Social Protection delivery systems with a focus on identification

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What we will cover...

I. Unbundling processes in order to find the gaps

II. Identification: Objectives, challenges and international experience

III. Assessing and improving ID systems

IV. Key questions
I. Unbundling the delivery process
The objective of implementing a social program: Deliver goods, services or money to people deemed eligible

The reality: Many people that should benefit do not

Why? Implementation failures are largely to blame

How can we improve implementation? Specifically, how can we maximize the target population that a program benefits?

First we have to understand where things are going wrong.
Useful to unbundle the key delivery processes

Each process involves spending on a combination of labor and capital (technology)

\[ Q = a + bX_1 + cX_2 + dX_3 + \cdots \]

MIS facilitates, links and automates these processes... but if process is not sound...

And generates useful reports to detect problems and for accountability...
• Each of these processes comes with a cost both to government and to the beneficiary.
• Each process has a production function with labor and capital combined to produce the desired result.

In addition to budgetary limitations, each country faces specific cultural and political limitations that limit their range of choices.
Other things constant, we expect that the more resources we devote to these processes, the greater the proportion of the target population will receive benefits from the program.
But the cost curve can be shifted with improvements in process and/or technology
II. Identification: Objectives, challenges and international experience
ID is the foundation for all processes

• Ensure uniqueness (1:n)
  – Whether voting, banking or paying cash transfers, it is crucial to ensure that the individual in question is unique
  – A unique common identifier is the only way to allow cross-checking across databases

• Authentication (1:1)
  – Ensuring that the individual making the transaction (opening an account, taking out a loan, receiving a cash transfer or subsidized product) is the right one

• Linking databases and cross-checking information
  – Social pensions in Mexico and Chile
But there are major gaps in ID systems

- Some countries do not have a national ID or have IDs that do not allow for deduplication or authentication
- Many programs have separate ID processes, that are often not robust and duplicate costs
- Multiple IDs hamper program integration
- Coverage and access to legal identity is often difficult especially for the poor
It begins with birth registration...

Necessary for basic rights...

- name
- nationality
- recognition before the law
- take part in government
- an identity with family ties
- equal access to services

...but lagging in poor countries

- 48 million (36%) unregistered births/year
- 71% in LDCs
- 12 million stateless

A cycle of exclusion: children → adults → children

Despite progress there are still large gaps in coverage
About 750 million people below 16 have not been registered at birth. Need a “catch-up” mechanism to register later
The poor least likely to be registered

Global birth registration and institutional birth rates

Indonesia: birth registration and income

% of children with birth certificates

Income Quintiles - Richest to poorest

Institutional birth rate %

birth registration rate %
And less likely to have legal identity

**ID as a barrier to inclusion**

- **Nepal** – 12% of elderly not able to get social pension benefits due to lack of ID
- **Dominican Republic** – one third of potential beneficiaries unable to enroll for CCT program due to lack of ID
- **Peru** – 15% of eligible people excluded from cash transfer due to lack of ID

**Pakistan’s BISP and ID access**

\[
R^2 = 0.4624
\]

- Score on PMT (higher richer)
- % of hhs without ID
Functional vs Foundational IDs

Functional (voter card, SocSec card..) → Foundational

DRC
Voter ID

USA
SSN

Foundational (typically NIDs) → Functional

Pakistan
NADRA

India
UID
Countries are Shifting to NIDs

• Driven by security and public management concerns plus lower-cost ICT and biometric technology
  – Unified ID system enables cross-linking registers to rationalize multiple social programs
  – From product subsidies to individual transfers
  – Can reduce tax and benefit fraud

• Globally estimate 122 NIDs in 195 countries
  – About 11 since 2008 or two more each year

• Increasingly based on biometrics
  – Since 2008 about 22 introduced biometrics into NIDs
  – Since 2008 about 16 countries upgraded biometrics in NIDs (generally towards being able to de-duplicate)

• Programs in developing countries almost all mandatory
  – But some have modest coverage – so far.
    Compilation builds on Bennett and Lyon
Global Profile of NID Programs by Income Group

Of 193 countries, 120 have NIDs

Source: Gelb and Clarke (2013)
Sample of Cases by Type and Region

Source: Gelb and Clarke (2013)
The Biometrics Regime

1:1 Verification
Is person who he claims to be?

