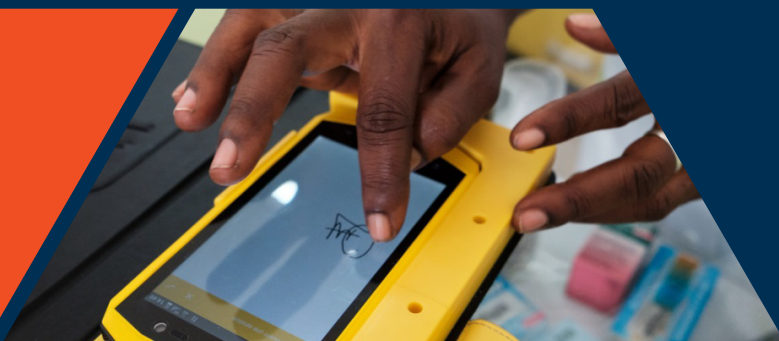


IDENTIFICATION FOR
DEVELOPMENT



2018 ANNUAL REPORT



WORLD BANK GROUP

WITH SUPPORT FROM:

BILL & MELINDA
GATES foundation

UN
OMIDYAR NETWORK

Australian
Aid 



Table of Contents

WELCOME MESSAGE	1
WHY IT MATTERS	3
The ID4D Vision	7
The ID4D Theory of Change	11
ID4D INITIATIVE	13
Partnership	14
ID4D's Three Pillars of Work	15
Pillar I. Thought Leadership & Analytics	16
Pillar II. Global Platforms & Convening	27
Pillar III. Country & Regional Action	34
2019—GOING FORWARD	41
Pillar I. Thought Leadership & Analytics	44
Pillar II. Global Platforms & Convening	45
Pillar III. Country & Regional Action	46

WELCOME MESSAGE

Now is the Time to Accelerate Action



Digital identity and civil registration systems have the potential to transform development prospects and accelerate progress towards the Sustainable Development Goals. Since its inception in 2014, the World Bank Group's Identification for Development Initiative (ID4D) has become an important voice on this agenda, and a trusted source of knowledge and advisory services for building inclusive and trusted ID systems.

ID4D has made substantial progress across its three pillars of activity—Thought Leadership, Global Convening, and Country and Regional Action—and this year marked a turning point in the scale and momentum of our work. The demand by country clients has increased substantially and our cross-cutting knowledge base is now being applied to support the implementation of digital ID and civil registration systems across the globe. The Principles on Identification for Sustainable Development have contributed to an understanding by countries and development partners of what 'Good ID' looks like in practice.

ID4D is continuing to put the Principles into action through scaled up country engagement and developing practical tools for ID system implementation. For example, the first phase of the West Africa Unique Identification for Regional Integration and Inclusion (WURI) project will develop foundational ID platforms which are also recognized across borders. Elsewhere, ID4D's advisory services have informed key decisions on the design and implementation of foundational ID systems that will help streamline and expand government and private sector service delivery and enhance the digital economy.

It is clear the digital ID agenda will only gain pace. The international community must keep up with this momentum and adapt to an ever-changing environment. As more countries consider investments in digital ID systems and upgrading their civil registration systems, there are risks of fragmentation and missed opportunities to maximize the benefits for development. At the World Bank Group, we are innovating to tackle persistent challenges related to digital ID systems. One example is ID4D's Mission Billion Challenge, which was launched in November to crowd-source new ideas and technical solutions for protecting privacy and increasing users' control over their personal data.

At the end of 2018 we are at a critical juncture. Now is the time to accelerate action to ensure we deliver on our promise to leave no one behind. ID4D has accomplished much over the last year, but much more remains to be done. I am delighted to be working on advancing this important agenda as co-Chair of the ID4D High Level Advisory Council and welcome the concerted effort by the World Bank Group and its development partners to meet this challenge and make every person become visible.

Kristalina Georgieva

Chief Executive Officer and Co-Chair of the ID4D High-Level Advisory Council
World Bank

2018 Spotlight

Thought Leadership • Global Convening • Country Engagement



46

COUNTRIES

supported with assessments, technical assistance and financing for ID and civil registration



US \$1 billion

in active and pipeline WB lending projects supporting ID and civil registration implementation



100

MILLION PEOPLE

in West Africa will benefit from the first project in Africa to facilitate mutual recognition of IDs across borders



24

ORGANIZATIONS

have endorsed the Principles on ID for Sustainable Development



3

NEW ID4D TOOLS

IDEEA legal assessments, Catalog of technical standards, Cost models



FOCUS ON DATA PROTECTION

Supporting laws, Mission Billion Innovation Challenge, Privacy by Design best practices paper



Australia joined the Bill & Melinda Gates Foundation and Omidyar Network in the ID4D partnership platform



99

COUNTRIES

with Findex survey data on ID coverage, use and barriers, which can be disaggregated



OPEN SOURCE

Morocco to adopt the Modular Open Source ID Platform (MOSIP), a global public good

WHY IT MATTERS

The 2018 update of the Global ID4D Dataset shows that an estimated 1 billion people globally face challenges in proving who they are because they lack official proof of their identity. As a result, they struggle to access basic services — including healthcare, education, financial and mobile services — and may miss out on important economic opportunities, such as participating in the digital economy or formal employment. At the same time, ID systems can be weak, exclusionary and put people's privacy at risk, which highlights the importance of improving the quality — and not just coverage — of ID systems.

It is for these reasons that “by 2030, provide legal identity for all, including birth registration” has been set as Sustainable Development Goal (SDG) target 16.9 and why providing people with the ability to reliably verify their identity is key to making progress on many more SDG targets. Digital ID systems are also a key platform for improving and innovating how services are delivered in the public and private sectors.

The Global ID4D Dataset also revealed:

- 1.** People in low income economies are the least likely to have an ID, but the majority of the ‘invisible billion’, over 60%, live in lower-middle income economies.
- 2.** From a regional perspective, ID coverage gaps are largest in Sub-Saharan Africa, which is home to close to half a billion people without an ID.
- 3.** Due to gaps in birth registration and birth certification, many children lack proof of identity. In fact, 47% of the 1 billion are children younger than the age of eligibility for a national ID who have not had their birth registered, highlighting the urgency of strengthening civil registration.

NEW SURVEY DATA SHOWS THAT THE POOR AND WOMEN ARE THE MOST LIKELY TO LACK AN ID

To better understand the nature of the global identification gap, the 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 99 countries. This is the first time nationally representative survey data have been collected on this topic for such a large number of countries. The ID4D-Findex dataset offers unique insights about ID systems, including disaggregation by a range of characteristics, and represents a new method to measure inclusion, such as coverage of legal identity among adults in the context of measuring SDG target 16.9.

Within countries, and especially in low-income countries (LICs), the poor are at a greater risk of getting left behind.

Data from the 18 LICs surveyed shows that among people in the poorest quintile 45% lack an ID, compared to 28% in the richest quintile. This finding parallels the gap in under-5 birth registration in least developed countries, where UNICEF estimates that 70% of the births among the poorest quintile go unregistered compared to 44% among the wealthiest. One likely reason for the gap in ID coverage between the poor and the rich is the high cost of obtaining an ID. A synthesis of ID4D Diagnostics in 17 African countries shows that direct fees for ID cards are as high as US\$ 8–10 in some countries, and applicants will often need to spend an additional US\$ 10–25 on travel costs and supporting documentation in order to complete their application. The ID4D-Findex survey data confirm that LICs have the largest ID coverage gaps, where over 38% of people aged 15 and above report not having an ID. Middle income countries (MICs) are closer to the goal of providing a proof of identity for all their residents, with over two-thirds of the surveyed MICs having achieved coverage of 90% or above.

Although the global gender gap in ID coverage is relatively small, the ID4D-Findex surveys reveal a much larger gender gap in LICs. On average, over 45% of women in LICs lack an ID, compared to 30% of men. Countries with the greatest gender gaps in ID coverage also tend to be those with legal barriers for women's access to identity documents. For example, in Afghanistan, Benin, and Pakistan — all countries with significant gender gaps — a married woman cannot apply for a national ID in the same way as a married man. In addition, countries with the lowest female ID ownership rates also score badly on other indicators of gender equality and empowerment — women tend to be more likely to be married before their 18th birthday and are much less likely to participate in the labor force than men.

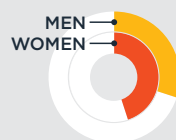
Key Insights



Close to 40% of the population aged 15+ in low-income countries (LICs) surveyed do not have an ID.



The poorest 20% are the least likely to have an ID: in surveyed LICs, 45% of the poorest 20% vs. 28% of the richest 20% lack a proof of identity.

