across a variety of actors, ID4D will pursue research to identify which solutions exist, particularly those that are open source, to assess their viability for developing countries, followed by piloting/testing their use.

ENABLING GOOD DESIGN: TRUSTED, SECURE, AND RESPONSIVE

ID4D has produced a set of tools for our country partners to promote robustness, open standards, vendor neutrality, and interoperability, but additional work is required in the following areas:

- **Increase transparency in procurement:** Weak procurement processes and informational asymmetries between governments and vendors on ID and civil registration system components have often led to ineffective decisions that have resulted in vendor lock-in and over-prescribed and unnecessarily costly credentials. To strengthen transparency through procurement, ID4D will document lessons from experiences in other sectors (e.g. extractive industries) and apply these to strengthen country capacity to adopt good practices. The initiative will also partner with other initiatives such as Open Contracting Partnerships.

- **Adoption of open source and open standards:** ID4D will continue to work closely to advance open standards and open source solutions.

- **Continental approach to digital ID in Africa:** The African Union has recently begun exploring a continental approach to digital identity through the setting of regional standards and norms that would enable mutual recognition, which can build on similar efforts by Economic Community of Western African States (ECOWAS) and the East African Community (EAC) at the regional level. ID4D will continue to work with the AU, UNECA and regional economic communities to design technical architecture options and support countries in necessary capacity building and convening.

- **PPPs, outsourcing and procurement:** Countries are looking at different models to finance digital ID systems, including charging fees for certain services and Build-Operate-Transfer projects. While such models offer the ability to mobilize resources quickly and, in the case of PPPs, to leverage expertise of the private sector, they also come with considerable risk, particularly around vendor and technology lock-in and data sovereignty, and sustainability. For many countries, digital ID systems are a new endeavor and thus there is limited knowledge and capacity to design PPP models that avoid such risks. Likewise, charging fees (e.g. for cards or authentication) can create a significant barrier for vulnerable populations to access ID systems, which is counterproductive. ID4D will look at the options for involving the private sector in foundational ID systems, including civil registration, from suppliers of equipment, software and systems to outsourced roles (e.g. in enrollment) to full PPP structures, including the key legal, regulatory and economic considerations for structuring such arrangements.

- **Alternatives to biometrics for establishing uniqueness:** Preventing duplicate registrations and IDs of the same person is important for strengthening the integrity of an ID system and for reducing risks of identity fraud in service delivery. However, uniqueness might not necessarily be required for all use cases and it creates challenges around privacy because ID holders have less choice (e.g. to use a pseudonym). Currently, the most efficient, effective and widely used method of establishing uniqueness is through biometrics, which also creates a range of additional exclusion and data protection and privacy risks. Some countries use demographic information to deduplicate but with mixed success. Demographic deduplication approaches may not be practical in developing countries where names are common, people may not know their date of birth (because it was never formally recorded), and there are multiple languages. ID4D will pursue research to identify when uniqueness is required and practical alternatives to biometrics for deduplication in developing country contexts.

- **Peer-to-peer network and capacity building:** As a growing number of countries are designing and implementing new digital ID systems and modernizing existing ones, there is an increased need to support capacity building and knowledge sharing for policy makers and technical staff on a number of emerging topics with the aim to build practitioner-to-practitioner networks and communities of practice, developing new and shared understanding—breaking down knowledge silos and fostering the development of new projects, ideas and partnerships, all with the aim to identify emerging perspectives/challenges/shifts that will need to be addressed to "future proof" ID systems. ID4D will continue to support peer-to-peer knowledge

exchange and capacity building for policy makers and technical staff, so that countries can stay abreast of good practices and recent developments in identification.

BUILDING TRUST BY PROTECTING PRIVACY AND RIGHTS

To help build and preserve trust in ID and civil registration systems and to mitigate opportunities for misuse, ID4D will continue to support the adoption of robust legal frameworks, the creation of data protection institutions, the use and development of privacy-preserving technologies, and the integration of 'privacy-by-design' features. Building on the momentum over the past couple of years, additional investments and efforts will be required to:

- **Scale up support for the development of laws and regulations on data protection and privacy and non-discrimination:** Most countries still lack adequate legal frameworks and institutions to support and regulate modern identification systems. ID4D will continue to support countries in strengthening their legal frameworks on data protection and privacy to ensure that digital ID and civil registration systems can operate in a secure, accountable, and people-centric manner. The WBG's technical assistance and financing for digital ID projects is often the entry point for engaging with governments on the importance of adequate legislation for data protection and privacy in the context of identification, as well as on a broader, cross-sectoral level, increasingly linked to digital economy initiatives for which digital ID is a key enabler; as such scale-up of these efforts will be critical going forward. ID4D will also continue to work with other international organizations and stakeholders on global and regional legal and normative frameworks, and associated knowledge products and awareness raising, to support this scaling up at the national and regional levels.

