ID IDENTITIES
New Practices in a Connected Age

Identities
Report

Email us at: info@cariboudigital.net

Visit us at: www.cariboudigital.net

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CONTENTS

INTRODUCTION AND EXECUTIVE SUMMARY

Understanding individuals' experiences with digital identity systems

INTRODUCTION AND EXECUTIVE SUMMARY

Understanding individuals' experiences
with digital identity systems

Who are you? It's a question people answer several times a day in order to access services, engage in economic transactions, and participate in social life. In one sense, there is only one answer to that question, because each human being is a unique individual, born into this world at a particular time and place, and moving through it over time. But amidst the complexities of life, whether in the mundane or in a moment of crisis, the answers vary across situations and practices: a person can "be" a mother and a sister; or a teacher and a bank customer, or a mobile phone user and a hospital patient, without having to "be"—or at least claim to be—all of those things, all at once.

We think here of Shailaja, one of our first interviewees in this research in India. When Shailaja was married young, her in-laws took away her voter ID, Aadhaar card, ration card, and bank passbook. Yet over time she negotiated her identity by getting a new passbook, renting a room in Bengaluru with her brother's help and his IDs; all the while she kept her daughter's birth certificate safe as she knew it was important for her future. Her experiences are an example of how a multiplicity of practices, credentials, and artifacts are used to support, assert, or prove identity. Some credentials are granted by the state, others by associations or private-sector companies. Some credentials are assigned in permanent ways to an individual at birth or at another critical juncture, others are adopted or selected actively by an individual as he or she cultivates various elements of his or her identity over time. Some are under her control, others, less so.

This study, drawing on interviews with 150 diverse individuals and dozens of professional stakeholders throughout India, draws on conversations like the one with Shailaja to explore the complexity of identity practices in everyday life. It is a critical moment for conversations like these, since new digital systems, such as India's Aadhaar, expand formal identity credentials to previously underserved communities, and into everyday identity practices in new ways. That said, it is important to note that the goal of this study is not to offer an evaluation of Aadhaar itself,[1] but rather to use the Aadhaar case to explore identity practices more broadly. The report suggests the need for an increased and sharper focus on the experiences of everyday people with their identity credentials, viewing those credentials not as things to be adopted once, but rather *used every day*, in ways and with outcomes more heterogeneous and nuanced than narratives to date might suggest.

There is general agreement that formal identification credentials offer significant benefits to all. The Sustainable Development Goal 16.9 calls for "legal identity for all, including birth registration." Yet, the World Bank estimates that over 1.1 billion people in the world lack proof of legal identity[2] and even for those who have proof of identity, enrolling on and using these systems can be complex. As Nandan Nilekani, chief architect of the Unique ID (UID or Aadhaar) in India, states: "Globally, identity as a public good is now becoming a critical topic."[3] The need for identity is exacerbated by a world where mobility is increasingly the norm— whether forced or unforced.

1   ID Insight, "State of Aadhaar Report 2016–2017" (Delhi, May 2017), http://stateofaadhaar.in/wp-content/uploads/State-of-Aadhaar-Full-Report-2016-17-IDinsight.pdf.

2   Vyjayanti T. Desai et al., "Counting the Uncounted: 1.1 Billion People without IDs," *World Bank Blogs*, June 6, 2017, https://blogs.worldbank.org/ic4d/counting-invisible-11-billion-people-without-proof-legal-id.

3   Asha Rai, "'Show Me Even One Example of Data Theft. Aadhaar Is Very, Very Secure'; Nandan Nilekani," *Economic Times*, April 3, 2017, https://ciso.economictimes.indiatimes.com/news/show-me-even-one-example-of-data-theft-aadhaar-is-very-very-secure-nandan-nilekani/57983599.

Introduction and executive summary

Understanding individuals' experiences
with digital identity systems

The development of digital technologies, from mobile telephony to low-cost and reliable biometric systems, has ushered in a new set of opportunities to close this identity gap around the world. The World Bank's World Development Report 2016 defines digital identity systems as "central registries storing personal data in digital form and credentials that rely on digital, rather than physical, mechanisms to authenticate the identity of their holder."[4]

Two parallel movements are gathering pace— first, countries as well as private-sector firms[5] are investing heavily in digital identification— Aadhaar is the largest deployment worldwide, but the World Bank's ID4D dataset estimates 133 economies worldwide have digital identity systems with varying levels of coverage.[6]

Second, there are increasingly prominent and influential calls for goals and principles for identification, such as SDG 16.9[7] and the Principles for Identification,[8] signed by 20 international development and private-sector organizations, as well as NGOs.

Despite these considerable movements, there is a particular gap in our understanding of the experiences of individuals who interact with these ID systems, particularly in low-income contexts and particularly beyond the use of state identity systems. There is some research, such as case studies of Pakistan, Tanzania and Côte d'Ivoire,[9] and anecdotal reports from experiences around the world but there is a lack of insight into the broader user experience of identification practices.

Specifically, we explore how identity practices (not just systems or numbers) might make a person's life better, but equally, what are the vulnerabilities he or she might face? Identity is complex because it is multidisciplinary—it is legal of course, but it's also personal, political, cultural, and psychological—and now, analog and digital. An identity credential is not a simple piece of paper or card—it is intersected with power and politics and further complicated by the complexity of networked technologies and biometrics. What are the *new identity practices of a connected age?* And *what might designers, technologists, and policymakers do with an increased awareness of these identity practices?*

4   World Bank, "World Development Report 2016: Digital Dividends" (Washington, DC: World Bank, 2016), http://www.worldbank.org/en/publication/wdr2016.

5   Caribou Digital, "Private Sector Digital Identity In Emerging Markets" (Farnham, Surrey, UK, 2016), http://cariboudigital.net/new/wp-content/uploads/2016/08/Caribou-Digitial-Omidyar-Network-Private-Sector-Digital-Identity-In-Emerging-Markets.pdf.

6   Desai et al., "Counting the Uncounted: 1.1 Billion People without IDs."

7   United Nations, "Sustainable Development Goal 16," 2017, https://sustainabledevelopment.un.org/sdg16.

8   World Bank, "Principles on Identification for Sustainable Development: Toward the Digital Age" (Washington, DC: World Bank, 2017), http://documents.worldbank.org/curated/en/213581486378184357/pdf/112614-REVISED-4-25-web-English-final-ID4D-IdentificationPrinciples.pdf.

9   GSMA, "Driving Adoption of Digital Identity for Sustainable Development: An End-User Perspective Report," February 2017, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2017/02/Driving-Adoption-of-Digital-Identity-for-Sustainable-Development_An-End-user-Perspective-Report.pdf.

Introduction and executive summary

Understanding individuals' experiences
with digital identity systems

REPORT AIMS, METHODS, AND APPROACH

With the support of the Omidyar Network, Caribou Digital, together with the International Institute of Information Technology, Bangalore, set out to uncover the complexity of the experience of managing identities and identity artifacts, from the perspective of people in lower-income communities in India.

We focused on India as Aadhaar is not only the world's largest biometric identity system, with almost 1.2 billion individuals registered,[10] but also because it is home to multiple other public and private sector ID systems. We interviewed around 30 key identity experts and held 150 interviews across six sites (urban, non-urban) in the states of Karnataka, the National Capital Territory of Delhi, and Assam, largely with low-income demographics such as tradesmen and women, house helps, construction workers, and others (see Appendix A1 for more details on methodology). Importantly, this is a qualitative and not a representative study, and as such, "situational, rather than demographic, representativeness is what is sought."[11] Our findings are particular to the people we spoke to and offer insight into what others in similar circumstances might experience.

Our approach is to adopt a "wide lens," focusing on a plurality of "identities" and "identity practices" rather than on a specific use case or evaluation of a single system. We take the plural of the term identities to reflect the multiple identities we all hold, and the aggregate of the expressive forms of ID such as personal preferences and statements of affiliation as well as ascribed forms of identity such as nationality, gender, income categorization and so on. We use "identity practices" rather than credentials or systems to describe the way identities are relational and manifest through the hundreds of millions of micro-negotiations that happen each day, and particularly in the transactions where identity must be verified.

The 12 interlocking essays that constitute this report help tease out the realities of these experiences, and their implications for the design and development of future identity systems and technologies.

Introduction and executive summary

Understanding individuals' experiences
with digital identity systems

FINDINGS AND STRUCTURE

There is a growing support for standards and principles to underpin future identity systems, with initiatives such as the Principles on Identification providing necessary high-level guidance. Yet these alone are not a sufficient basis from which develop ethical digital identity systems. Incorporating user experiences can provide policymakers and system designers with the local context and understanding necessary to develop more effective, equitable, and empowering identity systems. This research finds several challenges in identification practices, not least high barriers to identification and a lack of awareness and knowledge on obtaining ID credentials amongst people from low-income backgrounds. We organized our findings according to the practices of identification, the implications for vulnerabilities, and conclusions to inform the policy and design of identification systems.

Our first group of findings reflects four aspects of the wide lens approach we described above. Each heading is an essay in the document that follows:

1. We argue that **people have always had, and managed, multiple personal identities**. Identity technologies are always layered over and incorporated into the management of these identities.

2. Conversations with participants reminded us that **physical identity artifacts matter, even in the digital era**. Although digital promises to replace material artifacts, people find value in a credential they can hold in their hand.

3. We found that **every identity transaction means something to the people involved**. Identity transactions are always leavened with meaning and intersected with the operation of power along various lines.

4. And finally, like an "identity mosaic," we found that **people select and combine identity elements for transactions during the course of everyday life**. The management of identity mosaics brings to the fore questions of power and agency that determine the empowerment implications of identity credentials.

Introduction and executive summary

Understanding individuals' experiences
with digital identity systems

Our second theme reflects five ways in which identification technologies mediate vulnerabilities.

5. We found that **there is a tension between fixed identities within rigid systems and people's shifting, dynamic lives**. Identification systems in general and digital systems in particular make static aspects of people's identity in ways that are often outside their control.

6. Many respondents suggested that **crossing borders makes managing identities a struggle for migrants**. Transiting the boundaries of identities in general and the credentialing of municipal, regional, and national citizenship in particular creates tensions and can exacerbate vulnerabilities for the most marginalized.

7. We saw how **at the moment of enrolling into ID systems, vulnerabilities are exposed for many**. Processes of registration and the demand to reveal aspects of individuals' lives can expose latent and already present vulnerabilities.

8. In addition to end-users, we also found that **ID systems often create vulnerabilities for the intermediaries who facilitate the transactions**. Intermediaries who enable registration and ongoing usage of services may lack knowledge or awareness of rule changes, and often bend rules to enable users to achieve their goals.

9. We also suggest **there are persistent tensions around gender and identity**. Individuals' social and cultural contexts of power and status are embodied in the use of identification systems that can serve to mitigate as well as reinforce established dimensions of gender identity.

The third set of essays move from description to implications, offering a set of interconnected but distinct reflections on our findings.

10. We find that critical issues—such as privacy—are often abstract to the user. There is a need to use clear language to describe them. Differing conceptions of privacy can lead to conclusions such as the poor lacking concern for privacy. **Framing abstract concepts in the context of people's experiences reveals concrete concerns that can inform system design**.

11. We argue that **Intermediaries are critical—and need more support and accountability**. We found that the intermediaries who support enrollment and ID use are key to enabling access and remain significant despite the promise of digital to do away with human intermediaries.

12. Third and finally, we argue **Multiple ID elements are a feature, not a bug**. Many identity systems seek to fix identity around static categories that limit user ability to control what aspects of their identity mosaic are visible to others. Designing for empowerment should include attention to user agency over their multiple identities.

Introduction and executive summary

Understanding individuals' experiences
with digital identity systems

TAKEAWAYS FOR THE BROAD COMMUNITY

Drawing on the spirit of discussions emerging
from our stakeholder workshops, the **concluding
essay "From India to the World"** looks back
across these findings from India, framing them
as takeaways for an even broader community.

The core essays offer broad and complementary
perspectives on the practices, persistent
vulnerabilities, and implications for design of
digital identity systems. They are intentionally
modular, and each can be read as a standalone
piece or as part of the integrated set. That said,
as an overview and summary we offer several
crosscutting takeaways below. These points are
our nominations for the concrete takeaways
from the essays for the community of designers,
policymakers, practitioners, technologists, and
researchers involved with digital identity systems.
Together they reinforce and show a path ahead from
the research aims: to encourage the development
of identity systems and technologies that empower
users as they navigate increasingly digital lives.