1:N Identification
Who is this person?

Deduplication (AFIS/ABIS)
Is person unique in register?

Source: Atick (2014)
Indian RSBY functional ID...

Rollout: 2008
Number covered: 120 million
Cost: about $2-3 a head
Indian foundational (Aadhar) ID

Rollout: 2009
Number covered: 600 million
Cost $ 3-4 per head
Costliest to reach the poorest

Peru’s RENIEC increased NID coverage to around 95% with special outreach campaigns

Standard office: $10.3
Coastal region: $21.8
Mountains: $42.1
Jungle: $79.8
ID for authentication

• Reliance on discretion of individuals at point of transaction leads to more fraud and bribes
• Digital audit trail of transactions can reduce benefit leakages and allows better program monitoring
  – Subsidized food programs in Egypt and India
  – Health insurance in India
  – Cash transfers in Pakistan
• What you know, have and are...
## Authentication options

<table>
<thead>
<tr>
<th>Identification mode</th>
<th>Manual</th>
<th>offline</th>
<th>online</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Need</td>
<td>Manual</td>
<td>offline</td>
<td>online</td>
</tr>
<tr>
<td>Manual</td>
<td>Bihar/Haryana Social Pension Cash Disbursement; traditional PDS</td>
<td></td>
<td>Zimbabwe e-Voucher</td>
</tr>
<tr>
<td>off-line PIN</td>
<td>Egypt smart card (food/LPG)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biometric</td>
<td>RSBY smart card (HI)</td>
<td></td>
<td>Chhattisgarh COREPDS</td>
</tr>
<tr>
<td>online PIN</td>
<td>Debit card (Pakistan- BISP; Lebanon - Syrian refugees), mobile payment</td>
<td></td>
<td>UID MicroATM</td>
</tr>
<tr>
<td>Biometric</td>
<td></td>
<td></td>
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</tbody>
</table>
Some positive results...

- **Inclusion and empowerment** of disadvantaged groups (identification, authentication)
- **Better financial access** via ATMs etc. and easier KYC requirements (identification, authentication)
- **Reduced leakage and reduced fraud** in payments via cards, rationalizing public payrolls and social programs
- **Increasing tax collection** by reducing evasion, fraud (identification)
- **Enabling markets** in health insurance (India, Gabon; identification, authentication)
- **Tracking health treatments** such as post-natal care, TB, HIV/AIDS (authentication)
...and some Challenges

- **Planning**: trying to do too much too quickly, leading to failure

- **Fragmentation**: loses economies of scale and scope, and inconveniences citizens by multiple registrations
  - Mexico – many large programs most with biometrics
  - Usually happens because NID program is too slow or not good quality or sufficiently inclusive, or because of bureaucratic competition. Users develop own programs.

- **Exclusion**: for example restrictive criteria for citizenship

- **Procurement**: corruption, high-cost lock-in to vendors

- **Waste**: technology not used to full potential (partial or no de-duplication and/or authentication)

Most problematic area: voter registration and elections
...and some risks

Broad-based formal identification can be used to discriminate & marginalize those who challenge authority’s “standard notions of identity”:

- non nationals
- transgenders
- nomads
- refugees
- religious minorities
- dissidents, misfits, ...

Evidence for concern coming from discussions with governments seeking to establish national IDs

In many instances the cover of anonymity has been used by those outside the system to avoid persecution (good or bad)

Source: Atick (2014)
Personal data protection imperative:

Countries with NIDs but no legislation protecting privacy

Source: Gelb et al (2014)
Major ID reforms are complex undertakings

- Building broad-based identification implicates a complex set of technologies, competencies, assets, and requires the right capacity, institutional frameworks and infrastructure

- Policy has to lead to realistically attainable and measurable goals that do not overwhelm national development expectations

Source: Atick (2014)
III. Assessing and improving ID systems
Developing an assessment tool

• Social Protection Assessment modules being developed in conjunction with several development partners including ILO, WFP, DFID, UNICEF, EU, IADB, and others

• The first module to be developed is for identification systems; transactions (payments) is almost ready and beginning to work with ISSA on MIS assessment tool
Developing an assessment tool for ID