- **Enhance privacy by design:** In parallel to strengthening the legal and regulatory frameworks in developing countries, there is a need to develop 'privacy by design' features that can be embedded into digital identification systems to enhance data protection and to provide data subjects with greater control over their data. Privacy-enhancing measures need to work and be accessible for the most vulnerable populations. Continued work in this area is critical to ensure that privacy and control over one's personal data is built into the design and operation of ID systems. The ID4D Mission Billion Challenge helped surface new ideas on these challenges and ID4D will work on how to embed these ideas into the design of ID and civil registration systems. ID4D with work with the Mission Billion finalists and other top solutions to incubate privacy by design features (e.g. consent options, architectures) and will continue to promote innovation in this field.

- **Strengthen cybersecurity:** With a growing number of digital and online systems, developing countries are looking to adopt better cybersecurity practices and solutions. In response to the increased country demand, ID4D will partner with the broader cybersecurity agenda underway within the WBG and develop ID-specific guidance for practitioners to strengthen their capacity to maintain cybersecurity in line with international standards and best practices.
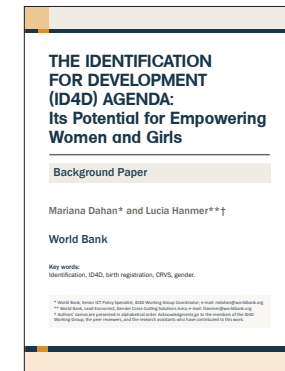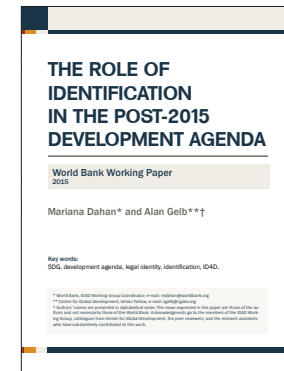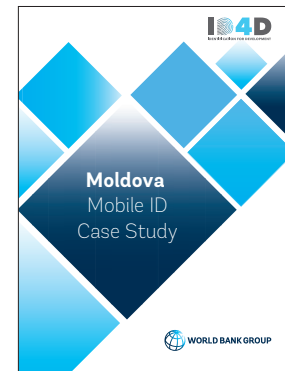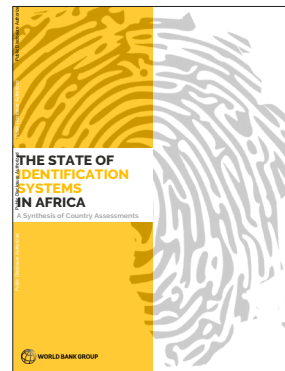

GATHERING ROBUST DATA AND EVIDENCE ON ID

To understand where global ID efforts should be focused, which solutions work, and to track progress toward our goals, additional work is needed in the following areas:

- **Update of the Global ID4D Dataset:** The next release of the ID4D Dataset will include a comprehensive methodological review and improved data collection to deliver enhanced estimates of ID coverage, as well as the quality of ID systems. This will include assessing the potential to use new survey-based measures for ID system coverage (e.g., using the 2020 Global Findex and other data sources) and collecting additional qualitative indicators on ID systems features important for harnessing the potential of ID for development and mitigating the risks.