THE BIG PICTURE

- **There are no greenfield identity systems**—
  People have been managing identities for
  millennia, adapting their behavior and practices
  in relation to each new identity technology
  that becomes commonplace. Even the most
  advanced digital identity platform will be
  perceived and engaged with in relation to
  all of the other identity systems, digital and
  analog, an individual has experience with.

- **Physical artifacts matter, even in a digital
  age**—People place importance and value
  on physical artifacts, as evidenced by the
  standard practice of carrying printed Aadhaar
  enrollment forms for a credential that was
  supposed to be completely virtual.

FAIR AND INCLUSIVE

- **Design for marginalized groups**—Individuals
  with disabilities, those suffering from HIV/
  AIDS, transgender individuals, and other
  groups may require additional consideration
  to ensure that processes and technologies
  are accessible and privacy preserving.

- **Unintended consequence often excludes the
  most vulnerable**—Policies that work for most
  people, most of the time, can end up excluding
  those who don't fit in the mainstream: For
  example, those without a permanent address
  can't sign up for many identity credentials;
  delays in credential processing can prevent
  children from attending school; and requirements
  for feeder documents are often most onerous
  on migrants and/or those from rural areas.

- **Actively support women's needs**—Even
  simple ideas, such as creating safe spaces
  (or times) for women to interact with
  service centers, or supporting the role of
  peer organizations such as sanghas or labor
  rights to assist women, can have significant
  impact on mitigating the barriers they face.

HELP THE HELPERS

- **Informal intermediaries are a mirror**—
  System designers and policymakers that take
  a hard look at the intermediaries who are
  actively facilitating their system will see a
  reflection of the highest-friction and costliest
  processes that users have to endure.

- **Figure out the right incentives**—System agents,
  whether state employees or 3rd-party firms,
  provide the best support to individual end-users
  when their incentives are aligned with the user.

Introduction and executive summary

Understanding individuals' experiences
with digital identity systems

- **Information asymmetry leads to exploitation**—
  The less people know about how the system
  works, the more dependent they are on
  intermediaries, and the greater the knowledge
  gap the more likely it is for intermediaries to be
  unscrupulous; increasing awareness and having
  more accessible channels for finding information
  reduces uncertainty and predatory practices.

PRIVACY, AGENCY, AND DIGNITY

- **Privacy by design**—The best identity systems
  would follow principles of minimal disclosure to
  limit what data is shared during identification
  and authentication, and ideally utilize zero-
  knowledge proofs to conduct authentication
  transactions so that the requesting entity
  only receives a yes/no and not any PII.

- **User choice and control are about more
  than functionality**—Providing flexibility for
  how people can identify themselves enables
  them to better compartmentalize and manage
  their identities, leading to increased agency
  and dignity; for many people, multiple
  ID elements are a feature, not a bug.

Understanding the user perspective is especially
important with identity, since incentives for
adoption of digital credentials and use cases
are intrinsically tied to other services—financial,
health, government—and thus require a holistic
and deep view into how individuals engage
with the institutions that matter most.

The research detailed in the essays that follow
contributes approaches and insights that others
can build on to advance in the development of
future identity systems which support the privacy,
agency, and dignity of their users. We hope that
both the advances and vulnerabilities shared, in
their own words, by individuals we spoke to across
India, will encourage others to investigate how
to design systems that mitigate marginalization
and exclusion, and to build further on the
possibilities that digital identity systems offer.

PRACTICES

There are **dynamic, human identity practices** that require our consideration

PRACTICES

Essay P1:

People have always had, and managed, **multiple personal identities**

LEAD AUTHOR:
Emrys Schoemaker

PEOPLE HOLD MULTIPLE FORMS OF IDENTIFICATION

Essay P1:

PRACTICES
People have always had, and managed, multiple personal identities

Nalin: *"Once I faced a problem during the election time. I could not find my voter ID for voting, and so when I went to vote, they (authorities) said bring any ID document, like an Aadhaar card, bank passbook…. Previously, identity was established with help of Gram Pradhan at the Panchayat level, but today identity is established with help of IDs, and without that it would be impossible to establish one's identity. If it is required, then it's OK that we have to get ID documents. When there is some government work, schemes, some urgent need then IDs becomes very important."*

Researcher: "*So if someone would ask you, how would you prove that you are a citizen of this country without any ID document?*"

Nalin: *"In that case, the question would arise from where the person has come. The old system was good and the Gram Panchayat could verify who is whom. The Gram Panchayat used to cross verify and used to vouch for someone whenever required. But now, Aadhaar and other ID cards are used for many other programs. Now the system has changed, all these things are a part of the new system."*

Nalin Kumar, dairy shop owner, Delhi

In this interview Nalin describes how he uses different ways of verifying who he is, in this case to prove his identity as a citizen in order to vote. Nalin highlights how identity artifacts are layered onto existing relationships, and how different artifacts are used in specific interactions.

In order to explore diverse ways in which people prove who they are, we view identity as always relational and performed to an audience[1] rather than purely individualistic, and view technologies as embedded in social contexts[2] rather than as isolated phenomena. If you don't see identity as multiple and performed, you can't see individual agency, improvisation or vulnerability. If you don't see technologies as always embedded in social contexts and practices, you fail to design for effective use. Thinking about identity technologies in this way can help policymakers and designers build systems that build on people's experiences and thus be more successful.

Many of the people we spoke to described how their sense of identity was embodied in various aspects such as their work, background, and public reputation.

"I am a puppeteer and I make dolls and puppets. I am a Rajasthani artist. This is my identity. My art. I am a Rajasthani artist. This is how I will be known and this is how I am known…. Without this, I have no other identity."

Ganga, puppeteer and craftsman, Delhi

Ganga's matter of fact description of "how he is known" is complex and dynamic, pulling in elements of time and change against static descriptors of gender, family, and occupation.

1 Erving Goffman, *The Presentation of Self in Everyday Life* (London, UK: Harmondsworth, 1978).

2 Chrisanthi Avgerou, "Information Systems in Developing Countries: A Critical Research Review," *Journal of Information Technology* 23, no. 3 (2008): 133–46.

Essay P1:

NEW PROOFS AND ESTABLISHED PRACTICES

In the past, whenever Nalin needed to prove who he was—for example, when it was time to vote or enter into a financial transaction—his identity would be verified by the Gram Panchayat (the local authority) of his village, who would use longstanding personal relationships to keep tabs on all the families in the village. After big changes such as huge population growth and rapid urbanization, India and other nations have turned to more formal systems of identification, yet as our research shows, these still rely on many of the same underlying social structures and relationships. For example, nowadays, when Nalin needs to prove who he is, he may show an official identity card with his photo or fingerprints. But in order to get that card, Nalin still had to go to his village Gram Panchayat in order to verify the first "seeder" identity credential. Most new identity systems require baseline verification of individuals that are used to "breed" further additional documents, and these baseline verifications are often rooted in relationships, such as Nalin's community council, that people have managed for a very long time. These seeder identities contain dynamics and nuances that are only visible by taking a deep dive beneath the surface.

Some new identity technologies, such as state based foundational systems, are intended to combine multiple identity artifacts, replacing different credentials with a single, universal proof. However, the reasons people used different credentials in the past endure even as new identity systems are introduced. For example, we asked Jairam, a former farmer in rural Karnataka, to describe which of his multiple credentials was the most important.

Jairam: *"Important? At the time of elections, voter's card becomes important to me. Now at the bank, they are asking for the Aadhaar these days, so the Aadhaar becomes important. Ration card is a necessity too. When I have to buy my ration, I have to take the ration card with me."*

Similarly, Bashim, a rickshaw driver in urban Delhi, described how the Aadhaar card has been layered across ones that were considered important in the past.

Bashim: *"Earlier the ration card had value, after that they made it the voter ID. So its (ration card) value got diminished. They then made it the voter ID, the one that you get made and use for voting, right? After that, they made it the Aadhaar card. Now in the Aadhaar card, there is punching (collection?) of everything; of eyes, signature, finger prints, everything about the whole body is there. In the sense, of your whole body (inaudible) in the Aadhaar card. It does all the same things. The only thing is, in one you have the address, every part of your body is in there, and it has the photo for your ID card."*

The endurance of established identity management practices means that new identity technologies and systems are not "greenfield" implementations, but are layered over existing understandings, practices, and relationships. Thinking about the multiple ways people identify themselves as "authentication repertoires" reveals the long-established ways that people prove who they are, and the context into which new identity proofs will be incorporated. These established practices can enable as well as hinder the successful adoption of new identity systems.

Essay P1:

IDENTITIES THOUGH TRANSACTIONS

"I went through a red light, and the policeman stopped me. I told him I hadn't seen it, and also that my tuk-tuk was old and the brake lever was damaged. That made the policeman angry, and he asked me if I was trying to kill the passengers!! He demanded to see my papers, the driving license and the vehicle registration. I had photocopies, but the policeman was angry and used his phone to take photos of the documents and then fined me 100Rs. I was afraid because that was the last 100 rupees in my pocket. I have no money with me now and I don't know what to tell the owner of this rickshaw."

Ramesh, rickshaw driver, Delhi

DIGITAL AUTHENTICATION FOR SIM REGISTRATION

Although many claims for the use of identity credentials emphasize their potential to empower individuals, for example to "participate fully in their society and economy" (Principles on Identification for Sustainable Development),[3] our research showed that the use of identity credentials is always within the context of relationships characterized by power and the provision of a service or benefit. Ramesh's account reveals how different individuals exercise power in the transactions they engage in. Indeed, our focus on the socially embedded nature of identity credentials reveals the importance of power in the use of identity credentials. Paying attention to who determines the nature of verification helps illuminate the nature of those power dynamics.

People who provide a service or benefit are in positions of power and are able to determine *how* people prove who they are. Indeed, our respondents commonly perceived the need to verify who they are as something that is demanded of them in exchange for something they need and over which they have little control. Remember how Nalin Kumar described going to vote, and who determined what credential he could use: "*when I went to vote, they (authorities) said bring any ID document, like Aadhaar card, bank passbook.*" It wasn't Nalin who decided how to verify his identity, but the electoral authorities. Similarly, Jafar described how others were in positions of power in providing access to artifacts and determining which form of credential was accepted.

When people are asked to prove who they are, the *form* of proof, the particular credential, is determined by the person or institution that is demanding verification. In other words, when people have to prove who they are it is usually in a context where the balance of power lies in the other party to the interaction. Recognizing the nature of power

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3   World Bank, "Principles on Identification for Sustainable Development: Toward the Digital Age" (Washington, DC: World Bank, 2017), http://documents.worldbank.org/curated/en/213581486378184357/pdf/112614-REVISED-4-25-web-English-final-ID4D-IdentificationPrinciples.pdf.

Essay P1:

in relationships can help suggest how new identity technologies may be incorporated into everyday life and the interactions that people seek to undertake.

MULTIPLE IDS FOR MULTIPLE CONTEXTS

"At the time of elections, the voter's card becomes important to me. Now at the bank, they are asking for the Aadhaar these days, so the Aadhaar becomes important…. When I have to buy my rations, I have to take the ration card with me… it is BPL and I can access facilities from it."

Jairam, ex-farmer, Garudahali, Karnataka

People use different credentials in different contexts. In the account above Jairam describes how he uses his voter card, Aadhaar card, and ration depending on the context of the transaction he is undertaking. Similarly, respondents such as Jubina, a female nurse from Assam, described how to attend college or a conference she has to show her nursing identity card, while to obtain a SIM card she has to show a different identity card. Our research shows that people use multiple identity credentials to negotiate different contexts, as well as the same credential in multiple contexts. We saw how many discrepancies between how the state intended versus how people actually used identity cards. For example, some shopkeepers and streetsellers described how the same identity card served multiple purposes, from using the PAN card as a photo identity card for train travel as well as to make cash deposits in the bank to the use of driving licenses as proof of driving ability, general identity, and proof of age. One young female Assamese student described how she'd only ever used her driving license to enable entry to local pubs. People negotiate different contexts using multiple IDs, and use IDs in unintended ways.