- Accessibility
- Robustness
- Integration
- Legal framework
Accessibility

- How costly is it in time and money for an individual to obtain an ID or to register a birth?
- What legal and other barriers are there to obtaining the ID or registration?
- Is there any stigma attached to holding particular forms of identification, such as for anti-poverty programs?
- Do people have to travel long distances at their own expense to obtain an ID or register births and deaths?
- Are there forms to fill out that will prevent illiterate people or those that speak an indigenous language from getting their ID?
- Are the processes adapted to local cultural norms to minimize potential exclusion of women?
- Are there conditions on being included in the ID such as birth certificates, proof of citizenship, age or religious requirements?
- Are there mechanisms for dealing with the lack of breeder documents when applying for a new, national ID?
Robustness

• Is the form of identification used de-duplicated? If so, how is the de-duplication done?
• Are biometrics utilized and if so, what is the scope and quality of the biometric information captured? What are the error rates observed?
• Does the program use biometrics, PINs or other mechanisms for verification of identity at the point of the transaction?
• What security features are used to avoid counterfeiting of identification?
• What are the legal and regulatory arrangements that determine access to personal data and the ID database?
• Are the institutional arrangements conducive to effective administration of the civil registration and identification systems?
Integration

• Use of the ID by many programs and actors allowing the ID holder to verify identity for many different purposes and in principle, allowing for different databases to be mapped to each other.

• What is relationship between civil registry and national ID?
Legal framework

• Is there personal data protection legislation and rules in place that conform to international standards?
• Is the government agency designated to provide oversight well funded and does it have good capacity?
<table>
<thead>
<tr>
<th>Accessibility</th>
<th>Robustness</th>
<th>Integration</th>
<th>Legal framework/Personal data protection</th>
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<tr>
<td><strong>Coverage</strong></td>
<td><strong>Uniqueness</strong></td>
<td><strong>Ubiquity</strong></td>
<td><strong>Ad hoc or non-existent mechanisms for privacy and data access.</strong></td>
</tr>
<tr>
<td>Poor generally excluded; acquiring ID costly in relative terms. Civil registry unreliable or inaccessible with very low rates of birth and death certification;</td>
<td>Official IDs are easily falsified and weak enforcement; government and donor programs use proprietary ID to fill gap; No institutional capacity to monitor ID database;</td>
<td>Little or no database linkages across programs; high dependence on local knowledge (e.g., community) and references for verifying identity.</td>
<td>Minimal protocols in place for personal data protection and privacy. Government agency designated as responsible.</td>
</tr>
<tr>
<td><strong>Access and timeliness</strong></td>
<td><strong>Security</strong></td>
<td><strong>Interoperability</strong></td>
<td><strong>Government agency designated as responsible but lacking resources for implementation and limited capacity. Most of the internationally accepted personal data protection standards and protocols are followed; mostly digital information on individual records</strong></td>
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<td>Updating and link with civil registries</td>
<td><strong>Authentication</strong></td>
<td><strong>Common transaction standards</strong></td>
<td><strong>Government agency designated as responsible and well resourced, good capacity. Full compliance with internationally accepted personal data protection guidelines;</strong></td>
</tr>
<tr>
<td>Minority of population has an accepted ID;</td>
<td>Some control of ID issuance, quality control and database maintenance; Mostly paper based recordkeeping;</td>
<td>A few major programs use a common identification platform; Benefits tied to particular locale and not portable.</td>
<td></td>
</tr>
<tr>
<td>Majority of population covered; acquiring ID less costly but government policy can be onerous; civil registry functional but coverage is low, records decentralized and with significant delays after birth; passive enrolment approach for ID.</td>
<td>Modern technologies employed for ID security features; Basic authentication processes.</td>
<td>Some private and public transactions can be done with single ID; most program MIS linked; authentication standards exist but are weak and vary across programs.</td>
<td>Government agency designated as responsible but lacking resources for implementation and limited capacity. Most of the internationally accepted personal data protection standards and protocols are followed; mostly digital information on individual records</td>
</tr>
<tr>
<td>Almost universal coverage/access with isolated pockets not covered; civil registry captures majority of births in central registries with minimal delays; obtaining ID not costly and proactive efforts to enroll in progress.</td>
<td>Modern technologies employed for ID security features; Basic authentication processes.</td>
<td>Most private and public transactions can be done with single ID at national level; Same advanced authentication standards used across programs. Vast majority of government MIS can be linked by unique ID or through other mechanism;</td>
<td>Government agency designated as responsible and well resourced, good capacity. Full compliance with internationally accepted personal data protection guidelines;</td>
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<tr>
<td>Universal coverage/access (including non-citizens, indigenous groups); cost of acquiring ID minimal in relative terms. Good links with centralized civil registry for updates; children issued unique numbers in timely fashion in full coordination between ID agency and civil registry.</td>
<td>Modern technologies employed for ID security features; Basic authentication processes.</td>
<td>Most private and public transactions can be done with single ID at national level; Same advanced authentication standards used across programs. Vast majority of government MIS can be linked by unique ID or through other mechanism;</td>
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Improving ID systems