- **Quantitative and qualitative studies:** Having a robust understanding of who the people are who lack a proof of identity worldwide and the challenges they face in accessing identification is critical for effectively addressing global ID coverage gaps. The annual ID4D Global Dataset and the 2017 ID4D-Findex survey have provided the first estimates on ID coverage globally and at the country level, but a more far-reaching and in-depth data collection effort is needed to unders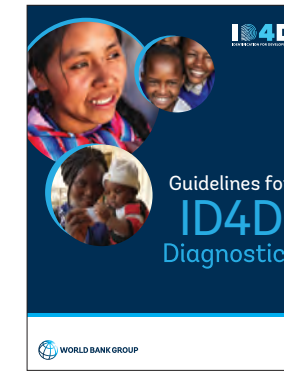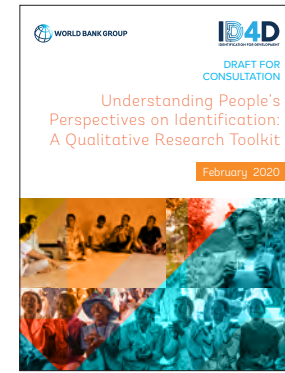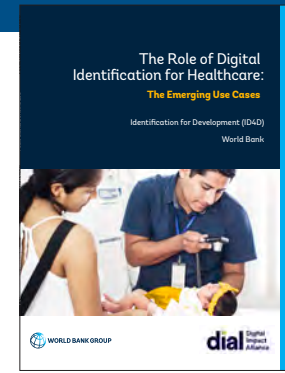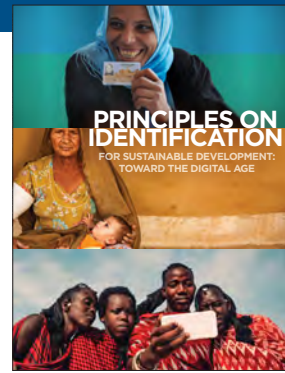tand the dynamics and use of ID in particular countries and regions. Quantitative and qualitative surveys targeting a wide range of ID stakeholders, including the people accessing and using ID systems, the policy makers and regulators setting the rules on access to and use of ID, and the administrators of the public and private sector service providers who rely on the ID system in their everyday operations, would enable the Initiative and countries to take a more informed and more comprehensive approach to tackling ID coverage and quality challenges.

- **Impact evaluations:** To support the successful roll-out of ID and civil registration systems and their use in service delivery, building a robust evidence base on which approaches work best and how they affect individual welfare and other development objectives will be critical. ID4D will pursue additional impact evaluations to support informed decision making in multiple areas, including enrollment strategies, the use of different authentication methods for service delivery, and the role of ID systems in improving access to financial and government services.

A SAMPLE OF ID4D ANALYTICS

PRACTITIONER'S GUIDE

PRINCIPLES ON IDENTIFICATION FOR SUSTAINABLE DEVELOPMENT: TOWARD THE DIGITAL AGE

ID Enabling Environment Assessment (IDEEA) GUIDANCE NOTE

CATALOG OF Technical Standards for Digital Identification Systems

Private Sector Economic Impacts from Identification Systems

The Role of Digital Identification for Healthcare: The Emerging Use Cases

Global ID Coverage, Barriers, and Use by the Numbers: Insights from the ID4D-Findex Survey

The Role of Digital Identification in Agriculture: Emerging Applications

Understanding Cost Drivers of Identification Systems

Technology Landscape for Digital Identification

Privacy by Design: Current Practices in Estonia, India, and Austria

Achieving Universal Access to ID: Gender-based Legal Barriers Against Women and Good Practice Reforms

IDENTIFICATION FOR DEVELOPMENT AFRICA BUSINESS PLAN

Understanding People's Perspectives on Identification: A Qualitative Research Toolkit — DRAFT FOR CONSULTATION — February 2020

Guidelines for ID4D Diagnostics

Incentives for Improving Birth Registration Coverage: A Review of the Literature

Public Sector Savings and Revenue from Identification Systems: Opportunities and Constraints

THE STATE OF IDENTIFICATION SYSTEMS IN AFRICA: A Synthesis of Country Assessments

G20 Digital Identity Onboarding

South Africa ID Case Study

Moldova Mobile ID Case Study

Digital Identity: Towards Shared Principles for Public and Private Sector Cooperation — A Joint World Bank Group – GSMA – Secure Identity Alliance Discussion Paper

THE ROLE OF IDENTIFICATION IN THE POST-2015 DEVELOPMENT AGENDA — World Bank Working Paper 2015 — Mariana Dahan* and Alan Gelb**†

THE IDENTIFICATION FOR DEVELOPMENT (ID4D) AGENDA: Its Potential for Empowering Women and Girls — Background Paper — Mariana Dahan* and Lucia Hanmer**† — World Bank

NEW PRACTITIONER'S NOTE SERIES:

DIGITAL ID AND THE DATA PROTECTION CHALLENGE — PRACTITIONER'S NOTE

IDENTITY AUTHENTICATION AND VERIFICATION FEES: OVERVIEW OF CURRENT PRACTICES — PRACTITIONER'S NOTE

Identification in the Context of Forced Displacement — Bronwen Manby

The Role of Identification in Ending Child Marriage — Lucia Hanmer and Marina Elefante

FOR MORE ANALYTICS, VISIT ID4D.WORLDBANK.ORG