The value of recognizing that people enact different identities according to context is that it highlights the complexity of managing identification as well as revealing cases where the use of multiple identities can be transgressive as well as empowering. The use of multiple identities is commonly linked to illegal and transgressive use, reflecting the belief that a single credential is sufficient to reflect a singular identity. Indeed, when the World Bank recommends digital ID, it argues "the priority should be to confer identity for all, either through a universal foundational scheme or through harmonization of the multitude of existing functional systems."[4] In India Aadhaar has been promoted by the Government of India as a single solution to a wide variety of authentication contexts.

Our research also found many examples of how multiple identities are linked to transgressive use. For example, it was not uncommon to hear accounts of people using multiple forms of identification to illegally obtain benefits, such as Alok Arora describing manual laborers: *"Most of them will have Delhi cards. They have dual voting rights. They have a card here, they'll have one in their village. This is illegal, shouldn't be."*

Yet our focus on the context of identity use and the history of how people have verified who they are also showed how empowering maintaining multiple credentials can be. For example, Jafar Akbar described how migrant laborers were keen to retain old "village proof" credentials—a document vouched testified by the local *panchayat*—even as they obtained new credentials such as ration cards.

4   World Bank, "World Development Report 2016: Digital Dividends" (Washington, DC: World Bank, 2016), 196, http://www.worldbank.org/en/publication/wdr2016.

Essay P1:

PRACTICES
People have always had, and managed, multiple personal identities

"If we have to make any document, passport, land related documents we have to go back to the village. So the village address proof is very important. They said they definitely would like an additional Delhi ID so that they have access to resources and benefits here, but the village ID they can't let go of."

Jafar Akbar, Migrants Rights Centre
Coordinator, Delhi

For these migrants, as well as many other identity groups, maintaining multiple credentials was important to demonstrate ties to multiple locations and the identities and relationships found in those locations. People also have multiple credentials because identity shifts as people's lives change. For example, when Riddhi, who works in a small tea stall in Madhugiri, got married, she moved from her home village to Madhugiri. Although she obtained new identity proofs such as Aadhaar card, ration card and voter ID, she had not yet applied for the old voter ID card to be terminated. As a result she has two voter IDs, one from the previous address and the second from her present address in Madhugiri.

The significance of specific credentials is determined by the value or salience of a credential in context. Respondents described how Aadhaar gained importance only as the demands for it grew. For many of our study participants, there was no "single-most" important ID card or document. As one respondent in urban Delhi said, "Each and every ID card for me is important. The bank passbook is important when I am in the bank. I get my food from my ration card and the BPL card gives me health benefits." Respondents we spoke to described how they prioritized their identity artifacts according to the benefits the credential provides access to. For example, ration cards, BPL certificates, PAN cards, and bank documents were ranked higher than driving license and membership cards. For many, national identity credentials such as passport or Aadhaar were viewed as an aspirational identity artifact, rather than something that could give them immediate benefit. Significantly, as income and occupation influence how people value different benefits and transactions, so too do these variables play an important role in determining how they value particular identity cards and documents.

SUMMARY

Identity technologies mediate the everyday interactions that people experience. If policymakers and designers of identity systems understand this they can see how new artifacts are always incorporated into existing relationships and practices of identity verification. Nalin's management of the way he proves who he is, and the extent to which this is deeply embedded in relationships he values, is a reminder that people have always had and managed identities in diverse ways.

Approaching the design of these technologies and systems with the recognition that they will be incorporated into existing perceptions, practices and relationships will provide information that designers and policymakers can use to make their technologies and systems more successful.

Essay P2:

Physical identity artifacts matter, even in the digital era

LEAD AUTHOR:
Emrys Schoemaker

DILIP AND SON HAVE DIFFERENT FAMILY NAMES ON MULTIPLE CARDS

Essay P2:

PRACTICES
Physical identity artifacts matter, even in the digital era

"So when I go to get medicines or go out, then I don't take this big handbag. I take this small purse (takes out a small clutch from inside the bag to show us). I keep whatever I need to take in this and leave all other IDs and cards inside this big bag. I take just this small purse with the Nimhans card and medical prescription inside this purse and leave all the rest here in the bag. And if I have to go out of town then there is another bag in which I keep just a few cards from this big bag and take that other bag (Ishmat laughs)."

Ishmat, housewife in Bangalore, India

Despite the value Ishmat places on the physical artifacts which help her present her identity, many argue that digital identity systems offer superior ways of managing identification, authentication, and verification. For example, in India Aadhaar was launched explicitly as a 12-digit Universal Identification (UID), not a physical card. As Planning Commission Deputy Chairman, Montek Singh Ahluwalia said in 2013, "The (Aadhaar) number comes in a form of card. But that card is not an identity card."[5] Indeed, this ambition is reflected in the goals of international organizations who see digital identity as a means to achieve Sustainable Development Goal 16 of providing "legal identity for all, including birth registration, by 2030."[6] As the World Bank's World Development Report 2016 puts it: "The best way to achieve this goal is through digital identity (digital ID) systems, central registries storing personal data in digital form and credentials that rely on digital, rather than physical, mechanisms to authenticate the identity of their holder."[7]

Many users we spoke to echoed these official perspectives, describing benefits afforded by digital identity systems over physical identity artifacts. For example, respondents described the convenience and reassurance of being able to quote the number of their PAN card—Permanent Account Number—the number provided to taxpayers by the Tax Department of India—compared to having to remember the 12-digit bank account number or risk losing the PAN card itself. Others described the confidence that a number based system provided, emphasizing how they were quite relaxed at the prospect of losing bank passbooks or Aadhaar card because they knew all they had to remember was the number in order to get a replacement.

5 Staff Writer, "Aadhaar Is a Number Not an ID Card, Says Montek," *The Hindu*, February 2, 2013, http://www.thehindubusinessline.com/economy/aadhaar-is-a-number-not-an-id-card-says-montek/article4372903.ece.

6 United Nations, "Sustainable Development Goal 16," 2017, https://sustainabledevelopment.un.org/sdg16.

7 World Bank, "World Development Report 2016: Digital Dividends" (Washington, DC: World Bank, 2016), 194, http://www.worldbank.org/en/publication/wdr2016.

Essay P2:

PRACTICES
Physical identity artifacts matter, even in the digital era

Others said they believed digital systems were helping to resolve these discrepancies.

"*There are such people, who have a different name showing up in their Paani (property) papers. Such instances are rare in recent times, because it will be entered in Anganwaadi around the same time that they also get their Aadhaar card. They also have to get their birth certificate. And parents are supposed to get bank accounts for their children if they want to avail of various schemes. With all these ID document processes happening near about the same time, it is easy to quickly catch any discrepancy in names and other profile details.*"

School principal, Garudahalli

In other words, there are a number of reasons why users, as well as institutions value digital identity systems over physical artifacts.

That being said, the focus of this chapter is how many of the respondents we spoke to, such as Ishmat quoted above, highlighted the continuing importance of physical, material identity credentials in supporting their identity practices. Respondents described a number of reasons why material artifacts (still) mattered, from the value they play in accessing services and benefits, to benefits obtained from having a physical credential to carry. Respondents also described the intangible value of credentials as symbols of a better future, and highlighted the complexities resulting from loss of artifacts.

USERS VALUE MATERIAL ARTIFACTS

"*So for the sake of developing trust with the other person, we need to keep these cards. See, we are not as educated as you people. You can speak well. But what about us? We are a wandering lot. Here today and there tomorrow. So we should keep all these ID cards safely.... See, this is a place where we are staying now. This place belongs to someone. We are not owners of this land.... Now if this owner comes and asks about our presence on his plot...say he wants to farm here. He will ask who gave us permission to stay here. Then what should I answer him?... And when someone like that comes here, we will show our ID and say 'we are here for a few days to show our talent...acrobatics' and then we will leave.*"

Nasir, itinerant circus performer, rural Karnataka

For many people, as for Nasir, the physical identity artifact has an intrinsic value. It serves a purpose that could not be replaced by a purely digital system. For Nasir, it is a way of demonstrating identity and reassuring strangers of their authenticity and, crucially, legitimacy. If Nasir relied solely on a number it would require whoever he was interacting with in a specific instance to have access to a means of verification to check that the number corresponded with the information he provided, a requirement that many, especially in rural areas, may struggle to meet.

Indeed, the people we spoke to carried a diversity of material artifacts, used them in diverse ways, and reported many different reasons for carrying specific credentials at specific times. For many people these included driving licenses, ATM cards, and bus passes. Others described carrying occupational credentials, such as artisan ID cards, student cards or workplace identity cards. Physical credentials were also described as being important for people accessing public welfare facilities such as ration cards, with people highlighting the ration card or Below Poverty Line card to outlet managers.

Essay P2:

PRACTICES
Physical identity artifacts matter, even in the digital era

During the demonetization events of 2016, the materiality of ID cards became critical, especially when people had to produce their PAN card, or voter's card, or the Aadhaar to deposit, withdraw and exchange cash. People value material artifacts for their role in enabling access to services as well as instilling confidence in their entitlement to those services.

There are many ways in which people use physical artifacts, and many reasons why people value having a credential they can hold, carry, and show. For instance, people who drove vehicles invariably carried the original driver's license with them. But this was nuanced by descriptions in which the driver's license was carried on the person whilst the car registration documents, the RC, were kept in the glove compartment.

For many respondents, the physical artifact was important for intangible reasons, such as descriptions of possessing an Aadhaar card but never using it and keeping it at home, because having one "is about being Indian," said one respondent outside an Aadhaar centre in Bangalore. Possessing physical artifacts was also seen as important in order to prove one's bona fide presence, legitimacy, or existence, especially when questioned by someone of power or authority (such as government officials). This was particularly the case for vulnerable individuals, such as street hawkers. As Vishal, a pani-puri seller in Bangalore said, without an identity credential.

"If they [Municipal Corporation] see you are standing with your things in a certain part of the sidewalk, they will come and disband your setup."

Vishal, pani-puri seller, Bangalore

THE COST OF LOSS

The significance of material artifacts is highlighted by the complications and vulnerabilities arising from their loss. A sudden change in verifiable status can impact on an individual's capability to exercise agency in a given situation. For instance, we saw how important it was for Ramesh the rickshaw driver we heard from in essay P1 to be able to prove his identity to the policeman. Others described how without a photo identity card they were unable to travel, such as Tenzin, a Tibetan refugee in Delhi described they always need their Aadhaar card to travel.

Tenzin: *"Wherever we go, right? When we travel...be it the train or by flight. They ask for the Aadhaar."*

Tenzin, Tibetan refugee, Delhi

The lack of a physical identity artifact can also prevent people from being able to access welfare benefits and entitlements. As Mansoor, a street hawker in Bengaluru, said *"I cannot avail of medical subsidies until I get my BPL card. I had applied for it, but until then I have to pay."* The delays and bureaucratic hassles involved in registering for new credentials or replacing lost ones often force people to relinquish their claim to services they are entitled to. Many respondents described how difficult it was to negotiate between the multiple authorities required to validate a new card or changes to an old one. As Ishmat, a homemaker in a squatter colony in Bangalore said, *"My son's name is wrongly spelt in the Aadhaar. Now I cannot access the ration facilities from my ration card until this is set right. So much walking around...an entire day goes in that. I have left it and now take my ration from kaka ki dukaan."* For many, the cost of time spent registering for, replacing or amending identity credentials is too high and so people, often those who most need them, are excluded from the benefits or services to which they are entitled.

Essay P2:

The cost of loss can be mitigated by the design of identity systems. Although the loss of any artifact causes complications, differences between systems mean some costs are higher than others. For example, replacing a voter card was perceived to be a significant problem, since it meant having to apply for an altogether new number. In comparison, respondents were more sanguine about the loss of a bank passbook because it was easier to replace. As Shailaja indicated, differences between cards are important: *"If I lose these two, it is stressful (pointing at the Aadhaar and voter's card). Even if I lose the ration card, I can get a new one. But the Aadhaar and voter's card are very difficult to replace. I will not get the same number…. If I lose that [bank passbook], I can tell the bank and they will reissue the new passbook with the same account number."* The important point here is how users *perceive* the process: in actual fact, the Aadhaar number remains the same regardless of how many replacement cards are issued. The materiality and design of artifacts matters, and issues such as ease of replacement shape how users such as Shailaja perceive the value of their credentials.