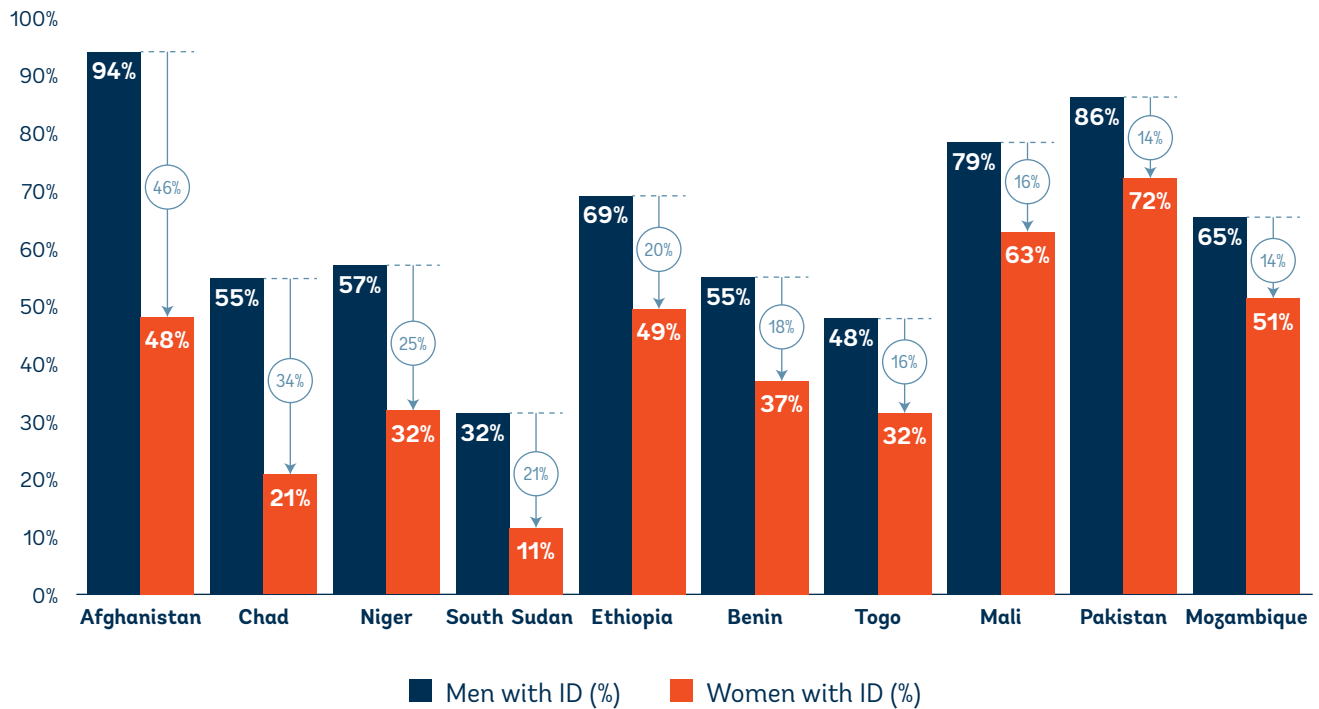


There is a gender gap in ID coverage: in surveyed LICs, 45% of women vs. 30% of men do not have an ID.