• Civil registration
  – The World Bank and many development partners such as UNICEF, EU, WHO, IDB and others provide support for upgrading civil registries

• World Bank’s ID4D Working Group
  – This inter-sectoral WG was formed in early 2014 and is in the process of defining its strategy in the identification space and will engage with interested countries starting in early 2015; this is likely to include technical assistance or lending
IV Key questions
1. What is the estimated percentage of actual births that are registered (i.e., issued birth certificates)?
   1. Close to 100%
   2. Between 75-95%
   3. 50-75%
   4. Under 50%

2. How is the national level ID system linked to birth and death registries?
   1) There is no national ID
   2) It is not
   3) Births and deaths are reported to the agency intermittently and updated
   4) Birth registration is regularly communicated to the ID agency
   5) Death registration is regularly communicated to the ID agency
   6) Birth registration is directly linked to the issuance of a new national level ID
3. Are there specific population groups that encounter obstacles to obtaining a birth certificate?
   1. Yes, indigenous people
   2. Yes, migrants and/or nomadic people
   3. Poor people
   4. Women

4. What is the main obstacle to acquiring a foundational or national ID?
   1) There is no national ID
   2) Direct cost
   3) Transaction costs
   4) Lack of ‘breeder’ document, i.e., birth certificate
5. What percentage of the adult population would you estimate has a national or foundational ID?
   1) There is no national ID
   2) Between 75-95%
   3) 50-75%
   4) Under 50%

6. Are biometrics used to ensure that new ID numbers are not issued for people already in the database (i.e., deduplication)?
   1) There is no national ID
   2) There is a national ID but there is no deduplication to ensure uniqueness
   3) Fingerprints
   4) Iris
   5) Digital facial image
   6) Other (uniqueness is ensured through other methods)
7. Are there particular categories of the population that face geographic, cultural, economic or legal barriers that prevent them from obtaining this ID?

1) There is no national ID
2) Yes, migrants
3) Yes, indigenous people
4) Yes, women
5) Yes, other groups, specify
6) No

8. How is identification used to authenticate transactions/payments?

1) Purely manual government (government employee verifies identity without electronic audit trail)
2) Purely manual, non-government (non-government person verifies identity without electronic audit trail)
3) Off-line PIN
4) Off-line biometric
5) On-line PIN
6) On line biometric
7) Other
9. Are there particular categories of the population that face geographic, cultural, economic or legal barriers that prevent them from obtaining this ID?
   1) Which of these problems does your program face with regard to identification?
   2) Based on national ID but many people do not have one
   3) Lack of deduplication to ensure uniqueness
   4) Easy to acquire a fake program ID
   5) No mechanism for authentication
   6) No major problems

10. In which databases are there common identifiers that your program could use to do cross-checks?
   1) Social insurance
   2) Other social assistance programs
   3) income tax data
   4) Social insurance and income tax data
   5) Property/assets and income tax data
   6) Public employment status
   7) Other (e.g., land registries, )
   8) There is no national ID
   9) Yes, migrants
   10) Yes, indigenous people
   11) Yes, women
   12) Yes, other groups, specify
   13) No
11. How many government agencies issue their own forms of ID cards?
   – 1
   – 2
   – 3-5
   – 6-10
   – 10+

12. Is there legislation on privacy or protection of personal data that delimits the access and use of data in the national ID database?
   • No
   • Yes, but often not enforced
   • Yes, it is strictly enforced
   • Do not know
Depending on the answers to these questions, it may be time to formulate a national identification strategy.