In principle, the introduction of digital ID systems such as Aadhaar make it easier to replace credentials, something that a number of respondents recognized, and valued. For example Asif, who works at a leather factory in Kesarpur, rural Delhi, said, *"We can easily make a new card. It is easy to just print it from a computer…."* However, although the digitalization of identity systems makes replacement easier, the materiality of the artifact continues to matter, as people continue to find value in the use of physical credentials.

MATERIAL ARTIFACTS, AGENCY, AND EFFICIENCY

Many of the people we spoke to found value in the materiality of their artifacts and the possession of a credential they could hold. Importantly, physical artifacts can be empowering in less tangible ways than more immediately apparent access to services they offer. Many respondents described how possessing a physical credential signified social status and was valued for the way it articulated certain aspects of an individual's identity. For example, an ATM card was described as important because being able to carry and show it communicated the "tech savvy" level of technology literacy required to operate an ATM machine, as well as the financial status of having a bank account. Cards such as voter ID cards were described as being empowering through their function as a status symbol, whilst others described how artifacts generated a sense of belonging. As Shailaja said, describing her voter's ID card, *"It is a symbol to show them (government) that we are living. Without this card it is like we are dead."* For Shailaja, and for many others, physical credentials are material embodiments of intangible yet highly valued aspects of identity that grants a deeply rooted sense of agency and legitimacy.

MATERIALIZING DIGITAL PHOTOS

GET PLASTIC COLOUR XEROX OF YOUR ID CARDS AND MAKE SAFE YOUR ORIGINAL ID CARDS

DL CARD, PAN CARD, RC CARD, AADHAAR CARD

Essay P2:

Physical artifacts were also described as creating a very functional sense of belonging and legitimacy. This was particularly apparent in contexts where citizenship was contested, such as in Assam, India. Since Bangladesh's independence from Pakistan in 1971 one of the most credible ways to authenticate legitimate Indian citizenship is by carrying a photocopy of family's name on the 1971 electoral roll, a document that has recently been used to verify citizenship in the National Registration of Citizenship (NRC). As Abdul, a shop owner in Guwahati, the capital of Assam, said, *"At the time of NRC we gave documents to prove that we are Indian. We submitted documents of our parents, our grandparents."* Authenticating citizenship is complex, and important. Being able to register on the NRC, and having a material artifact to authenticate belonging has an important value for those who fear being marginalized or even deported.

The agency associated with material artifacts was also described in more practical, pragmatic terms. This was particularly the case in relation to the ways in which people had exercised creativity or *jugaad* (Hindi for "creative workarounds") to circumvent constraints and obstacles in the access to and use of identity credentials. For example, a number of respondents described how they balanced protecting original credentials with the

need to use them and the risk of their loss by making high-quality color photocopies, regarded as more authoritative than black and white copies. As Dilu, in urban Delhi, said on a brief glance at our researcher's Aadhaar card, *"I will tell you this…it is a printout that you have got from the online image. It is not original."* Whether creating high-quality copies or other creative arounds to achieve the tasks that required the use of identity artifacts, many others emphasized how material artifacts were intimately linked to the exercise of individual agency.

Material artifacts matter to people for many reasons, from intangibles such as social status and a sense of belonging to practical, tangible benefits such as accessing benefits. Regardless of the reason, for the vast majority of people that we spoke with, physical artifacts are the only point of engagement with identity systems. They understand and value artifacts for the diverse reasons that they present, but the wider system architecture remains an abstraction outside of most users' knowledge or understanding. In many cases and for most of the time, this may be a sensible way of managing the cognitive load that a full systems comprehension would demand, yet as the implications of complex digital identity systems such as Aadhaar begin to emerge, the need for an understanding of the system behind the artifact will only grow.

SUMMARY

The materiality of physical identity credentials matter to users in many ways, and play many different roles in their lives. Possessing a physical artifact is important when accessing benefits, but also delivers intangible benefits that strengthen an individual sense of agency and empowerment. Significantly, Aadhaar was intended to be solely a number with no accompanying card, but as we have shown, many value the material nature of the artifact. Paying attention to the material aspect of ways in which people prove who

they are reveals how the possession of identity credentials can enable forms of agency whilst their loss can create or exacerbate vulnerability, themes that we pick up in more detail later in this report. Although both policymakers and frontline bureaucrats argue that digital identity systems can deliver benefits in the form of efficiencies and reducing complexities, this does not mean we should ignore the durable importance of physical objects in supporting identity practices.

Essay P3:

Every identity transaction means **something** to the people involved

LEAD AUTHOR:
Emrys Schoemaker

INTERMEDIARIES REGISTER PAN CARDS

Essay P3:

PRACTICES
Every identity transaction means something to the people involved

INTRODUCTION: INTENDED AND ACTUAL USE

The design of digital identity technologies is commonly informed by thinking about specific functions and intended uses. For example, the World Bank's World Development Report 2016[8] emphasises the importance of being able to prove identity as "essential for people to access a range of rights and services such as health care, enrollment in school, social welfare, and financial services." More explicitly, the multi-stakeholder Principles on Identification for Sustainable Development[9] emphasizes the importance of designing systems for specific functions, stating that identification systems "should collect and use only the information necessary for the system's explicit purpose."

Kajol's account of opening a bank account shows that in practice, whilst systems and technologies are designed with intended use cases in mind, identity credentials are used in interactions that have more layers of meaning than can be encompassed in narrow definitions of intended use. Our research found diverse practices and meaning embodied in the obtaining and using of artifacts, as well as in the broader interactions in which identity artifacts are used. We also found that some credentials remain valued and in use even as new artifacts or systems of authentication are introduced.

THE NUANCE OF OBTAINING IDENTITY ARTIFACTS

The first principle in The Digital Principles for Identification for International Development is Inclusion, and it emphasizes the importance of making sure that identity systems strive for "universal coverage from birth to death, free from discrimination and accessible to all individuals," and in terms of non-discrimination, it states that "Legal, procedural, and social barriers to enroll in and use identification systems should be identified and mitigated."[10] Yet many of the respondents that we spoke to emphasized that accessing and obtaining identity credentials was often complex, and relied on established personal relationships and was shaped by social contexts. For example, Husna, an ASHA worker in Assam, North India, described how registering for an Aadhaar card went faster after she told them she worked as an Accredited Social Health Activist (ASHA): *"I mentioned that I had been working as an ASHA member since 12 years, but our Anganwadi is not efficient. Officials processed my paperwork much faster...."*

Beyond personal relationships, the wider context of social identities was also significant in shaping how people obtain identity artifacts. In Assam, for instance, members of "scheduled" tribes are granted specific benefits as part of wider affirmative development plans. As one Assamese student described, *"Yes, some want to be 'Scheduled Tribe', others want to be 'Scheduled Tribe' from the hills, some others want to be 'Scheduled Tribe' from the plains.... They want to be categorized to have certain political claims and benefits in terms of reserved jobs and education."* Personal relationships and the wider social context shape how people register for identity credentials.

8 World Bank, "World Development Report 2016: Digital Dividends" (Washington, DC: World Bank, 2016), 194, http://www.worldbank.org/en/publication/wdr2016.

9 World Bank, "Principles on Identification for Sustainable Development: Toward the Digital Age" (Washington, DC: World Bank, 2017), 12, http://documents.worldbank.org/curated/en/213581486378184357/pdf/112614-REVISED-4-25-web-English-final-ID4D-IdentificationPrinciples.pdf.

10 Ibid., 8.

Essay P3:

The use of identity credentials is, like the interactions through which people obtain artifacts, characterized by layers of meaning and complexity that are outside the functional, intended use cases that dominate most debates on identity technologies. For example, as we noted in essay P2, many respondents described various ways in which artifacts are used for purposes outside their "design" remit, from the use of driving licenses to verify age to ATM cards as symbols of social status. These many unintended use cases are significant elements of the ways in which identity credentials are used in practice.

The respondents we spoke to also described how interactions that are mediated by identity credentials are characterized broader forms of meaning and significance. For example Kanaila, a rickshaw driver from Delhi, described how he gave a photocopy of his voter ID card to verify his identity before the owner would rent the rickshaw to him, but that the real authentication came from a mutual acquaintance: *"One fellow is there from my native village who came here as a laborer but gradually he became owner of almost 50 rickshaws. He introduced me to the person from whom I take the rickshaw."*

MEANINGFUL INTERACTIONS

Common accounts of identity credential use highlight their intended use, perhaps the nature of the interaction in which they take place and the purpose of the interaction. For example, the World Development Report—Spotlight on Digital Identity notes that of developing countries, "55 percent have digital IDs that are used for specific functions and services like voting, cash transfers, or health."[11] Yet our study participants described many interactions built on relationships and histories that make artifacts redundant or unnecessary,

and in which their use is largely a formality. For example, Doddaraghu, a ration shopkeeper in Garudahali, rural Karnataka, described how when people come to get their food allocation, one of the most common interactions in which people have to verify their identity, the artifact and the person holding it do not always match:

"Often the card holder himself does not come to the shop. His daughter comes with the card. Then we see her face and the face as shown in the card and we can tell. Actually such problems hardly arise. We keep seeing the people, who come and take ration from our shop. We also interact with them every day. We know who all are in their family."

The point here is that the relationship Doddaraghu has with the family is a sufficient source for the authentication of the welfare distribution. The layers of time that make up the relationship are sufficient to substitute for the artifact and enable the interactions to proceed. We heard similar accounts of biometric authentication being sidelined in favor of personal knowledge and relationships. For example, in banks, illiterate users' fingerprints are often not digitally scanned for verification. Instead bank officials draw upon a user's personal circle of trust-based relationships. In such cases, the tacit knowledge that constitutes relationships is sufficient to bypass formal methods of authentication.

More broadly, our work was a reminder that elements like social status, expectations, and cultural values were often at play even in small interactions. For example, a common feature of many interactions that are mediated by biometric verification is a failure of the reader to recognize the thumbprint, because the individual's thumbprint is worn, because the reader is faulty or any number of other reasons. When this artifact failure occurs, the agent's common response is to hold the

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11 World Bank, "World Development Report 2016: Digital Dividends" (Washington, DC: World Bank, 2016), 194, http://www.worldbank.org/en/publication/wdr2016.

Essay P3:

individual's hand and attempt to force them into the "correct" position. This physical guidance is usually fine between men but when it is a man physically assisting a woman these invasions of personal space are deeply problematic, especially in a context where women's personal space and integrity are key to maintaining both her own and by extension the family's dignity and social status. The frequency and commonality of these failures mean that the importance of the interaction overrides cultural norms and women must put up with having a man invade her personal space. These interactions, which last mere moments, can pass by unremarked unless one pays attention to the experience of the interaction.

INTERACTIONS AND JUGAAD

The interactions that identity artifacts are designed to mediate are commonly described as being smooth, functioning processes enabled by the intended use of identity technologies. Yet in our research, many of these interactions are not that simple. In these situations, many respondents, both agents and users described how they exercised creative ways—*jugaad*—around these obstacles in order to successfully achieve their goals. For example, Manjanna, the postmaster in Garudhahalli, was spending a lot of time writing the same address for his illiterate customers when they came in to send money to family or friends. To make things easier he created repeatable seals of illiterate users addresses, so that when his customers came in to send money he could just stamp the money order with the recipient's address, making his and his customers' life easier.

These creative solutions to complex problems are most apparent in circumstances when the goal of the interaction is important and the resources of the individual are limited. Accessing rations was one interaction that many people described jugaad practices. For example, Rahul, a puppet maker in urban Delhi, described how people share ration cards, even though they're not supposed to: *"It happens like this. We give our ration card to one of our neighbors and say 'OK today you get your*

HUSNA PROTECTS DOCUMENTS IN PLASTIC

ration with this. Take it for month. Next month I will use it for myself. We feel sad for our neighbors and their economic condition. So we let them have our ration." Negotiating the constraints of formal systems to meet informal needs requires creative practices such as sharing cards, and relies on trust that is grounded in established relationships. This common practice involves jugaad by both the users, as they share cards to maximize access to rations, as well as by agents, as they accommodate these practices that challenge the letter of the law.