■ without an ID

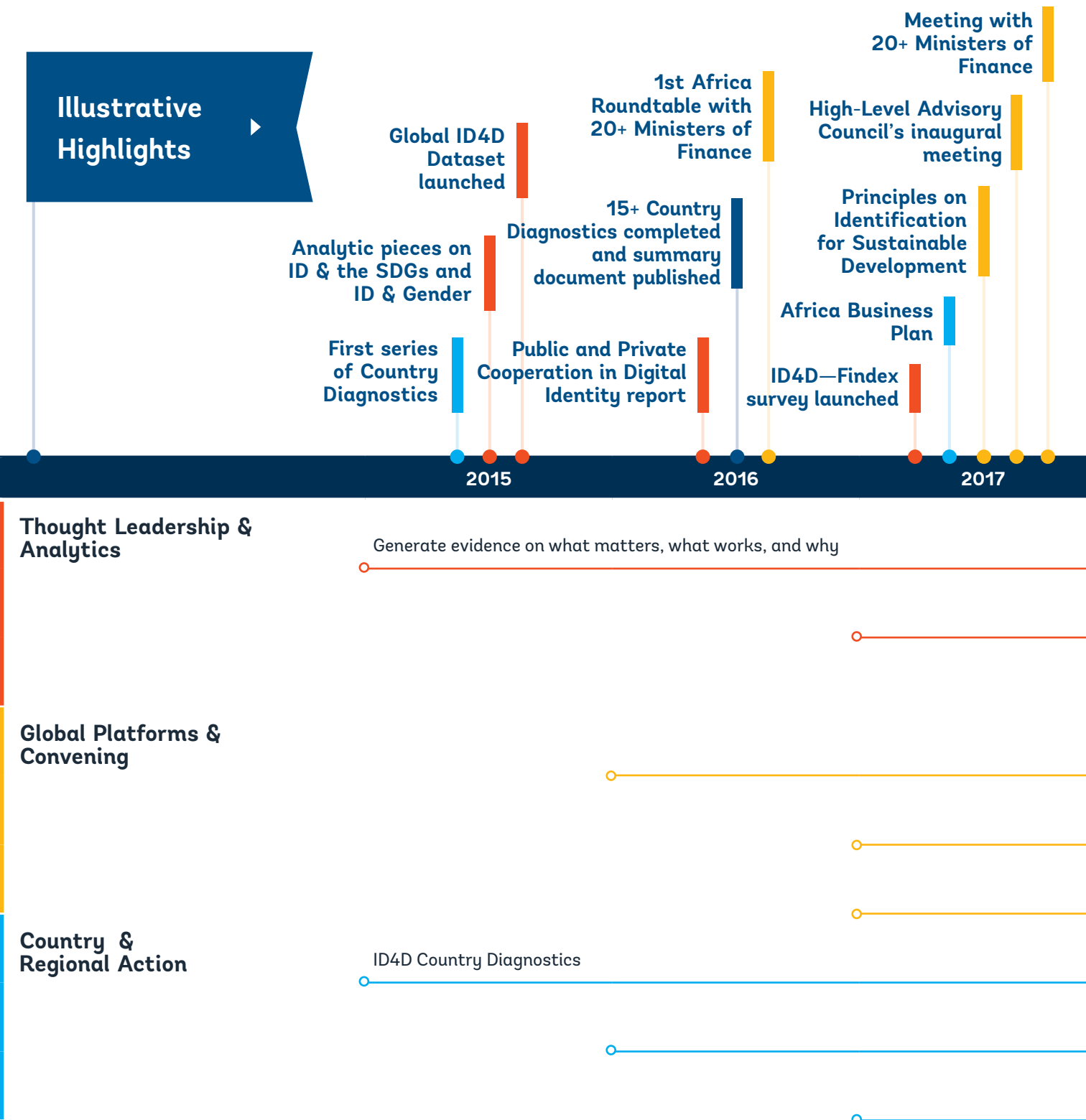


Figure 2: Top 10 countries with the greatest gender gaps in ID coverage

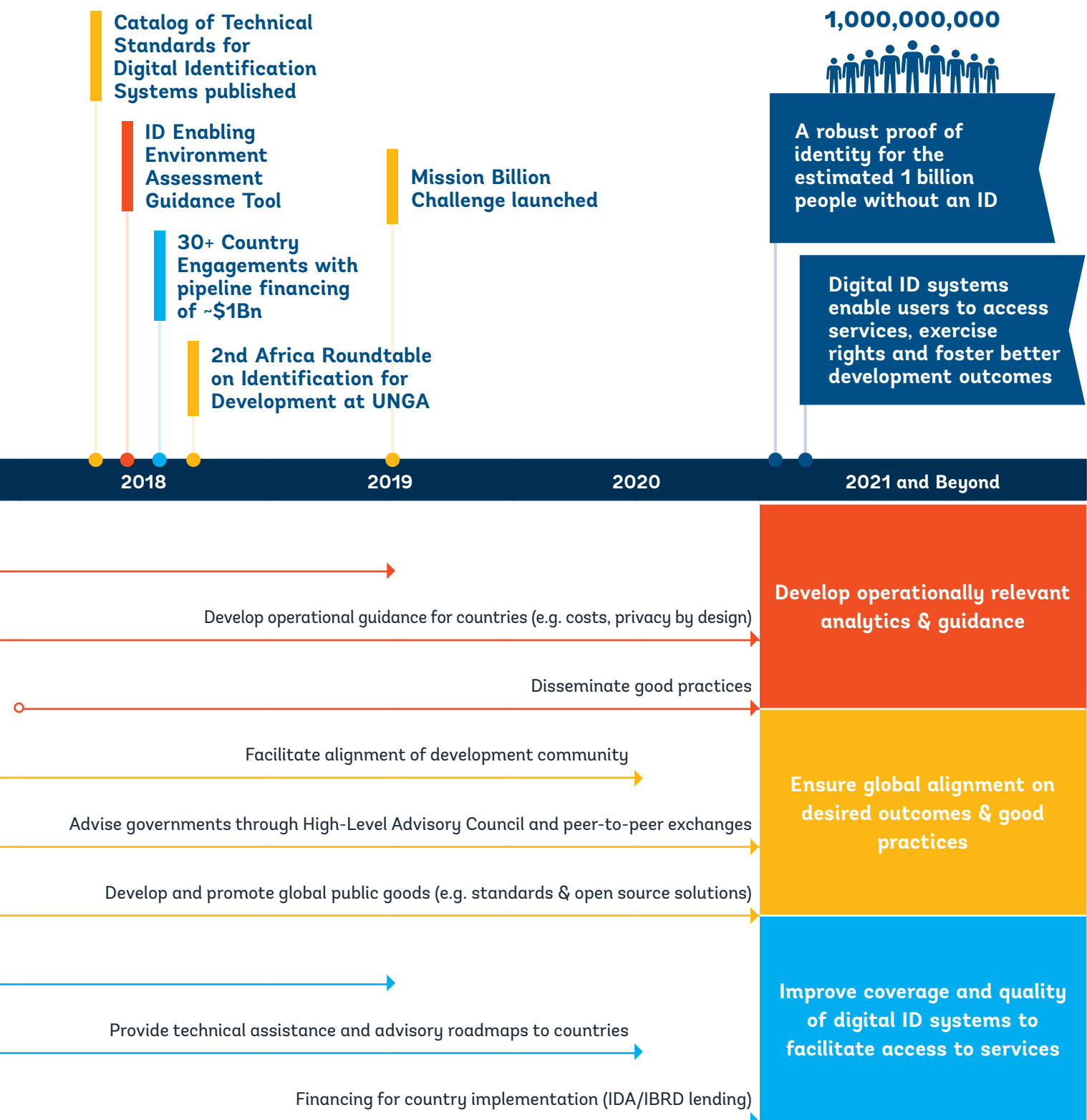


Achieving universal coverage is only one element of addressing the global identification challenge — quality, use, and privacy are also critical for maximizing the benefits of ID systems and mitigating their risks. Although providing a legal identity for all is a crucial first step toward leaving no one behind, ID4D is looking beyond addressing gaps in coverage to successfully tackle the global identification challenge. We are working to improve the quality of ID systems, including their ability to provide trusted and secure identities, to safeguard privacy and protect people's data, and to ensure that ID credentials can be utilized as widely, inclusively, and effectively as possible for access to services and beyond.

The ID4D Vision



Help countries realize the transformational potential of digital identification







Identity from the individual's perspective:

End-user research from three countries

Aggregate statistics do not tell the full story of ID systems and how they are used by people in daily life. In order to develop a deeper understanding of the technical, logistical, financial, and political challenges that impede the development of robust and inclusive systems—and develop strategies to effectively address them—qualitative, user-centric studies are a critical and complementary tool for policy makers.

In 2018, the ID4D Initiative piloted user studies in three countries—two in Africa and one in East Asia—to better understand people's experiences, perceptions, and challenges with ID systems. These studies used a human-centered methodology, including in-depth interviews, process observation, and focus groups of 50–80 people across various locations in each country that provide a cross-section of the population and particularly marginalized and underserved groups. A synthesis of these exercises offers unique perspectives and insights on the human experience with identification that can be translated into concrete recommendations for implementing more inclusive and trusted ID systems.

Together, this end-user research revealed a number of strong motives to register for

ID systems. This included the value of ID as a symbol of national pride and “being a good citizen,” as well as more concrete and immediate goals such as access to social services—including healthcare, pensions, scholarships, and more—and the ability to purchase land, obtain SIM cards, and open a mobile money account.

Coverage gaps in each of the three countries were not due to a lack of demand for identification, but a lack of accessibility due to registration and updating processes that were slow, costly, opaque, and sometimes discriminatory. As a result, many individuals either forgo the registration process altogether or give up during the process due to travel costs and time. Life events such as marriage, parenthood, or moving often pose a significant challenge. Discrimination based on age, sex, religion, gender identity, or nationality was also highlighted as a barrier to registration by study participants. Additionally, some respondents in each of the three countries demonstrated a limited understanding of how to obtain an ID and the associated benefits, which confirms the need for strong communication and engagement with the population. ■

The ID4D Theory of Change





Improved ID coverage,
system quality and
functionality

Improved development
outcomes

3

4



ID system design,
implementation, and
modernization reflects
good practices



More people have an
official proof of identity
&
ID systems are
better able to support
development outcomes,
while mitigating risks



People have greater access
to services, resources and
opportunities
&
Governments and the
private sector deliver
services more effectively
and inclusively

ID4D INITIATIVE

Recognizing the transformational potential of digital identification, the ID4D Initiative brings global knowledge and expertise across sectors and countries to tackle this fundamental challenge. It operates across the World Bank Group with global practices and units working on digital development, social protection, health, governance, gender, legal, financial inclusion and data. Over the last few years, the agenda has been embedded in the dialogue and the work among these sectors. The staff working on ID issues across sectors at the WBG has grown from a handful to more than 140. To meet the growing demand for access to practitioners, the ID4D Initiative launched an external Technical Expert Group who have either worked for or advised governments on the design and roll out of digital identification systems.

Together with development partners, the World Bank Group is well-positioned to advance this critical agenda given its multi-sectoral expertise, extensive global footprint, and range of financial instruments. WBG senior management have placed strategic importance on ID4D and play an active role overseeing the initiative, including through monthly meetings, to ensure institutional resources are being fully-leveraged.

The goal of the ID4D Initiative is for all people to be able to access services and exercise their rights, enabled by digital identification. This will be achieved by supporting countries to build inclusive and trusted identification systems, including civil registration, using multi-sectoral approaches and appropriately leveraging innovative digital and other solutions.

The ID4D Initiative is directly supporting countries to achieve Sustainable Development Target 16.9: *“By 2030, provide legal identity for all, including birth registration,”* and in making progress towards dozens of other targets such as poverty elimination, reduced inequalities, gender equality and women’s empowerment, safe and orderly migration, universal health coverage, and financial inclusion, among others.



PARTNERSHIP

ID4D PARTNERSHIP PLATFORM

To accelerate ID4D's work, a Multi-Donor Trust Fund (MDTF) was established in November 2016 with a catalytic contribution from the Bill & Melinda Gates Foundation, followed by contributions from the Omidyar Network and Australia's Department of Foreign Affairs and Trade. The MDTF:

- Provides a platform for partners to cohesively advance progress across ID4D's three pillars with a common vision and shared actions;
- Influences the World Bank Group's active and pipeline portfolio of ID and civil registration projects, including the work of more than 140 staff across sectors, with guidance on best practices and upstream technical assistance; and
- Shapes global approaches and a shared vision on identification and civil registration by convening a growing number of organizations to invest in this agenda and advance global public goods.



A POWERFUL PARTNERSHIP PLATFORM

As demand for support from countries and opportunities for impact grows, the ID4D partnership provides a powerful platform for partners to drive and shape the digital ID and civil registration agenda at global, regional, and national levels.

Partner support enhances ID4D's ability to influence nearly US\$1 billion in World Bank Group financing on digital ID and civil registration. Such support also enables the World Bank Group to continue its thought leadership, including to generate new evidence and knowledge related to this nascent topic. For example, DFAT's contribution to the ID4D Initiative in 2018 through the Commonwealth Digital ID Initiative has enabled the World Bank to scale up its support in new countries and to carry out new country-level research related to women's empowerment, which will inform projects in Africa, East Asia and the Pacific.

More resources are needed to provide advisory services to additional countries, including support on the design of 'Good ID' systems and on issues such as legal foundations of data protection and privacy. The ID4D Initiative also strives to fill critical knowledge gaps through innovative and informative research on a range of pressing topics such as: (1) options to mitigate exclusion risks, (2) authentication in low connectivity areas, (3) gender gaps and barriers in ID, (4) civil society and end-user perceptions about identification, and (5) understanding possible models of self-managed identities in the development context.

ID4D'S THREE PILLARS OF WORK

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



Thought Leadership & Analytics

Advancing understanding of identification, including answering key questions:

Why ID matters? — Researching the role of identification in development across sectors, including impact evaluations.

How to build a good system? — Developing a comprehensive set of knowledge resources, with emphasis on international best practices.

What progress has been made? — Identifying gaps and measuring progress in the coverage and quality of ID systems, such as the annual update of the Global ID4D Dataset.



Global Platforms & Convening

Unifying and driving the identification agenda at global, regional and national levels by raising awareness, strengthening coordination among a wide range of actors, developing and supporting the development of normative tools, and facilitating peer-to-peer learning.



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.



Pillar I. Thought Leadership & Analytics

Under the Thought Leadership and Analytics Pillar, ID4D has continued to contribute to global knowledge on digital ID and civil registration. This includes expanding our understanding of “*why ID matters?*” through a variety of country-, regional- and sector-specific case studies, end-user research, and reports on the fiscal benefits of ID systems. This work is intended to generate new evidence and synthesize existing knowledge on the use and utility of ID systems and catalyze global support for this transformative agenda for development.

ID4D Initiative is filling gaps in critical analytics and research

Why identification systems are important	How to build robust identification systems	Tracking of progress toward our goals
<ul style="list-style-type: none"> Impact evaluations of ID Potential public and private sector savings Linkages with delivery of services (e.g. agriculture, health, financial sector) ID in the context of forced displacement The role of ID in ending child marriage	<p>Operational Guide</p> <ul style="list-style-type: none"> ID Enabling Environment Assessment Integration of CR & ID Technology Landscape Key drivers of costs of ID systems Privacy by Design <hr/> <ul style="list-style-type: none"> End user research for vulnerable populations Country cases: India, Moldova, Thailand, South Africa Public-Private Partnerships (PPPs)	<ul style="list-style-type: none"> Synthesis of Africa ID4D diagnostics Global Dataset & trend analysis ID4D-Findex survey results Africa country briefs

In addition, the ID4D Initiative has leveraged World Bank Group and global expertise to develop concrete tools to help put the *Principles on Identification for Sustainable Development* into practice, including in country engagements. This pioneering analytical work includes a “Technology Landscape” report that outlines the strengths and weaknesses of the technology solutions for identification and authentication; an in-depth study on the cost drivers of ID systems that includes a model to estimate expenditures across different design choices; and several thematic and country case studies that showcase effective ID applications and good practices. These tools equip the World Bank Group and its partners to provide cutting-edge technical support to digital ID projects in countries such as the Pacific islands, Philippines, Morocco and Nigeria.