The exercise of jugaad by agents is particularly striking as it reveals ways in which agents seek to circumvent rules in their customers' interests. For example, a loan provider described how they had to determine eligibility and suitability for one loan

Essay P3:

program over another based on limited information from the set of information given by applicant. They described how they used agreed formal data points such as income, assets, and ID credentials but also relied on other sources of information from family or friends. Similarly, government officials often use literacy as a heuristic to decide whether someone is eligible for government benefits. For example, although Padma, a young woman from rural Karnataka, had learning difficulties she could sign her name in English. The postmaster from Garudahalli described how when the doctor who was there to verify her eligibility for mental health benefits saw her signing her name, *"he shouted at us asking if this was some kind of a joke."* The subtlety of relationships shapes the way identity artifacts are used, and the creative ways that people find to carry out their work. Often these processes are successful but sometimes, as with Padma, they can cause obstacles to successful interactions.

THE ENDURING LIFE OF REDUNDANT ARTIFACTS

The introduction of new identity systems includes the replacement of old artifacts with new. Aadhaar, for example, is intended to be a form of identity and authentication that can replace many others such as ration cards, bank cards and so on. Yet many respondents described how they continued to use

identity artifacts that were technically redundant. For example, Ashruthi, a daily wage laborer in rural Karnataka, described how she had to show both voter ID and Aadhaar card when applying for a girl child savings program. As she said, *"they asked for the voter's card and the Aadhaar card for this scheme.... The Bhagyalakshmi bond is like the LIC bond. We get a card under this scheme and after the child turns 18 years, we can use it.... It is only for the girl child. For our daughters."*

Thus identity artifacts can endure in ways that are unexpected and entirely dependent on local histories and social contexts. For example, in Assam, Northern India, it was common to find people describing the 1971 electoral roll as the most important identity document, with a number of respondents saying they carried it around with them on a daily basis. As Aneesa, a housewife in rural Assam, said: *"Those who had all these documents, had to submit.... They asked voter list of 1971 and 1966 and they even wanted some earlier documents. Whatever other old documents we had, we submitted all."* These old electoral rolls indicated Indian citizenship prior to Bangladesh's independence, and thus current entitlement to Indian citizenship status today.

SUMMARY

All identity interactions are full of meaning and significance, imbued with the subtleties and nuance of relationships, histories, and contexts that constitute social life. Even though artifacts are designed to fulfill specific functions, they are often incorporated into interactions characterized by social dynamics of power and status. The processes of accessing and using identity artifacts is commonly characterized by barriers and constraints that shape how people interact and the way in which a specific artifact mediates the interaction. People exercise creative practices of jugaad to realize their goals, often subverting the intended use case of credentials to meet their needs. And as artifacts are embedded within social contexts of relationships and histories, so the life of artifacts is shaped by the particularities of social context as much as the intended use. When designers and policymakers are sensitive to the meaning and significance inherent in specific interactions they can better design systems and artifacts able to accommodate the changing lives of people, and the credentials they use to mediate their interactions.

Essay P3:

PRACTICES
Every identity transaction means something to the people involved

AN EXAMPLE OF ALL THE PROCESSES NEEDING AN ID IN A VILLAGE
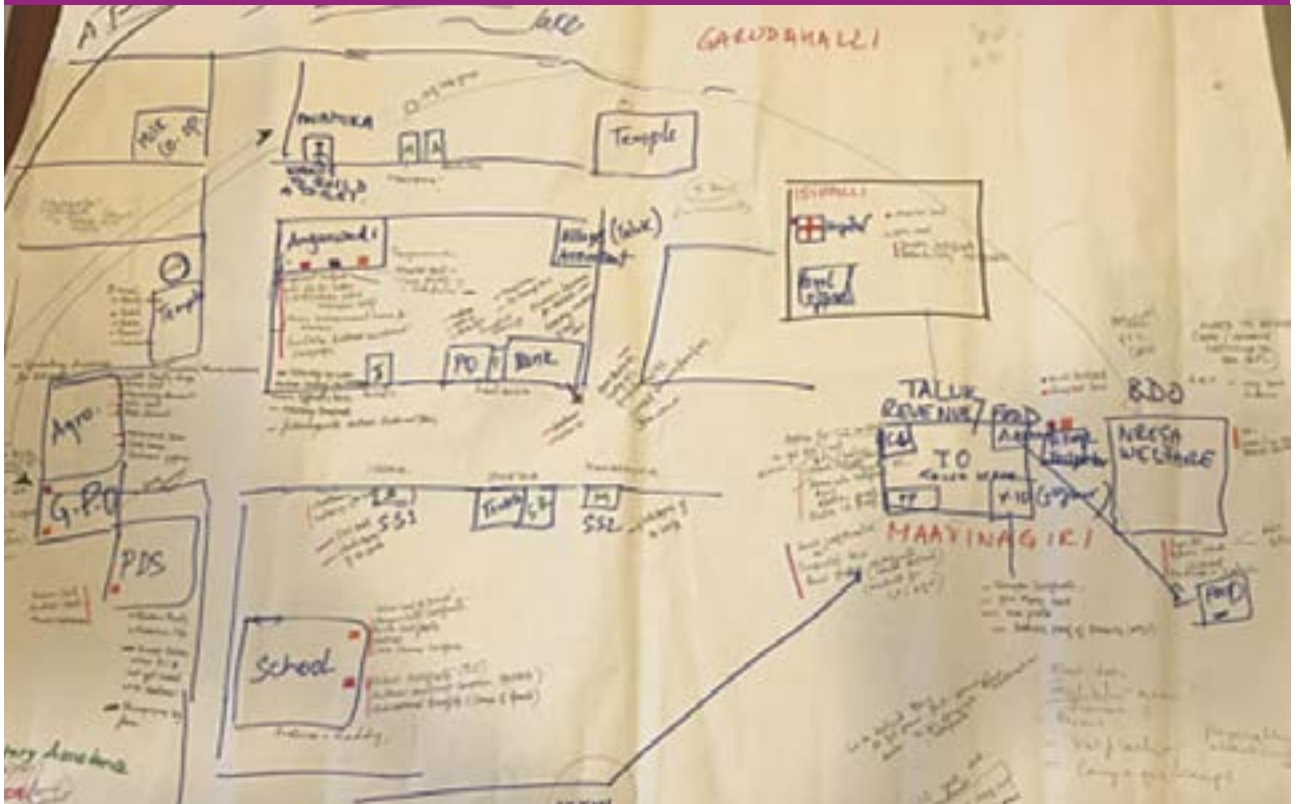
THE ID JOURNEY

Tamang and Ramdhan are from neighboring villages in Assam. Both of them got to know each other only after they came to Bangalore and now work at the same institution as security guards. Tamang came a few years ago but Ramdhan has been here for 16 years. Ramdhan has a voter's card, a PAN card, Aadhaar, a ration card and a Driver's License. Tamang does not have an Aadhaar (yet) but has a Driver's License (DL), PAN card, voter's card and a passport as he was intending to leave India.

Tamang initially had a school ID and got a school certificate after 10th standard (grade). Following the 10th standard certificate, he got himself a PAN card and much later a voter's card, because of a general election in the offing which made enrollment and distribution of voter's card easy (doorstep as he called it) and a driving license. He got the passport only after securing his Gram Panchayat's certificate (for proof of residence) along with the PAN card, voter's card and bank statements of both his parents. Over and above this, he also had to show his own PAN card, voter's card and DL. Tamang and Ramdhan share a smartphone—bought with pooled resources (as they work on the same site) but have their own SIM and passcodes for different apps.

PRACTICES

Essay P4:

Like an "identity mosaic," people select and combine identity elements for transactions during the course of everyday life

LEAD AUTHOR:
Emrys Schoemaker

MOSAICS: TRADERS AND CUSTOMERS, SONS AND DAUGHTERS, MALE AND FEMALE

Essay P4

"…I am an artist. My identity is in my art. What am I without my art? And then there was this big form that I had to fill…. My expression is my art and that has no age, no gender and no address."

Sumitra, female puppet maker, urban Delhi

"Important? At the time of elections, voter's card becomes important to me. Now at the bank, they are asking for the Aadhaar these days, so the Aadhaar becomes important. Ration card is a necessity too. When I have to buy my ration, I have to take the ration card with me."

Jairam, former farmer in rural Karnataka

THE PRESENTATION OF IDENTITIES

In the accounts above Sumitra and Jairam describe in two very different ways how they present multiple identities, and their relation to identity artifacts. Indeed, our sub-title here is a playful reference to one of sociologist Erving Goffman's most well-known books, "The Presentation of the Self in Everyday Life,"[12] in which he describes how people perform differently according to the context they are in.

Sumitra and many others we spoke to value identity cards for the way they help them in their presentation of identity in everyday life. So Sumitra places her artisan card above all others because it allows her to showcase her most valued identity, that of being an artist. Although she described valuing her ration card, voter's card and Aadhaar card, none of these represented the aspect of her identity that mattered most.

Jairam, meanwhile, describes how different identities—as a citizen, a bank customer, and a welfare recipient—are all made visible through different identity artifacts. These identities, many of which exist prior to their credentialing, are embedded in social lives and disclosed, selectively, in the interactions of everyday life.

In the Identities Project we consciously avoided focusing on a single credential, even though our research location was India and our research included Aadhaar, regarded by many as one of the most successful "single" identity initiatives. In doing so, we were struck by how often we heard stories of the active, strategic management of what we came to call the mosaic of identities. Let us be clear: in using a plural framing and in offering a term like mosaics to describe identity, we aren't describing an individual masquerading as someone else, or fraudulent presentation of oneself to another. Rather

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12 Erving Goffman, *The Presentation of Self in Everyday Life* (London, UK: Harmondsworth, 1978).

Essay P4:

PRACTICES
Like an "identity mosaic," people select and combine identity elements for transactions during the course of everyday life

we are highlighting the decisions and choices about which elements of everyone's selves are to be foregrounded, at what times, in what circumstances.

Of course, people do not have full, individual control over this performance of disclosure and presentation, but nor are they passive. Look at these two examples, in which Sumitra feels that her most valued identity is her artist self, an identity that other credentials cannot capture. Jairam, on the other hand, highlights how it is specific interactions that determine which identity credential, and the identity elements that each credential contains, that are made salient and visible in any specific transaction.

A significant insight from this is that whilst the performance of variable aspects of an individual's identity mosaic are an intrinsic part of being human, control over this plurality is only realizable to the extent that people have the agency to manage, select, and negotiate these multiple elements of identity. In this sense, the implications of credentials for individual agency over the presentation of identity is a critical dimension of understanding the complexity of identity technologies in everyday life.

People deploy and present variable aspects of their identity mosaics according to the demands of particular contexts, and these are made visible in different ways by different artifacts. Sometimes these are tacit and almost anonymous, such as interactions that do not require credentials but in which identity is communicated through other forms such as dress, speech, and body language. At other times these are more explicit, and we focus on these interactions where the verification of identity requires some form of credential. The World Bank distinguishes between two forms of identity system,[13] namely *functional*, that serve specific purposes and

DEVI SHOWS ELEMENTS OF HIS IDENTITY MOSAIC

foundational, the kind that serve as universal multipurpose systems capable of supporting the entire range of needs for legal identity across all applications. The scale and visibility of Aadhaar has prompted particular interest in foundational identity schemes that serve multiple purposes.

At the same time there is a growing awareness of the need to design identity systems to meet the needs and realities of users. The World Bank convened Principles of Identification for Sustainable

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13 World Bank, "World Development Report 2016: Digital Dividends" (Washington, DC: World Bank, 2016), 194, http://www.worldbank.org/en/publication/wdr2016.

Essay P4:

Development includes commitment to designing systems that are robust, which means "a statistically unique and verifiable identity for the course of an individual's life, from birth to death, with safeguards against tampering (alteration or other unauthorized changes to data or credentials), identity theft and other errors occurring throughout the identity lifecycle."[14] This commitment envisages an identity credential that reflects the unique diversity of an individual's identity over the duration of the use of the identity credential. The Principles go on to state a commitment to designing systems that are interoperable and responsive to the needs of various users, that are "flexible, scalable, and meet the needs and concerns of end-users (individuals)."[15] Yet these aims, of a singular identity that is responsive and accurate over the credentials lifecycle, seem to be inherently in tension with the reality of the way individuals manage and perform the elements of their identity mosaics.

Sumitra and Jairam's descriptions show that the identities that people hold and wish to present are neither static nor singular. These insights, surfaced across each of the four essays in this section, are not new. Rather, they are in line with long-established sociological arguments[16] that individuals strategically manage identities such as age, location, gender, occupation and so on and that they perform these context dependent identities in order to be seen in the best possible light. Respondents described how at different times they are wives, workers, patients, and Indians, with different artifacts required in specific transactions related to each identity.