Importantly, these tools help answer the question of “*how to build a ‘Good ID’ system?*” Indeed, the ID4D Initiative recognizes that maximizing the benefits of digital ID systems for development depends not only on closing the global ID coverage gap, but also on the technical quality of these ID systems and their ability to maintain trust and protect privacy. To this end, the ID4D Initiative’s analytic work in 2018 has also included projects on “privacy by design,” on end-user experiences, and the ID Enabling Environment Assessment (IDEEA) Guidance Note to address critical gaps in weak legal and regulatory environments. This work also continues to respond to emerging needs for analytics on specific issues, including through a procurement checklist, an analysis of the ethical and practical considerations for infant biometrics, and reports on tokenization and eKYC, which are expected to be published in 2019. Throughout this work, ID4D has *tracked the progress of our goals* through impact evaluations, annual updates to the Global ID4D Dataset, representative country surveys on ID coverage and ID use, and country case studies. These numerous analytic pieces, research products, and tools fill the following gaps:

WHY ID SYSTEMS ARE IMPORTANT

- **ID and Agriculture Case Study:** This paper looks at key applications of identification in agriculture to understand how they can help tackle some of the sector’s critical challenges, remove barriers to agricultural productivity and enhance farmers’ livelihoods, including through: (1) increasing the effectiveness and inclusivity of subsidy programs; (2) enabling formal land and asset registration; and (3) improving data about farmers’ economic activity and needs.
- **ID and Financial Inclusion — G20 Digital ID and Onboarding Paper:** This paper analyzes the role of a robust digital identification system in financial sector development, particularly the role it plays in furthering the global financial inclusion commitments. It provides insights and recommendations for country-level implementation in line with Principle 7 of the G20 High-Level Principles for Digital Financial Inclusion developed by the Global Partnership for Financial Inclusion.

HOW TO BUILD INCLUSIVE AND TRUSTED ID SYSTEMS

- **ID Enabling Environment Assessment (IDEEA) Guidance Note:** The IDEEA is designed to serve as a supplementary tool to the Guidelines for ID4D Diagnostics, with the aim of producing a focused analysis of the legal enabling framework with respect to inclusion, non-discrimination, data protection, privacy and related issues in a country’s ecosystem.
- **Qualitative research on end-user experiences with identification:** Research using qualitative methods was conducted in three countries—two in Africa and one in East Asia—with the aim of better understanding how policy makers can design and develop systems that respect and prioritize users’ needs, including privacy, agency, and dignity. Through in-depth interviews, focus groups, and process tracing of 50-80 people in each country across multiple locations and a focus on marginalized populations, the research extracts overarching findings of the human experience related to identification systems. These studies have served as a useful pilot and based on this experience, the ID4D Initiative is developing a



methodology to carry out similar research in other countries in 2019. Building on this and the strong partnership that ID4D has forged with the United Nations High Commissioner for Refugees (UNHCR), ID4D will support UNHCR as they develop a similar new tool for consulting communities affected by forced displacement on the design of registration and digital ID systems for refugees, asylum seekers, and internally-displaced persons.

- **Incentives for Birth Registration:** This report describes a framework of supply and demand factors that could affect birth registration rates, particularly in the context of social transfers. Within this framework, a review of the empirical literature was conducted on incentives that have been demonstrated to increase birth registration. More than 200 articles were reviewed including literature that encompassed evidence from Asia, Africa, and Latin America. A key finding of the review was that linking birth registration with social transfer programs, such as cash transfers, has in many cases resulted in increased birth registration rates.
- **Integrating Unique Identification Numbers (UIN) in Civil Registration:** This report examines the process for assigning UINs at birth and the mechanisms for incorporating them into the civil registry, as well as including them on the birth certificate. It includes an analysis of UIN structures in ID systems across the world.
- **Privacy by Design:** To better understand how to obtain a robust system that enables sharing and using individuals' data safely, this note synthesizes approaches to privacy by design in digital ID systems across Austria, Estonia and India. It explores features—including minimal data collection, randomized unique identity numbers allotment, and tokenization.
- **Country case study of South Africa:** This country case study highlights the factors that encourage or impede the adoption of identification and civil registration systems and their ability to advance financial inclusion, women's empowerment, targeting of social safety nets, agriculture, universal health coverage, resilience building, shock responsiveness, and energy subsidy reform. South Africa's experience with respect to increasing birth and death registration coverage, leveraging child grants in the case of the former, offers an important lesson for other countries.
- **Moldova Mobile ID case study:** The Moldova case study unveils the details of Mobile eID implementation through innovative Public-Private Partnership (PPP) model and articulates lessons learned that might be of interest to other countries. It highlights key success factors in terms of infrastructure and institutional arrangements as well as legal and regulatory environment. The case study describes the impact of Mobile eID on the overall digital transformation of Moldovan Government and particularly, the role that mobile ID played in improving e-service delivery in key sectors.

TRACKING PROGRESS

- **Third Annual update of the Global ID4D Dataset:** Using a combination of self-reported figures from country authorities, birth registration and other proxy indicators, the 2018 Global ID4D Dataset estimates that as many as 1 billion people struggle to prove who they are. For the third annual update, over 40 country authorities provided direct data on foundational ID coverage—a record number.
- **ID4D-Findex Survey Data:** ID4D partnered with the World Bank's Global Findex team to gather additional data on ID coverage, ID use, and barriers to obtaining a proof of identity. The ID4D-Findex survey covers 99 countries—representing over 70 percent of the world's population. The survey was carried out over the 2017 calendar year by Gallup, Inc., as part of its Gallup World Poll. Approximately 1,000 people were surveyed in each economy, using randomly selected, nationally representative samples of the non-institutionalized population aged 15 and above.

3-Year Target Results 2017–2019	Results Achieved 2017	Results Achieved 2018
At least 10 original analytical pieces to be produced	<ul style="list-style-type: none"> ▪ Technology Landscape Report ▪ Public-Sector Savings from Identification Systems ▪ Private-Sector Savings from Identification Systems ▪ India's Aadhaar Case Study ▪ Application of Aadhaar in the Krishna District ▪ Understanding Key Cost Drivers of Identification Systems ▪ ID and Health Case Study ▪ State of Identification Systems in Africa—Synthesis of Country Diagnostics ▪ State of Identification Systems in Africa—Country Briefs 	<ul style="list-style-type: none"> ▪ ID and Agriculture Case Study ▪ ID and Financial Inclusion—G20 Digital ID and Onboarding Paper 2018 ▪ ID Enabling Environment Assessment (IDEEA) Guidance Note ▪ Qualitative research on the user demand-side of identification ▪ Incentives for Improving Birth Registration Coverage: A Review of the Literature ▪ Integrating Unique Identification Numbers in Civil Registration ▪ Privacy by Design ▪ Case Study of South Africa ▪ Moldova: Mobile ID Case Study
Global ID4D Dataset to be updated annually	<ul style="list-style-type: none"> ▪ Updated and published in April 2017; included in the new WBG Development Data Hub ▪ ID-related questions included in the 2017 Findex Survey 	<ul style="list-style-type: none"> ▪ Updated and published in May 2018 ▪ Global ID4D Dataset (available for dynamic inquiry via Tableau) featured on id4d.worldbank.org ▪ Initial Findex findings published
Two impact evaluations to be completed	<ul style="list-style-type: none"> ▪ 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 ▪ Proposals from several countries reviewed against technical and policy criteria 	<ul style="list-style-type: none"> ▪ Initiated new impact evaluations in West Africa and Nigeria

Putting the Principles into Practice...

#GoodID

The *Principles on ID for Sustainable Development* have been endorsed by 24 organizations and continue to contribute to understanding what 'Good ID' looks like in practice, and how the developmental benefits can be maximized while mitigating risks. The #GoodID campaign draws inspiration from the elements of design and governance embodied in the Principles and highlights the importance of quality and functionality as key additions to the goal of increasing coverage.

The World Bank Group's ID4D Initiative works to ensure that ID and civil registration systems are high-quality systems and their processes protect privacy, facilitate interoperability, ensure inclusion and reach scale, while avoiding vendor and technology lock-in and maintaining affordability. As part of this, particular attention is being paid to proactively addressing the risks associated with implementing digital ID and civil registration system.

A few persistent issues surface frequently, including the need for enabling legal frameworks, technical mechanisms to protect privacy, the use of technical standards to ensure interoperability and system neutrality, and to address mechanisms of exclusion. In 2018, ID4D continued to create a knowledge base and develop a set of tools to help governments proactively address a number of emerging issues highlighted below.

Support to countries on establishing sound legal and regulatory frameworks

Although robust data protection laws are a globally-recognized prerequisite for ID systems, many countries lack adequate legal frameworks to support and regulate modern identification systems. Therefore, the ID4D Initiative has developed the ID Enabling Environment Assessment (IDEEA) tool to assist governments in developing legal frameworks that promote trust in

the design, implementation and use of ID systems. It builds on and serves as a supplementary tool to the ID4D Diagnostic and addresses key issues such as data security, individual privacy and data protection, non-discrimination and inclusion. IDEEA can be applied in a variety of country contexts in conjunction with or separately from ID4D Diagnostic. It is designed to generate a country profile which may be used to identify areas where administrative and legal frameworks might be strengthened to support the development of digital ID. The IDEEA has been deployed in nine countries this year (Côte d'Ivoire, Guinea, Morocco, Nepal, Nigeria, Philippines, Samoa, Somalia, and Tonga).

Privacy by Design / Mission Billion

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 reduce data protection risks and provide people, including those with low literacy, greater control over their data — while accounting for low connectivity environments in which these systems need to operate. For example, minimal data collection, randomized unique identity number assignment, and tokenization are examples of current 'privacy by design' features being deployed in digital ID systems globally.

The World Bank Group and its partners want to spur innovative ideas and solutions to these perennial issues by launching the ID4D Mission Billion Challenge, which will focus on a single pressing issue each year. This Challenge seeks to crowdsource innovations around privacy-by-design and giving people greater control over their data. The core question of the inaugural ID4D Mission Billion Challenge is: "How



can foundational digital identification systems in developing countries be better designed to protect people's privacy and empower them with greater control over their personal data?"

Technical Standards for Digital ID Systems

Standards are key to unlocking the value of digital identity for development and supporting an interoperable, scalable, secure, and efficient digital identity platform for service delivery. Without standards, cross-functional systems interoperability will be difficult to achieve. Furthermore, the use of open standards can help to ensure competition and prevent vendor and technology lock-in. The precise choice of relevant standards depends on the purpose, scope, and function of the identification system.

To help countries make sense of various standards, the World Bank Group developed a catalog of technical standards that can serve as a source of reference for the stakeholders in the identification ecosystem. The technical standards have been organized by category and subcategory, to help identify (a) areas where standards are missing, and (b) areas where there are competing standards and a choice needs to be made. Guidance notes on competing standards are provided to aid in the selection for a given country context. The ID4D Initiative's research on standards yielded several valuable insights, including:

- **Use open standards when feasible.** Using open standards can help ensure that an ID system is robust, interoperable and technology neutral. However, it is important to consider before using an open standard if the standard is widely used in the market.

- **Technical standards alone are not sufficient.**

In addition to using open technical standards, data standards are important to consider when developing an ID system as they enable semantic interoperability. Data standards define the data formats and metadata for identity attributes like name and date of birth (e.g. the number of characters allowed for a name; order of specifying the first name, middle, name; format of date—date of birth mm/dd/yyyy or dd/mm/yy) to facilitate interoperable data exchange across systems.

Modular Open Source ID Platform (MOSIP): An affordable, scalable, and customizable software option for countries

The ID4D Initiative is working closely with its partners who are developing MOSIP, a secure, standards compliant, vendor neutral software solution for countries building foundational ID platforms. MOSIP, which is expected to be available as a global public good by mid-2019, embraces best practices of design, functions, scalability, security and privacy from a range of countries. Because of its modular architecture, MOSIP is envisioned to provide flexibility in how countries implement and configure their foundational ID system. It will be intentionally interoperable with other information systems, such as civil registries.

Morocco will be the first adopter of MOSIP for its new national population registry, beginning in early-2019. MOSIP will help Morocco and other countries mitigate challenges related to technology and vendor lock-in, which is a persistent challenge in many contexts today. Finally, it is hoped that a vibrant community can grow through MOSIP, with opportunities for international cooperation, knowledge transfer, and economies of scale (particularly for smaller states).

MOSIP has potential to drastically transform the landscape of technology solutions for digital ID. The World Bank is working with partners to bring the widest range of international expertise and experiences possible while also ensuring that MOSIP is relevant for client countries. The ID4D Initiative is also raising awareness among countries and development partners.

Assessing barriers to accessing identification and addressing the potential for exclusion

In advancing an inclusive approach for all individuals even the most marginalized, the World Bank has initiated targeted outreach and regular consultations (e.g. focus groups, workshops, etc.) with vulnerable groups. To help projects assess and address the mechanisms of exclusion from ID systems, the ID4D Initiative piloted methodologies for ID systems to be more inclusive, for example, of persons with disabilities, IDPs and refugees, ethnic and religious minorities, and more. In Côte d'Ivoire, Guinea, and Nigeria, with additional support from the World Bank's Rapid Social Response Fund, research notes were commissioned to identify key marginalized and vulnerable groups in the context of ID in each country. These included the beginnings of a stakeholder mapping exercise that enabled clients and task teams to plan consultations with certain key groups.

In beginning implementation of the West Africa Unique Identification for Regional Integration and Inclusion (WURI) Program in Côte d'Ivoire and Guinea, consultations were held with a large number of disabled persons organizations and civil society organizations in September and November 2018. During WURI's awareness-raising campaigns, there will be a concerted effort to include all relevant actors—customary chiefs, the decentralized territorial administration, disabled persons organizations, and communities at large.





Digital ID as a Key Platform of the Digital Economy “Stack”

In today’s digital age, there is a pressing need for digital ID systems that allow people to prove who they are—anytime and anywhere—and facilitate online and offline trust within countries and across borders. Trust in the identity of a person or entity is a cornerstone of transactions. In an increasingly globalized and formalized world, this trust has often been provided by official, certified forms of identification, such as ID cards, birth certificates, and passports. Beyond these “traditional” forms of identification, the emergence of the digital economy has created a need for verifiable *digital* identities for people. Digital identities are needed to provide reliable authentication of a person’s identity on demand and bind the user of an online transaction with their ‘real world’ identity. The lack of a digital ID prevents people from participating in the digital economy.

Digital identity and trust services are therefore a core foundational layer that countries must build to support dynamic and inclusive digital economies. Given the fundamental need for secure and accurate online identification and authentication, digital ID and other trust services—such as e-signatures—form part of the core foundation or a “stack” needed for successful digital economies. When *enabled by digital infrastructure*—such as broadband, mobile networks—that brings people and organizations online, digital ID and trust services can be *leveraged by government and commercial platforms* to facilitate a variety of digital transactions, including digital payments.

Together, connectivity, digital ID and associated trust services, and digital platforms allow governments and companies to move services online, with potentially huge gains in efficiency, productivity, and growth. The ability to enroll in healthcare or sign a contract without ever needing to leave the house creates productivity gains for individuals and for service providers. Digital IDs can enable seamless authentication for digital payments, and together these two platforms provide the means to move towards a cashless society, creating further productivity gains, reducing corruption, theft and leakage, and further improving user convenience. In each case, the ability to know and trust the people, organizations, and devices you are transacting with online is what empowers public and private sector digital platforms and allows for better, cashless, and cross-border service delivery.

To enable innovation, more and more countries realize that digital ID systems need to be designed as platforms and use open design principles. By enabling businesses and individuals to build new applications on top of this digital ID foundation, the digital stack can allow SMEs and young entrepreneurs from around the world to access new markets, expand the reach of their business, and become competitive on a global scale. Furthermore, where digital IDs are interoperable across borders, this expands the sphere of trust and can accelerate economic integration and create opportunities in new markets.

Across the World Bank Group, many global practices are working closely together to support countries in building the foundations of a digital economy.



Pillar II. Global Platforms & Convening

Making progress towards every country realizing the transformational potential of digital identification depends on harmonized action by a wide-range of stakeholders. Leveraging its multi-sectoral approach and thought and operational leadership, the ID4D Initiative helps to unify and drive the identification agenda at country, regional, and global levels by creating and supporting catalytic platforms and partnerships and engaging in advocacy. In 2018, the ID4D Initiative focused on taking existing work under this pillar to the next level, such as facilitating more peer-to-peer knowledge exchanges; advancing innovative streams, such as the ID4D Mission Billion Challenge; and supporting better understanding and wider use of technical standards to ensure interoperability across economies.

This past year, the ID4D Initiative has spearheaded or supported the following initiatives:

ID4D High-Level Advisory Council (HLAC): Since 2017, the Council, co-chaired by Kristalina Georgieva, World Bank CEO, and Amina J. Mohammed, United Nations Deputy Secretary-General, has provided strategic guidance to the ID4D Initiative and engages with heads of state and regional actors (e.g. African Union) to encourage action on ID. Members include Toomas Hendrik Ilves, former President of Estonia; Nandan Nilekani, co-founder of Infosys and Founding Chairman of Unique Identification Authority of India; Eric Jing, CEO of Ant Financial; Carolina Trivelli, former Minister of Development and Social Inclusion, Peru and Chairman of Pagos Digitales Peruanos; Dr. Benno Ndulu, former Governor, Bank of Tanzania; Mo Ibrahim, Chair of the Mo Ibrahim Foundation and founder of Celtel; Iqbal Quadir, founder of the Legatum Center at the Massachusetts Institute of Technology (MIT) and of Grameenphone.