CHANGING LIVES, CHANGING IDENTITIES

Jafar: "*I wanted the card to have the village address on it. I wasn't sure how long I would stay in Delhi and the Aadhaar card can be made only once for all over India. Now if I get it done here and then have to cancel, it might be a problem. Actually, there was another reason as well. I had decided that I'll make a voter ID card of Delhi and the Aadhaar of the village…because we have land in the village also so I might require an address proof. It is on that address that the electricity bill comes on my name. This was an advantage. My father and brother don't have any ID documents of the village. They have lived in Bengal all their lives, so all their IDs are from there. So no one from my family has any village address proof, I mean no male family member. All the women have village IDs, men don't. I am the only one.*

In this account, Jafar describes the various identities and relationships that he holds, and how they have evolved as he moved around. People have different identities as their life changes, from shifting relocations to changes in family status. Changes in identity that result from people moving locations, such as relocating for work, introduce complexities outside the frame of a singular, universal identity. Jafar's description of the way his identities have shifted following his movements were a common experience for many of the people we spoke to, especially for people such as migrant laborers. Indeed, Jafar himself pointed to his experience at the Migrant Rights Centre coordinator to describe how many people moving for work often wanted to retain their old identity credentials, the "informal" village council certified identity letter, despite also applying for identity credentials in their new urban location in order to access benefits. As Jafar said

14 World Bank, "Principles on Identification for Sustainable Development: Toward the Digital Age" (Washington, DC: World Bank, 2017), 12, http://documents.worldbank.org/curated/en/213581486378184357/pdf/112614-REVISED-4-25-web-English-final-ID4D-IdentificationPrinciples.pdf.

15 Ibid.

16 Goffman, *The Presentation of Self in Everyday Life*; Judith Butler, *Gender Trouble: Feminism and the Subversion of Identity* (Routledge, 1990).

Essay P4:

"they definitely would like an additional Delhi ID so that they have access to resources and benefits here, but the village ID they can't let go of." In this case, people need multiple credentials to reflect the multiple contexts in which their relationships exist.

The changes to individual identities that result from changing location can cause complications, because credentials rarely accommodate the dynamism of people's lives. As we will argue in essay V2 (migration) location can be an important aspect of an individual's identity, manifest in the address recorded in an identity system or on an artifact. Changing one's address requires updating credentials, yet many hold multiple addresses or lack a single permanent address.

For example, much like Jafar's description above, Daphne, a nurse in Assam, described how she struggles to reconcile changes in her address with the singular address that most credentials demand: *"For me I feel sometimes giving a permanent address is not always possible. Sometimes we shift places like in my case I have my EPIC [ration] card and the address is somewhere else and now we have shifted to somewhere else. Now that is a problem."* For Daphne, as for Jafar and the migrant workers, changing locations involves assuming new identities which is often in tension with the singular demands of identity artifacts.

People's identities also change as their family and social context changes. Many of our respondents described how marriage introduced new identities and social roles that caused complications in the use of identity credentials. For example, Riddhi, a tea stall owner in rural Karnataka, described how when she got married she moved from her home village in Gadag to Madhugiri: *"I shifted to*

Madhugiri and registered on my husband's ration card, but kept my name on my parents' card also. I didn't want to remove it." Having her name on two ration cards reflects Riddhi's continuing relationship with her family as well as her new relationship with her in-laws. Although this multiple credentialing contravenes the function of the ration allowance it reflects Riddhi's multiple identities and the contexts in which they are important. Separation and divorce were also described as significant changes that introduced new identities. Shailaja, for example, described how after her husband left and she had moved with her daughter to the city she had struggled to get proof of her address and been unable to get new ration cards. As Shailaja said:

"We were all together in the village, and from the same [ration] card, they used to get it [rations]…. My husband, my mother-in-law. Someone would go and get the ration from the depot after showing the card. There was no problem. It's only after coming to Bangalore that I have had so much difficulty. I have to purchase everything from the regular shop."

Although Shailaja struggled with her responsibilities as a single mother, she described how getting new identity credentials in her name and not her husband's was an important part of demonstrating her independence and realizing her ability to look after her daughter. For Shailaja, her changing status and associated identities required her to present different identities in the new contexts of her life, differences that her existing identity credentials couldn't easily accommodate.

Essay P4:

PRACTICES
Like an "identity mosaic," people select and combine identity elements for transactions during the course of everyday life

THE NEGOTIATION OF IDENTITY VISIBILITY

Madappa: *"See and understand for yourself Madam (showing his list of documents). This is the first page, which is our application letter for a loan. This is my wife's photograph. People have to see who the beneficiary is. Then here are the photocopies of all my ID cards. I have to add those three documents which she mentioned."*

Interviewer: *"So you are really helping your wife obtain this loan...?"*

Madappa: *"I will be doing the business...but since this loan is only available to women, we are applying through her. I am taking all this effort with submission of application and documents. But finally I will be doing the business. She cannot do much. It is physically exhausting.... So I decided to step in and submit the application myself. See? This is her sign and this is her photograph... you can see she is selling berries and peanuts. But all this running around, she cannot do."*

In this account, we see how Madappa, a pavement vendor in rural Karnataka, describes applying for a micro-enterprise loan in his wife's name. He gathered the documents that proved his wife was not a proxy applicant for the loan, but he was also careful to ensure that there was nothing in it that would "officially" reveal that he would be the actual beneficiary. In fact, as he went on to describe, he was willing to make the extra effort of submitting his documents on another day, because his son (who had written out the application letter) had signed his own name, rather than have his mother sign it. We heard many descriptions like Madappa of negotiating transactions through managing different identities, which were often combinations of different aspects of identities, such as gender, marital status, religion or ethnicity.

The specific account given by Madappa describes how a single person actively manages diverse identities, including those of other people, incorporating them into single transactions. This example shows the control over identity, one's own and others, can be manifestations of the exercise of power. Indeed, this example might be easily understood as the form of fraud or creative applications of the rules that singular identity credentials could help to address. Yet we also heard people articulating concerns about the consequences that a single identity system might have for their ability to control other people's knowledge of specific identities.

These descriptions of the way people negotiate the demand for specific identities and the management of diverse, overlapping identities also brings to the fore questions of privacy and information management. In negotiating specific transactions, we saw how Madappa was careful to control the visibility of his wife and his own identity in very conscious ways. Similarly, we heard accounts of how individuals are careful to manage the specific information that their artifacts reveal. For example, Ishmat Begum and her husband Mansoor Ali, in urban Karnataka, in describing the informal loans that they had taken from a moneylender, were happy to reveal to us how much they had borrowed, the interest they had to pay and how much they still owed, but were very careful to limit public knowledge of their indebtedness as well as the identity of their lender in order to protect that relationship. They described how during the time of their daughter's wedding they tried to limit public knowledge of their financial situation, as Ishmat said, "*We were in such a state that even they could not see our condition and helplessness. Such was our condition during my daughter's wedding.*" Ishmat's description highlights how they navigate revealing different aspects of their identity

Essay P4

PRACTICES
Like an "identity mosaic," people select and combine identity elements for transactions during the course of everyday life

in different contexts. For example, whilst they were comfortable describing to us their financial situation and even showed us their loan book, they kept careful control to make sure we didn't know who the lender was. This description of managing information shows how people selectively disclose aspects of their identity in different contexts. Ishmat and Mansoor were happy to share with us details about their financial identities, but very careful to protect their identity as trusted borrowers in their relationship with their moneylender.

Singular identity systems such as Aadhaar are characterized by their networked nature—that is, aspects of individual's lives such as health, financial, and electoral data are linked through foundational identity systems. This has raised concerns amongst activists about the consequences of potential and actual data breaches and breakdowns in individual privacy. Yet the newness and complexity of these systems means people's understanding of them is still developing, so we asked respondents about *potential* implications for their ability to manage identity visibility. Ayesha, a community health worker living on the chars islands on the Brahmaputra river in Assam described how health information was particularly sensitive. As she said, *"Pregnancy is very sensitive, especially for the fourth or fifth pregnancy. People are ashamed,*

they tell their doctor but keep it private from their community until maybe the sixth month." Ayesha went on to speculate that if pregnant women knew their pregnancy status was linked to other information held in other contexts they might be reluctant to engage with their own doctor and health services. Ayesha's account, and those of others who shared similar sentiments, highlight how networked identity systems pose challenges for the capability of individuals to manage the visibility of specific identities they hold.

SUMMARY

People perform identities according to the context they are in, and commonly present aspects of themselves that intersect according to the demands of the specific transaction. People we spoke to were mindful of the different identities brought about by changes in their life, and of the often competing demands of different situations, yet were forced to negotiate the manner in which performance and artifacts made these identities visible. Respondents described how at different times they perform different selves, with different artifacts required in specific transactions. New identity systems have implications for how identities are made visible and accessible, and raise concerns about their consequences for individual's ability to manage the way they present themselves in everyday life, especially in the management of personal information such as income status or pregnancy. This mosaic lens can help designers and policymakers build technologies that are sensitive to the ways in which people present themselves in everyday life.

VULNERABILITIES

Everyone is vulnerable when identifying themselves— and ID systems can sometimes just shift, or even introduce new, vulnerabilities

VULNERABILITIES

Essay V1:

There is a tension between fixed identities within systems and people's shifting, dynamic lives

LEAD AUTHOR:
Savita Bailur

SULEIMAN THE STILT WALKER AND THE TENTS THEY LIVE IN

Essay V1:

"All the clothes in Bara Tooti had special pockets for money and important papers: a breast pocket sewn on the inside of the shirt, rather than the outside; a pouch stitched into the waistband of a pair of faded trousers; an extra pocket-inside-a-pocket. Every mazdoor was a walking album paneled with money, papers, phone numbers, and creased photocopies of ration cards.

Rehaan, for instance, always carried two tattered photocopies of his ration card (registered back home in Sitapur, Uttar Pradesh), a copy of his class five mark sheet that looked like it had survived a flood, a small black telephone diary, and his entire medical history in the form of a prescription for a painkiller—all secreted in various pockets on his person. In a plastic bag that never left his side, he carried a blurry x-ray of a large translucent bone gleaming against a greenish black background."

Aman Sethi,
A Free Man (2012, p. 18)

Rehaan was not one of our respondents but his dynamic, non-formal existence while keenly protecting his identity artifacts resonated in many of our interviews. In 'A Free Man', the journalist Aman Sethi spends five years shadowing construction workers in Sadar Bazaar, one of the oldest areas in Delhi. Most of those living in Sadar Bazaar are migrants, obtaining piecemeal work (painting, carrying loads, building) through word of mouth. They are sometimes exploited, sometimes exploiting, but always exercise jugaad (creativity; innovation) appearing and disappearing around Kaka's tea stall with regularity. In Sadar Bazaar, skills are a critical differentiator, to the extent of standing in the right line to be chosen in the mornings for work, as is word of mouth, but identity documents are just as critical.

Essay V1:

VULNERABILITIES
There is a tension between fixed identities within systems and people's shifting, dynamic lives

We conducted similar interviews at a location our interviewees called "The stand" in the area of Hatigaon in Assam—here, daily wage laborers would stand waiting for work with their tools. Most did not have IDs with them (kept at home for safety) but said it would be a problem if they were asked to show them as they would have to return home and by then someone else would be hired.

This essay focuses on the tensions our research uncovers, between the dynamic, often non-formal, and unpredictable life an individual may live, and how identity artifacts are static snapshots of an individual in time and space. It is critical to recognize this tension between formal static systems and dynamic everyday practices to influence policymakers and designers in developing systems that accommodate the complexity of everyday life.