In its latest meeting on the sidelines of the United Nations General Assembly in September 2018, the Council called for catalyzing financing for ID and civil registration systems in Africa and emphasized the benefits of a regional approach for the continent. To support this effort, HLAC members Nandan Nilekani and Carolina Trivelli shared good practices from their respective countries with representatives from close to a dozen African countries at the African Leaders Roundtable on Identification for Development event. Another priority for the Council is the deployment of appropriate policy, legal, and technical frameworks to safeguard privacy and support data protection.

Principles on Identification for Sustainable Development: Since it was first published in 2017, the Principles continue to represent the shared vision on digital ID for development and have drawn worldwide attention to the topic, while also providing a guiding framework for countries and development partners. Over the last years, the Principles have been endorsed by two additional organizations, totaling 24 organizations to date.



The Catalog of Technical Standards for Digital Identification Systems: This catalog of technical standards serves as a reference for stakeholders involved with digital identification systems. The catalog includes a decision tree to help identify areas where standards are available, and areas where there are competing standards, which require a choice to be made. Guidance notes on competing standards are provided to aid in the selection process. Technical standards to enhance the robustness of identification systems, such as security and quality, are also included in the catalog.

ID4D Mission Billion Challenge: Despite significant progress on increasing access to IDs, one billion people are still unable to prove their identity, and millions more have forms of ID that cannot be reliably verified or authenticated. Based on ID4D's experience working in countries across the globe, there are a few persistent issues that surface in country after country. To tackle these issues, the ID4D Initiative launched its first Challenge in November 2018 with the goals of:

- **Incentivizing Innovation** — Amplify the range of ideas and approaches to designing and implementing robust, sustainable, and inclusive digital identification systems, by addressing one persistent issue—privacy by design
- **Raising Awareness** — Amplify the importance of individuals obtaining 'Good ID' as articulated in the Principles on Identification for Sustainable Development.

Peer-to-Peer Knowledge Exchange: The ID4D Initiative facilitated dozens of knowledge exchange activities between countries in 2018, including:

- Learning visit to India for the Philippines
- Learning visits to Peru for Côte d'Ivoire, Guinea, and Indonesia
- Involvement of experts with experience in developing the EU's 'eIDAS' regulation on electronic identification and trust services for electronic transactions in the early implementation of WURI
- A regional workshop on digital ID for Fiji, Papua New Guinea, Samoa, Solomon Islands, Tonga, and Vanuatu
- Supporting 29 officials from 9 countries to participate at the 2018 ID4Africa Annual Forum in Abuja, Nigeria
- A series of in-country knowledge sharing sessions delivered in Uzbekistan by experts from Moldova and Kyrgyz Republic
- Responding to just-in-time knowledge sharing requests from Uganda and Vietnam around Moldova's experience in mobile ID PPP

3-Year Target Results 2017–2019	Results Achieved 2017	Results Achieved 2018
Principles on Identification for Sustainable Development would be finalized and endorsed by major international organizations	<ul style="list-style-type: none"> Principles were published in February 2017 22 organizations have endorsed the Principles Principles highlighted during the GSMA's Mobile World Congress in February 2017 and the WBG's Spring and Annual Meetings in April and October 2017 	<ul style="list-style-type: none"> Two additional organizations endorsed the Principles, bringing the new total to 24 organizations
3 Countries benefiting from peer-to-peer knowledge exchanges	<ul style="list-style-type: none"> Two country delegations (Morocco and Tanzania) undertook study tours to India 	<ul style="list-style-type: none"> Three delegations (Côte d' Ivoire, Guinea, and Indonesia) undertook study tours to Peru Philippine delegation undertook a study tour to India Regional workshop in the Pacific islands for six countries (Fiji, Papua New Guinea, Samoa, Solomon Islands, Tonga, and Vanuatu) A series of in-country learning exchanges were organized in Uzbekistan and Vietnam
High-Level Advisory Council and ID4D Multi-Donor Steering Committee established	<ul style="list-style-type: none"> The High-Level Advisory Council established, and first meeting held during the World Bank Group's Annual Meetings in October 2017 First Steering Committee meeting was held in July 2017 	<ul style="list-style-type: none"> The High-Level Advisory Council held meetings in May and September Second Steering Committee meeting in April
Catalog of Technical Standards for Digital Identification Systems	<ul style="list-style-type: none"> Snapshot of Technical Standards for Digital Identification Systems drafted and presented/discussed with stakeholders in September Co-hosted, with OXI at the World Bank, the 2nd Colloquium on Legal Issues of Identification Systems Participated in UNCITRAL's Working Group IV on Identity and Trust Services 	<ul style="list-style-type: none"> The Catalog of Technical Standards peer reviewed and published Continuing working with UNCITRAL Working Group IV on developing an international legal instrument

Global Discussions Highlight

African Leaders Roundtable on ID4D convened at the United Nations General Assembly

The World Bank organized an event at the United Nations General Assembly in New York in September. The event brought together African countries to catalyze collective action to achieve the goal of having inclusive and trusted digital ID and civil registration systems by 2030. High-level representatives of governments and development partners exchanged perspectives and aspirations on how this goal can be achieved, including a pan-Africa approach to digital ID, which could accelerate trade and migration on the continent, and unlock opportunities presented by the digital economy.

Council Meeting held at the United Nations

The ID4D High-Level Advisory Council held its third meeting in September at the United Nations Headquarters, co-chaired by Kristalina Georgieva, CEO of the World Bank and Amina J. Mohammed, Deputy Secretary-General of the United Nations. Among other topics, the Council strategized on generating greater financing, political commitment, and innovations for the digital ID and civil registration agenda in Africa. The Council also discussed how to effectively support countries to tackle emerging challenges around data protection and privacy and the responsible use of technology, with special emphasis on promoting new, scalable initiatives such as the ID4D Mission Billion Challenge and the Modular Open Source ID Platform.

Indonesia studies how Peru achieved universal civil registration coverage

As part of the ID4D Initiative's efforts to facilitate knowledge exchanges between countries, a group of officials from Indonesia's Ministry of Home Affairs visited Peru in December to see how the *Registro*

Nacional de Identificación y Estado Civil (RENIEC) makes special efforts to reach vulnerable populations, including by partnering with health and social programs to visit remote communities, as well as how RENIEC provides authentication services to public and private sector institutional clients. The Ministry of Home Affairs also learned how RENIEC has established its own academy to train staff, which was timely as the Ministry develops a new strategy to strengthen its workforce across Indonesia. The visit, which followed a similar one by Côte d'Ivoire and Guinea in June, is one of the first activities of ID4D's new partnership with the Indonesian Ministry of Home Affairs to support increasing population and civil registration coverage, enhancing usage of the national ID system for service delivery, and capacity-building.

ID4D From Principles to Practice Workshop

Two years after the adoption of the *Principles on Identification for Sustainable Development*, governments, development and humanitarian partners, and the private sector are moving quickly to translate these ambitions into tangible progress on the ground. In September the *ID4D From Principles to Practice* workshop brought together more than 100 representatives of a wide range of stakeholders to share knowledge and insights about the latest analytical pieces and country progress, and to generate concrete action on emerging operational issues across the three pillars of the Principles. By improving our understanding of best practices and potential risks that need to be mitigated, our community can better support countries and other stakeholders working to put the Principles into practice.







Pillar III. Country & Regional Action

The World Bank provides technical assistance to countries and supports efforts to conduct assessments and roadmaps, and assist in project design, stakeholder dialogue, and project implementation. In 2018, the World Bank expanded its country engagements to include Uzbekistan, Afghanistan, Vietnam, Senegal, Thailand, Indonesia, and Uganda, amongst others. Our technical assistance is utilizing the lessons drawn from country diagnostics and other analytical work to build ID systems that include the most vulnerable, protect user data and privacy, and maximize benefits for the public and private sectors. The ID4D Initiative's country level work will continue to build upon previous engagements and incorporate the cutting-edge research on 'Good ID'.

ID4D Country Diagnostics: In response to a country's request, the ID4D Initiative conducts an assessment of the country's identity ecosystem using the ID4D Country Diagnostic tool. As of end-2018, ID4D has implemented over 30 country diagnostics. These diagnostics facilitate engagement and dialogue within countries and provide recommendations on next steps.


Technical assistance and advisory services to countries: Building on the country diagnostics, the ID4D Initiative responds to growing demand from governments for technical assistance, which includes a range of activities to support the design of identification systems using global good practice. The technical assistance focuses on the following:

- Recommendations on design, including:
 - Cost-benefit analysis of different options, to increase enrollment and coverage;
 - Design options to integrate civil registries with national ID;
 - Guidance on appropriate technology (e.g. enrollment, database structures, credential options, deduplication, and cybersecurity);
 - Sustainability aspects and business models of ID systems; and
 - Authentication and eKYC aspects of ID systems.
- Development of a robust legal and regulatory framework, including addressing; data protection and privacy gaps;
- Leveraging identification systems for improving service delivery in key sectors;
- Monitoring and evaluation of ID systems; and
- Ensuring end-user engagement from design through implementation.

Country Engagements

Country	Pre-Diagnostic Dialogue	Diagnostic	Action Plan/ Advisory	Pipeline Project Preparation	Financing & Implementation
 Algeria	✓				
 Bangladesh	✓	✓	■		■
 Benin				■ ● ▲	
 Botswana		✓			
 Burkina Faso		✓		■ ▲	●
 Cameroon		✓			●
 Central Africa Republic		✓			
 Chad		✓			
 Côte d'Ivoire		✓	■ ●		■ ▲
 Djibouti					■
 DRC		✓	●		●
 Ethiopia		✓			●
 Gabon	✓			■ ●	
 Gambia				●	
 Ghana		✓			
 Guinea		✓	■ ●		■ ● ▲
 Honduras	✓				
 Indonesia			■ ●		
 Kenya		✓			●
 Lao PDR			●	●	
 Lesotho		✓	■ ●		
 Liberia		✓			●
 Madagascar		✓	■ ●	■	●

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

					
Country	Pre-Diagnostic Dialogue	Diagnostic	Action Plan/ Advisory	Pipeline Project Preparation	Financing & Implementation
 Mexico		✓			
 Morocco		✓	■		■
 Mozambique					●
 Myanmar		✓			
 Namibia		✓			
 Nepal		✓	●		●
 Niger		✓	■	■ ▲	
 Nigeria		✓	■ ●	■ ●	
 Philippines		✓	■		
 Peru		✓			
 Rwanda		✓	■ ●		●
 Samoa			■ ●	■ ●	
 Sao Tome		✓			
 Senegal	✓			■	
 Sierra Leone		✓			
 Somalia		✓	■	■	
 Sri Lanka	✓				
 Tanzania		✓		●	
 Togo		✓		■ ●	
 Tonga		✓	■ ●	■ ●	
 Tunisia		✓		■	
 Uganda		✓			●
 Vietnam	✓				
 Zambia		✓			

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

3-Year Target Results 2017–2019	Results Achieved 2017	Results Achieved 2018
Technical assistance provided to six countries and at least five countries have developed action plans / implementation roadmaps	<ul style="list-style-type: none"> ▪ Africa ID4D Business Plan published ▪ Action plans developed in three countries: Myanmar, Tanzania and Nigeria ▪ Technical assistance provided to Tanzania, Nigeria, Zambia, Sierra Leone and Morocco 	<ul style="list-style-type: none"> ▪ East Africa roadmap finalized and delivered to EA Secretariat, with a summary published ▪ Technical assistance provided to Côte d'Ivoire, Guinea, Indonesia, Lesotho, Morocco, Somalia, Nigeria, Philippines, Rwanda, Samoa, Tonga, and Uzbekistan
At least three countries have conducted an ID4D Diagnostic	<ul style="list-style-type: none"> ▪ Myanmar ▪ Central African Republic ▪ Lesotho ▪ Niger ▪ São Tomé and Príncipe ▪ Somalia 	<ul style="list-style-type: none"> ▪ Philippines ▪ Tunisia ▪ Uganda
At least two follow-on WBG projects (IDA/IBRD financed) to support implementation	<ul style="list-style-type: none"> ▪ US\$ 100 million Morocco project approved by the WB Board in March 2017 	<ul style="list-style-type: none"> ▪ WURI approved by the WB Board in June 2018 (including Côte d'Ivoire and Guinea) ▪ Djibouti project approved in April 2018



Country & Regional Highlights

Côte d'Ivoire and Guinea kick-start West Africa regional identification program

In June, the World Bank's Board of Directors approved US\$ 317.1 million for the West Africa Unique Identification for Regional Integration and Inclusion (WURI) program. WURI will finance the development of foundational ID platforms, which will provide government-recognized proof of unique identity. The ID platforms will facilitate access to services by providing robust identity verification and authentication options for functional services to rely on. Collecting only minimal identity data (e.g. name, biometrics, date of birth, sex and unique identity number), the ID platforms will be open to all persons in their territory, irrespective of nationality or legal status. Further, each national foundational ID platform will link to that country's civil registry, thereby assuring that the two function with greater efficiency and are also kept up-to-date.

WURI's Phase 1 is underway in Côte d'Ivoire and Guinea, and is supported by the Economic Community of West African States (ECOWAS); Phase 2, covering Benin, Burkina Faso and Niger, is in its preparatory stages. WURI will also further regional integration, as the foundational ID platforms will be interoperable across ECOWAS member countries. To that end, the ECOWAS Commission is supporting the development of regional standards, with inspiration and lessons learned to be drawn from the experiences of the European Union (notably, its regulation on electronic identification, authentication and trust services ("eIDAS")) and Latin America.

Participating countries have also had the opportunity to learn from international experiences and best practices. In June, representatives from Côte d'Ivoire and Guinea went to Peru to learn about its experiences in developing a national ID system, particularly with regard to reaching vulnerable and isolated populations,

and in developing ICT systems for registration and authentication. In September, a regional workshop was held in Guinea, with representatives joining from India, Namibia and Peru to discuss technical aspects of the foundational ID platform, as well as its legal and institutional framework. A second regional workshop was held in Côte d'Ivoire in December.

WURI is expected to create substantial gains for both participating countries, as well as for the ECOWAS sub-region at-large by streamlining the movement of people, goods, services and capital. Although sub-regional, the institutional, technical and legal model for interoperability and mutual recognition offers a template for a broader continent-wide approach to digital identification, especially in light of progress in African Union efforts to form the African Continental Free Trade Area.

Morocco pioneers the Modular Open Source Identification Platform (MOSIP)

The World Bank is supporting the Government of Morocco to design and implement a new National Population Registry (NPR) that will underpin efforts to reform the national social safety net system and to introduce presence-less, paper-less and cash-less transactions. The NPR will leverage the Modular Open Source Identification Platform (MOSIP) as its core technology solution, beginning in early-2019. Assistance to the Ministry of Interior has included facilitation of knowledge exchanges with India to learn about Aadhaar and the broader India Stack, including adapting these experiences to Morocco's context, and advice on interoperability between different registries and databases, including a new social registry, and on the development of laws and regulations for the NPR, such as on data protection and privacy.

The NPR will greatly boost efforts to eliminate poverty in Morocco by transforming how social protection



programs are targeted and delivered, while also providing a foundational platform to accelerate inclusive growth of the digital economy. Moreover, by adopting MOSIP, Morocco is in a position to change the landscape of digital identification for Africa and the world by demonstrating the strength of open source solutions and technology neutrality.

Philippines aims to leverage a new foundational ID system to support inclusive growth

The Philippine Identification System (PhilSys) Act came into force in October, establishing a foundational ID system to streamline and expand the delivery of services and social assistance. Leading up to this, the World Bank, through the ID4D Initiative, has been providing a range of advisory services in response to the needs of the Government's cross department technical working group in the areas of policy formulation, technical architecture, institutional arrangements, use case development, and developing the law and implementing regulation. The ID4D Diagnostic completed in March and knowledge exchanges facilitated with India and Thailand informed key Government decisions to move towards a foundational ID system, as well as integration of the PhilSys with the existing high coverage civil registration system.

The 2017 ID4D-Findex survey found that 15% of the population had been unable to apply for a government service because they lacked a recognized ID, rising to 19% among the poorest 40% of the population. The PhilSys therefore represents a significant opportunity for the Philippines to eliminate poverty, to make targeted investments in human capital, and to drive inclusive growth of the digital economy, particularly through financial inclusion. Moving forward, the ID4D Initiative will continue providing advisory services to the Government as implementation of PhilSys begins, including support to finalize a strategic roadmap and the technical design, development of the financial sector and social protection

use cases, devising the business model, and qualitative research on public experiences and perceptions to inform all of these activities.

Nigeria scales up digital identification efforts

The World Bank, working with the European Investment Bank and French Agency for Development (Afd) as co-financers, is preparing a US\$ 430 million digital identification program in Nigeria, Africa's largest country with 187 million people, to reform the national ID and civil registration ecosystem. The program will help boost the coverage of Nigeria's national ID system, harmonize the country's existing identification ecosystem, and help establish a robust and inclusive digital identification platform.

The ID4D Initiative previously played a critical role in helping the National Identity Management Commission (NIMC) to develop a strategic roadmap, which was endorsed in September 2018 by the Federal Executive Council, chaired by the President and comprised of all 32 Ministers. In addition, ID4D is providing extensive technical assistance to NIMC, including to complete technical, legal, and cybersecurity assessments to strengthen the robustness, resilience, and privacy-consciousness of the ID system, as well as to prepare a social impact assessment and vulnerability mapping to ensure the inclusion of vulnerable and marginalized populations.

World Bank financing will include support for the development of a robust legal and institutional framework and leverage existing registries as well as private and public-sector partners to ensure rapid roll-out of the system. Linking the new, foundational ID to service delivery is a central component of the project, and will help Nigeria minimize fraud, waste, and leakages in public programs and help maximize the system's potential for boosting financial inclusion and economic opportunities.

2019 – GOING FORWARD

Building on the momentum and achievements to date, the ID4D Initiative will in 2019 remain focused on responding to growing demand from client countries and regions, and delivering on the research and advocacy activities agreed through the multi-donor partnership platform. Through country and regional action, the ID4D Initiative will prioritize the linkage of digital ID systems with the broader digital economy agenda, including digital financial services and digital platforms, and on advancing mutual recognition and interoperability of digital IDs across countries, particularly in support of up-and-coming initiatives in Africa.