IDENTITY ARTIFACTS HAVE TO WITHSTAND DIFFICULT CIRCUMSTANCES

Like Rehaan's tattered ration card photocopies and marksheet "that looked like it had survived a flood," many of our interviewees mentioned the materiality and tangibility of identity documents having to survive years, seasons (e.g., floods) and moves between homes. Ajit, a pani puri seller, told us that his daughter's birth certificate had been eaten by a rat, so he had to have another made by a doctor friend. Tarini, a flower seller in Bengaluru, talked of all her documents perishing in a fire. Suleiman was one of a community of travelling performers we interviewed in rural Karnataka. He carried all his identity cards (voter ID, Aadhaar), had them all scanned in a Google Drive, but also carried a photo album of photos of himself with eminent politicians and police to help get out of any problematic situations. Rahul, a Madhubani artist in Dilli Haat, says "in Rajasthan [his home state] we will always keep 10 photocopies of the same document. We store it all in a trunk." In the shifting sandbanks of the Char in Assam, where your entire home (and therefore your permanent address) can become flooded, residents told us they kept their ID documents in a plastic bag in the rafters as it would be the last place to be submerged. Many spoke of multiple photocopies and laminated photocopies for safety.

Essay V1:

VULNERABILITIES
There is a tension between fixed identities within systems and people's shifting, dynamic lives

Others face more concerns that they simply don't have access to historical artifacts, particularly in Assam with the National Register of Citizens. Nilakhi, a housewife from Guwahati, says:

"I was married very early.… My parents died within a few years of my marriage, and since then I never went back to my parental home in West Bengal. Now suddenly, I am required to provide documents to establish linkage with my father [for the National Register of Citizens].… I will have to go back to West Bengal…it might not even be possible to trace those documents. The government should relax the process for people like me who have migrated from other states.…"

All these examples showed the challenges of obtaining and maintaining identity artifacts through time, between moving locations, and through changes of circumstances. Yet, the challenge is that this places greater burden on those who have less access to resources and knowledge about how to do this.

ASHRUTHI WITH HER RATION CARD AT THE RATION SHOP IN GARUDAHALLI

Essay V1:

VULNERABILITIES
There is a tension between fixed identities within systems and people's shifting, dynamic lives

COMPLEXITY PLACES ADDITIONAL BURDENS ON THOSE WHO HAVE LESS TIME AND RESOURCES

All those we met suffered the tension between the timelines and procedures of identity systems and the impact of these on their lives. Life is dynamic—birth, migration, marriage, death are emotional circumstances which need documentation. Shailaja in Bengaluru and Jubina in Assam were examples of two women separated from their husbands who had to seek work and obtain new identity documentation *on their own* in unknown cities. Some requirements seem irrelevant to document—when opening a bank account, Shailaja had to enter her husband's name, even though they have been separated for years. At other times, requirements are excessive and expensive. Anjali, a housewife in our peri-urban research site of Kesarpur, states:

Anjali: *"We need separate, signed rent agreements for every ID needed. It has to be in the name of the person whose work it is.*

Interviewer: *You don't have a template agreement with both your names?*

Anjali: *I had given away that signed copy. Gave a copy for the gas connection, for the bank, all originals.*

Interviewer: *You make a new agreement every time?*

Anjali: *Yes.*

Interviewer: *And you pay money to get it made every time?*

Anjali: *Yes, around Rs. 150 ($2)."*

Similarly, a young social worker in Bengaluru who lived with her grandmother said *"my parents passed away.… Nowadays they ask me to link my Aadhaar card with everything. Our gas is in my granny's name and electricity bill in mother's name. Now with whom should I link things? When I went to NIMHANS [hospital] for a course, they asked me to get a BPL card [below poverty line] for a free course. We didn't have one. I went to the Food Office to get a BPL card. I couldn't get it in my grandmother's name as she is old and couldn't be there in person. I asked to have it in my name and they asked me if I was married. I said no. He said he can't. I should get my parents. I was annoyed by his response. I asked, do you want me to get my parents from heaven? He said why have you come to eat our heads [bother us] in the morning. Get your husband or get some man. After I heard this, I just left."*

This disconnect between the time the state might take and how it impacts on an individual's life, due to redundant processes and forced dependencies, has major implications. Ashruthi is a daily wage earner in Garudahalli who earns a living collecting firewood, spreading dung, and sifting maize. She recounts the loss of her ration card:

"A photocopy will help me apply for replacing the lost ration card. But I cannot avail of ration at the cooperative society here. You cannot take ration with a photocopy.… If you get a letter from the Food Inspector with his stamp that your ration card is missing and that you have applied for a new one, then you can get ration. You need an affidavit from the court for that.… But it can take as long as five or six months or sometimes you can get it within two or three months."

Essay V1:

VULNERABILITIES
There is a tension between fixed identities within systems and people's shifting, dynamic lives

Even if individuals are aware of where they need to go to obtain identity documents, the time taken to do this impacts greatly. Consider this interview with Mansoor Ali, a pavement seller of socks and underwear in City Market, Bengaluru's grey market:

Interviewer: *"Can you tell us why you are not renewing your driving license?"*

Mansoor Ali: *"Now Madam, I have all these responsibilities. I have to run my shop and I have to maintain my family. Or do I go all the way to Rajajinagar and spend hours there to renew? If I do this every day, how will it work out? I have to go there and also pay up. And there is money to be given to run the household too. So I went to Rajajinagar and gave money to this broker."*

Mansoor has to make the decision on taking the time out and potentially losing sales, driving illegally or using an intermediary. Unfortunately for Mansoor, the broker only renewed the license for one year (as opposed to five) and so when we met Mansoor, he made the decision not to review it after this. A similar story is recounted by Ankur, a garment factory worker in Kesarpur: "to do this entire process of making a local ID will entail my taking a whole month off from work. I have tried myself. For around 15 days I gave it my best shot. I went to the Choupal [office] inside Kesarpur. The office is downstairs where forms are filled for applying for Aadhaar cards, voter cards and ration cards…. We used to go every day to the office. Five times my form was canceled. And they won't even tell us on the day of the submission what the problems are with it so that we can correct it and submit it the next day. They'll tell us four to five days later.

A number is given to the form and we are told to come back on some later date and then stand in queue on that day again waiting for my number to be called. When my turn comes finally at the end of the day, they point out the mistake, which again is mostly the absence of the landlord's signature and the room agreement. Then one has to run around to get the signature, if somehow we manage that and resubmit, then again it gets canceled; because that time they hadn't given the full information that a room agreement is also required. Then for that we have to go to the court to get the rent agreement made where we have to shell out money, some will ask for Rs 200 ($3.00), while some will ask for Rs. 300 ($4.60) to make the agreement. Then again the form will get canceled because I haven't attached a police verification form. So then we have run to the police station to get their stamp."

Although the World Bank *Principles on Identification*[1] raise the point that all supporting documents for identity artifacts need to be easy to obtain, what we consistently found in our interviews was that this was not the case and in fact places an additional burden on those who have the least resources. Three Nepalese cooks in Bengaluru told us of their attempts to get ID cards. Taki, the eldest, said: *"we tried to get it done. We gave money to someone, but they ran off with the money. They said they would get it done but did not do anything. Just stole our money."*

1   World Bank, "Principles on Identification for Sustainable Development: Toward the Digital Age" (Washington, DC: World Bank, 2017), http://documents.worldbank.org/curated/en/213581486378184357/pdf/112614-REVISED-4-25-web-English-final-ID4D-IdentificationPrinciples.pdf.

Essay V1:

LIFE IS COMMUNAL AND DYNAMIC, AN IDENTITY CARD IS INDIVIDUAL AND STATIC

While an identity card focuses on an individual, it cannot capture the multiplicity of relationships and family structures. The ration dealer at Garudahalli, our rural research site, talked about how daughters who marry may have their original ration cards as well as new ones from their in-laws:

"This village is in the border. They have land in Andhra Pradesh, but people come here as well. So, they could come here as say daughters-in-law. They will marry into families here and come here. And then they get themselves into ration cards held by their in-laws…. And the same woman gets to enjoy ration benefits even back in her father's place as well."

This practice is meant to change with the linkage of individual Aadhaar cards to communal ration cards but was narrated by many we interviewed, where ration cards were left in the home state to be used by the remaining family. This raises questions around the underlying assumption at the heart of most identity systems that users hold a singular, sovereign identity that is a "social island," like information pieces that are separate from each other, yet in practice this is not the case.

THE REQUIREMENT OF A PERMANENT ADDRESS CAUSES THE GREATEST CHALLENGE

The biggest challenge for many of those in the demographic we researched was that of a permanent address, needed for all identity artifacts. As Jubina, a nurse originally from Shillong, working in Guwahati, stated: *"for me I feel sometimes permanent address is not always possible. Sometimes we shift places like in my case I have my EPIC [voter ID] where the address is somewhere else and now we have shifted to somewhere else. Now that is a problem."*

Receiving any mail to an address is also problematic for those without a permanent address. Suresh Singh, an Aadhaar center franchisee in Kesarpur accepted that *"making a ration card is very challenging. Everyone lives on rent here. Today it is one address, tomorrow it'll be another address, this causes problems in verification. That is why we ourselves haven't got ours made."*

Movement complicates changing minor details such as contact numbers. Tenzin, Dik**i**, and Dolkar are three sisters who were goat-herders in Tibet and now sell souvenirs in Delhi (Tenzin is also training to be a beautician). Although they have been living in Delhi for around four years, they have not yet managed to update their bank details to include their Delhi mobile number rather than their Ladakh number:

Interviewer: *Which bank is your account in?*

Tenzin: *[Mentions bank name].*

Interviewer: *Can you not give an application at the branch here in Delhi?*

Essay V1:

VULNERABILITIES
There is a tension between fixed identities within systems and people's shifting, dynamic lives

Tenzin: *We cannot do that here. We have to apply for that there (Ladakh)*

Interviewer: *Can't you send that application through someone going to Ladakh.*

Tenzin: *No one's going there that we know.*

Interviewer: *You have no connection with Ladakh now?*

Tenzin: *We do have a connection. But the thing is to go there physically.*

Interviewer: *You could give an authorization letter to someone going there and...*

Tenzin: *I don't know."*

The sisters felt stymied that they could only act on this when back in Ladakh—a 1,000 km, 15 hour bus journey through the Himalayas or one hour by plane. Further, after the above conversation, they were frustrated with our questions, asking: *"are you saying that these are some of the things to be followed for safety?"* We responded with *"we are not telling you, we want to know from you"* but Tenzin again stated *"what are the things to be done for safety...that is what you want to tell us?"* This gave a sense that they felt bound by a "formal" process at odds with their lived experience.

SUMMARY

Bureaucracy is challenging enough to deal with, without added complications of changes in location, not having a permanent address, living in communal networks and enduring fragile circumstances. These are not constraints unique to specific demographics[2] but they have greater impact on those who live non-formal lives. One question is of the validity of a permanent address, perhaps an outdated concept in times where we are moving from one place to another more than ever before. Another is around making systems more responsive and flexible, so there is not a five-month delay for a ration card, impacting on someone's ability to feed themselves. Designers of identity systems and users may never have the same set of priorities (notably security versus flexibility) and while perhaps this tension cannot be permanently resolved, we need to consider how to build for a brave new world.

2   T. K. Rohit, "People without Surnames Face Problems in Linking Aadhaar with PAN," *The Hindu*, April 6, 2017, http://www.thehindu.com/news/national/people-without-surnames-are-facing-problems-in-linking-aadhaar-with-pan/article17844495.ece.

VULNERABILITIES

Essay V2:

Migrants struggle with identities
when moving across geographies

LEAD AUTHOR:
Savita Bailur

MIGRANTS

Essay V2:

VULNERABILITIES
Migrants struggle with identities when moving across geographies

"It feels like migrants have no rights at all. In Sundarpur [pseudonym], *there are 200–300 jhuggis* [temporary housing] *where people have been residing for 20–30 years. They've been trying to get voter ID cards made for a long time. The land they live on is probably government land. And now after living for so many years, they are willing to cancel their village IDs and get local voter IDs so they have proof of the land where they are staying. But it's been tough. Even after paying money, Rs. 400–500* ($6.00–$8.00) *each, they haven't been able to get any ID card."*

Jafar Akbar, migrant Rights Centre, Kesarpur

Jafar Akbar's words reflected the situation of many we spoke to who straddled different states in terms of credentials. Around 60% of those we interviewed were not living in the same city or village (for rural respondents) they were born in. What do these movements across geographies and sovereignties imply for identification?

The world is more mobile than ever, open to more opportunities but even more challenges, particularly when migration is not voluntary. The Indian Census enumerated 453.6 million inter-state migrants in 2011, a rise of 121.6 million since the previous decadal count of 2001.[3] UNHCR estimates 65.6 million forcibly displaced people worldwide in 2017, including 10 million refugees, over half of whom are aged under 18.[4] Unstable political environments, fragile food security, and temporary income opportunities are all leading to fractured flows across national as well as domestic (state-state; rural-urban) borders.