Other emerging issues that require further exploration and dedicated ID4D Initiative time and resource investments in 2019 include:

- **Inclusion and exclusion:** Improved ID system design and the removal of legal, administrative, and economic barriers can help ensure inclusion and access to services. At the same time, there could be unintended consequences which lead to exclusion from access to critical services (e.g. due to biometric authentication failures at the point of service if no alternatives are available). More work is needed to understand exclusion risks and to identify people-centric and privacy-conscious solutions to mitigate them.
- **Enhancing privacy by design:** Privacy-enhancing measures need to work for the most vulnerable populations where breaches of confidentiality will do the most harm. Continued work in this area—in concert with work to strengthen legal and regulatory frameworks—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 will help surface new ideas on these challenges; in 2019, the ID4D Initiative will focus on how to embed these ideas into the design of ID systems.
- **Digital 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



digital ID systems could be used to respond to forced displacement and natural disasters. Digital ID plays 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, the ID4D Initiative will scale up its analytical and country work on this nascent area.

- **Engagement with civil society and end-users:** Engagement with civil society and consultations with marginalized groups such as in Côte d'Ivoire, Guinea, and Nigeria can provide a useful template for similar approaches in other countries and regions. In addition, the end-user qualitative research done for the three countries in Africa and Asia will be replicated in more countries in 2019.
- **Authentication in low connectivity areas:** Some existing solutions (e.g., smart cards, mobile apps) provide secure, trusted methods for people to prove that they are who they say they are, but these solutions may not be appropriate in all cases, particularly in poorer, low-connectivity areas. With new innovations and more work across a variety of actors, new solutions can be made available to better address the authentication needs of a diverse set of countries and populations.



- **Uniqueness:** More work is needed on determining the importance of uniqueness for various use cases, as well as the alternatives to biometrics for ensuring uniqueness in diverse contexts, particularly in large countries with weak breeder documents.

- **Business models and Public-Private Partnerships:**

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. 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) can create a significant barrier for vulnerable populations to access ID systems, which is counterproductive. ID4D will analyze different business models and their tradeoffs, particularly around PPPs.

- **Closing the gender gap by improving women's access to IDs:**

Identification is a critical factor for gender equality and the empowerment of women across multiple policy areas, including securing equal rights to economic resources. Strengthening civil registration and ID systems can help ensure that women's property and inheritance rights are recognized, and they can enhance women's financial

access. With a robust proof of identify, women and girls are also more empowered to access mobile phones, healthcare, social protection, and other services. ID4D is making gender empowerment through 'Good ID' a priority and will achieve this by scaling up end-user research and analytical work on gender-relevant issues, and supporting governments in building effective and inclusive digital identification systems.

- **Self-managed identity:** Although foundational ID systems, such as civil registration and national IDs, have traditionally been managed centrally by governments, new models and technologies are now emerging which can enable digital IDs and data to be managed in a decentralized manner. However, it remains unclear how exactly existing and emerging technologies would help effectively facilitate such a decentralized solution, particularly in contexts where people do not have trusted breeder documents and have limited digital footprint. More work is needed to investigate to what extent and how self-managed identity could practically work in such contexts.



Pillar I. Thought Leadership & Analytics

The ID4D Initiative will continue its pioneering analytical work on the importance of identification and how to build robust and inclusive ID systems. Further work will focus on exploring critical gaps and barriers and broadening our research on good practices to help inform country operations. The ID4D Initiative will also advance its guidance on legal, governance and technology solutions and how to adapt these at scale in client countries.

FY19 Proposed Activities

- 1 Operational guide for developing/strengthening ID systems**
The guide would be an update of the Digital ID Toolkit with additional content. It would pull together various streams of research, including on authentication approaches, emerging technologies, institutional arrangements, integration of national ID and civil registration, costs, data harmonization models and other key areas of interest.
- 2 White paper on approaches to providing digital IDs to refugees (with UNHCR)**
This research will examine different models that refugees are registered and provided with IDs. It is being carried out in collaboration with UNHCR and with inputs from the World Bank's Fragility, Conflict, and Violence unit.
- 3 Guidance tool on integration of civil registration and identification systems**
This research will examine how identification systems can be built on or integrated with birth, death and marriage registration, including digitization and issuance of unique ID numbers at birth.
- 4 Annual update of the Global ID4D Dataset**
Directors have made a commitment to update this data set annually. In FY19, the methodology will be further strengthened to collect more primary and disaggregated data from national ID offices and statistical offices.
- 5 Launch additional impact assessments**
In collaboration with DIME (e.g. Morocco, Nigeria, WURI, West Africa, Lesotho)
Use pre-post surveys and/or experimental or quasi-experimental design to study the net effect of a new ID system and/or mandatory authentication on access to services. Possible countries include Nepal and Benin, among others.
- 6 Country Case Studies of Rwanda and Thailand**
- 7 3 Thematic case studies**
These case studies explore the role of identification systems in supporting particular sectors: ID and Education, ID for Digital Payments, and beyond.
- 8 Policy note on KYC registries and practices**
- 9 Gender focused deep-dive in one Commonwealth country**
Identify key drivers of under-registration of women and policies best suited to address them. Includes an analysis of legal, administrative, and cost barriers for women in ID registration through in-country surveys, focus group discussions, and outreach to NGOs and other local organizations. The work can also consider how digital ID can facilitate women's empowerment.
- 10 Qualitative research on the user demand-side of identification**
Possible countries: Philippines, Nigeria, Samoa
- 11 Quantitative study on the experience of refugees and/or irregular migrants**
At one or multiple sites (e.g., Kenya, Bangladesh, Germany, Lebanon) conduct in-depth surveys of migrant/refugee experiences with identification in their host countries and countries of origin in order to identify main barriers/challenges to obtaining and replacing IDs, fears and concerns regarding privacy and identification, the role of ID in facilitating access to services and integration, preferred identity solutions and technologies, etc.



Pillar II. Global Platforms & Convening

ID4D will continue to advance the global identification agenda by raising awareness, harmonizing the varying interests on this topic, and strengthening coordination among UN, non-government and private sector actors (including through the development of key guiding principles and guiding papers/notes). Additionally, the ID4D Initiative will facilitate peer-to-peer knowledge exchanges.

FY19 Proposed Activities

- 1 Two annual High-Level Advisory Council meetings
- 2 Global advocacy anchored around global platforms, including discussions with the G20 and the World Economic Forum for Good Digital Identity
- 3 Coordination with the United Nations' Legal Identity Experts Group, including joint research, joint country engagement, and consensus on defining 'legal identity'
- 4 **Procurement checklist and performance criteria for assessing technologies. Based on insight from workshops and working groups which convene standards bodies and agencies.**
Although there are a range of global standards (e.g. ISO, ICAO, EMV, etc.), a better understanding of the competing standards, gaps in standards, as well as guidance to project teams will allow for better implementation, economies of scale for deployment and enhanced opportunity for interoperability across countries.
- 5 Peer-to-Peer knowledge exchange series for government officials
- 6 **Mission Billion Challenge**
ID4D will announce the winners from the first Challenge with the twin goals of: (i) Incentivizing Innovation — Amplify the range of ideas and approaches to designing and implementing robust, sustainable and inclusive digital identification systems, by addressing one persistent issue — privacy by design; and (ii) Growing the community — Expand the community of individuals and organizations involved in the design and implementation of digital identification systems.
- 7 **Development of an International Legal Instrument**
ID4D will continue to be a leading contributor in the on-going deliberations of UNCITRAL's Working Group IV developing an international legal instrument for digital ID and Trust Services. As other organizations also consider introducing regional and application-specific legal regimes, ID4D will continue to play a coordinating role.



Pillar III. Country & Regional Action

Through the ID4D Initiative, the World Bank Group is actively engaged in several countries (see table on pages 35–36), which will continue and be scaled up, in accordance with country demand, through 2019. The country engagements will remain focused on providing technical assistance to design, develop and maintain digital ID systems that are aligned with the Principles on Identification for Sustainable Development and on leveraging World Bank Group resources to help countries implement them. In 2019, there will be emphasis on continuing to advance a regional approach in Africa in partnership with the African Union and the Pacific islands.



PHOTO CREDITS:

Cover (left)	Emrys Schoemaker / Caribou
Cover (right)	Nyani Quarmyne / IFC
Cover (bottom)	Nyani Quarmyne / IFC
Inside Cover	Nyani Quarmyne / IFC
Page 5	Stephan Gladieu / World Bank
Page 9-10	Emrys Schoemaker / Caribou
Page 11	IDEO
Page 12	Anat Lewin
Page 14	Dasan Bobo
Page 18	Stephan Gladieu / World Bank
Page 22	Nyani Quarmyne / IFC
Page 24	Pablo Ariel Acosta
Page 25	Daniel Silva Yashisato
Page 28	Nyani Quarmyne / IFC
Page 32	Daniel Silva Yashisato
Page 33	Pepukaye Bardouille / IFC
Page 38	Emrys Schoemaker / Caribou
Page 40 (left)	Pablo Ariel Acosta
Page 40 (right)	Nyani Quarmyne / IFC
Page 42	IDEO
Page 43	Stephan Gladieu / World Bank
Page 46	Daniel Silva Yashisato

id4d.worldbank.org