In this essay, we explore how many of those we spoke to about identity practices felt torn, not only emotionally as to where they belonged, but also in terms of the strategies they had to employ to access credentials "here" and "there." Some had more choice than others, but two main challenges stood through: the onus was on the migrant to prove who they were *not*—i.e., illegal immigrants or committing benefit fraud, and that they often faced the denial of identity credentials as a practiced form of exclusion. Most of the findings in this section are from our peri-urban site of Kesarpur, around an hour from New Delhi. Kesarpur is home to large numbers of migrants from Bihar and Uttar Pradesh in search of work in garment factories.

3 "Population Enumeration Data (Final Population)" (Office of the Registrar General & Census Commissioner, India, 2011), http://www.censusindia.gov.in/2011census/population_enumeration.html.

4 UNHCR, "Figures at a Glance" (Geneva: United Nations, 2017), http://www.unhcr.org/uk/figures-at-a-glance.html.

Essay V2:

VULNERABILITIES
Migrants struggle with identities when moving across geographies

NEITHER HERE NOR THERE

For migrants, refugees and otherwise displaced people, identity provision and sovereignty present particular complexities. While there is a difference between each of these groups—indeed all the migrants in our sample were economic, rather than political—there are similar challenges of being caught between source and destination—equally in terms of how individuals perceive themselves, being caught between the bureaucracy of providers of credentials and how relationships are formed with neighbors.

A key aspect of identity formulation is the relationship of an individual to a place—and with that, the family, friends, networks, practices, food, and social memories of a home.[5] When displaced, this identity fragmentation and reformulation is challenging.[6] In the case of economic migrants, we saw several examples of conflicted identities. An interview with two jewelry sellers in Delhi for example, revealed struggle in defining oneself:

Researcher: *"Where are you from?"*

Ankita: *"I am from Jaipur…near Raipur, Jyotinagar."*

Mangalwati: *"How are you from Jaipur, when we all live here in the plot in Delhi?"*

Ankita: *"Yes but are we not originally from Rajasthan?"*

Researcher: *"How long have you been in Delhi?"*

Ankita: *"Several years. Cannot recall since when (laughs)."*

Researcher: *"How long did you say (to Mangalwati)?"*

Mangalwati: *"Many years. She (Ankita) was in fact born here. "My parents and my in-laws are back there (in Rajasthan). Ever since I got married, I have been here in Delhi. Now I don't have a plot of land to do any farming. We don't do any farming and earn a living out of that back home. So I am a Delhi person. All my ID cards are from here. My house and land plot is here in Delhi. I consider myself from Delhi. What is there back in Rajasthan for me? How will I earn and what will I live on, when I go back to Rajasthan? Nothing. I am from here."*

Ankita's self-exclusion and wanting to belong in her home state, even though she was born in Delhi, was tied to her feeling unwanted in Delhi, because she and Mangalwati felt hounded by local council officials for selling their wares. This fear of not belonging was reiterated by many in our interviews. Samit, a barber we interviewed in Guwahati had lived there for 25 years but when we asked him if he was from there he said *"I am an outsider here, pardesi."* He recalled an incident in 2003/2004—*"they wanted to drive the Biharis from Assam… Assamese people wanted to drive away the Biharis… we ran away. We went home."*[7] Mangesh, a SIM card provider in Delhi, said *"people used to show respect to elders whether he was from Madras or U.P. [Uttar Pradesh] or Bihar. But now they have changed. They call people like "hey Madrasi, come here," "hey Bihari, Come here." "They treat people like animals."*

5 Maria Holt, "The Wives and Mothers of Heroes: Evolving Identities of Palestinian Refugee Women in Lebanon," *The Journal of Development Studies* 43, no. 2 (February 1, 2007): 245–64, doi:10.1080/00220380601125073; Alastair Ager, "Perspectives on the Refugee Experience," in *Refugees: Perspectives on the Experience of Forced Migration* (New York: Pinter, 1999), 1–23; Elizabeth Maggie Penn, "Citizenship versus Ethnicity: The Role of Institutions in Shaping Identity Choice," *The Journal of Politics* 70, no. 04 (2008): 956–973; Maggie O'Neill and Tony Spybey, "Global Refugees, Exile, Displacement and Belonging," *Sociology* 37, no. 1 (February 1, 2003): 7–12, doi:10.1177/0038038503037001385.

6 Kari Burnett, "Feeling like an Outsider: A Case Study of Refugee Identity in the Czech Republic," Research Papers (Geneva: UNHCR, January 2013), http://www.unhcr.org/research/working/510947989/feeling-outsider-case-study-refugee-identity-czech-republic-kari-burnett.html.

7 Ipsita Chakravarty, "How the Fear of Migrants Became the Driving Force of Politics in Assam," *Scroll.in*, February 16, 2016, https://scroll.in/article/802983/from-votebank-to-spectre-how-political-parties-imagine-the-outsider-in-assam.

Essay V2:

VULNERABILITIES
Migrants struggle with identities when moving across geographies

[IMAGE CAPTION]

Aneesa, a third generation Indian in Assam, said: *"all these thoughts come to my mind always... they had already taken many documents for NRC, what if they come again for more documents, if they drive us away from the country."* When asked where Devi felt at home, he said: *"for all practical purposes, Bengaluru is home to us. There is no need for us to speak out loud in favor of Tamil Nadu or Karnataka. We will only speak about the place that gives us food."*

In addition to being conflicted in terms of *identity*, there is also the challenge of being torn apart in terms of obtaining identity *credentials*. Almost all those we interviewed in Kesarpur reported holding on to their home credentials because they were not sure they would get ones from Kesarpur, though these were the ones they needed for benefits. There is some evidence on two particular sets of demographics—young men and newly married women—who fall through the cracks of identification the most.[8] The studies find that young men may not obtain credentials because they may leave home before voting age (18) and then find it hard or not a priority to return home—and similarly young women may leave to get married before 18.[9]

However, in our research, we found respondents had source IDs, and if they didn't, they made it a priority to go home, because they knew local contacts who could get this done (such as a mukhiya or village headman) and also tried to go home to vote (either out of a sense of duty, or as a response to vote-buying).[10] The ration card was uniformly left at home for other family members to use and as it was too much of a hassle to get a new one, normal retail outlets were used (in Kesarpur, residents complained that shop owners were aware

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8 Rameez Abbas and Divya Varma, "Internal Labor Migration in India Raises Integration Challenges for Migrants," *Migration Policy Institute*, February 28, 2014, http://www.migrationpolicy.org/article/internal-labor-migration-india-raises-integration-challenges-migrants; A. Sharma et al., "Political Inclusion of Migrant Workers: Perceptions, Realities and Challenges" (Political Inclusion Workshop and their Access to Basic Services, Lucknow, India, 2011).

9 A. Sharma et al., "Political Inclusion of Migrant Workers: Perceptions, Realities and Challenges."

10 This was not always fruitful. Gudia in Kesapur told us their family went home to Uttar Pradesh to vote because they were told their travel would be covered. They spent Rs. 2,000 "but no one has given us anything till now."

Essay V2:

VULNERABILITIES
Migrants struggle with identities when moving across geographies

of this and therefore sold at inflated prices). Ankur, a migrant in Kesarpur (like Ankita, he saw himself as such, even though he was born in Delhi and had a birth certificate to prove this), recounted his experience of making a ration card for his family:

"*We used to go every day to the office. Five times my form was canceled. And they won't even tell us on the day of the submission what the problems are with it so that we can correct it and submit it the next day. They'll tell us 4–5 days later. A number is given to the form and we are told to come back on some later date and then stand in queue on that day again waiting for my number to be called*."

One of the instances in which local identity credentials become crucial is in children's admission into schools.[11] Jamima narrated how she had to persevere to get her children admitted into the local government school in Kesarpur. School authorities refused to accept the children as she lacked a local address proof. Jamima struggled for days, fighting with the authorities till her children

These complicated processes, reluctance to identify as migrants, and then ineligibility to belong (by voting or being eligible for schemes) result in migrants feeling even more insecure in new environments (although networks with family and friends are formed). Laila, a homemaker in rural Assam, talked of how being forced to move after land erosion in her home village, she is not eligible for bank loans and village subsidies in Feharbari because she is not considered a resident. Dependence on new, unknown people, new structures—power dynamics are even more apparent here, feeling vulnerable. The lack of trusted networks means that there can be a reliance on intermediaries who may let them down. Taki was one of three Nepalese cooks in Bengaluru we talked to who tried to get voter IDs made in Gujarat before arriving in Bengaluru but the broker *"ran off with the money...around Rs. 300/400 ($4.50/$6.00)."*

LIVING ARRANGEMENTS

11 Shreya Roy Chowdhury, "Delhi Government Schools Are Turning Away Children Who Don't Have Aadhaar," *Scroll.in*, April 11, 2017, https://scroll.in/article/834245/admissions-delhi-government-schools-are-turning-away-children-who-dont-have-aadhaar.

Essay V2:

VULNERABILITIES
Migrants struggle with identities when moving across geographies

Essay V2:

VULNERABILITIES
Migrants struggle with identities when moving across geographies

And finally, for many of those we interviewed, identity credentials were more about proving who they were *not*—in North India in particular, some mentioned "not being a terrorist." In Assam, it was about not being Bangladeshi—even if residents were not Bangladeshi, there was the fear of being perceived as such. Ayesha said she keeps hold of her voter's card all the time because: *"I don't want to go to Bangladesh.… If I have this voter card, people will believe that we are Indian."* She gathered all her documents together for the NRC—*"those who don't have were also asked to submit. They asked voter list of 1951, 1966, 1971, and 2011 and even they wanted some earlier documents also.… I brought some documents from my father's house. Whatever other old documents we had, we submitted all."* Similarly, Lotok, an auto-rickshaw driver in Guwahati said *"we had to submit name and address proof of my previous generation, copy of voter list [to make it sure it had our surname] and I think an electricity bill…and legacy data of 1951…they wanted those and we submitted. It was difficult to find out legacy documents of the previous generations."* When we asked if this raised concerns, we heard responses such as "my husband says if they require more documents what would we do" (Aneesa).

DELIBERATE EXCLUSION

In Kesarpur, where we interviewed the greatest number of migrants, we heard two major challenges. First, interviewees reported they tend to be hired through contractors and subcontractors for brief periods of work ranging from as low as 15 days to a year. They not only have no job security, but contractors are also unwilling to provide any identification to them. For this reason, it was initially hard to obtain interviews, only possible because of one of our research team had previous experience

working on labor rights in the factory site. In addition, most did not want their photo taken. Second, landlords let out spaces out illegally and are equally unwilling to provide rent agreements or electricity bills as feeder identity documents (for example for Aadhaar). An interviewee in Kesarpur stated "the attitude towards those who are outsiders is that you deal with your own problems." (Although we also heard in Delhi as well as Kesarpur that "there is no one really local anyway.") Jamima, residing in Kesarpur from 2003, found it impossible to validate her residence as a feeder ID, as her landlord refused to provide her the rent agreement and electricity bill (as both were likely illegal). Although she managed to obtain a rent agreement of sorts through the landlord's son, she bribed an intermediary for the electricity bill and then forged the landlord's signature on it. Jamima's is not an isolated case. All migrants in Kesarpur vouched for the near impossibility of obtaining local address proof documents and thereby resorting to parallel means (which Jamima helped others with).

"Othering" and exclusion can be common behavior migrants and refugees face.[12] Ankur recounted the harassment he faced in trying to obtain a Kesarpur voter ID: *"I tried. During elections I hung around with the candidates and went on rallies with them. For days I campaigned for them, and in return they had promised to make my voter card. But after the campaigning was over they refused to recognize me. They never got back to me."*

This is apparent even in the census caveat that the migrant numbers may be underreported due to fear of persecution. The 2011 census also states that for the first time, India's urban population has grown faster than its rural population,[13] putting pressure on housing and infrastructure. In

12 Kari Burnett, "Feeling like an Outsider: A Case Study of Refugee Identity in the Czech Republic"; Kerry Moore and Sadie Clifford, "The Gendered Use of the Media by Asylum Seekers in Britain," *Gender & Development* 15, no. 3 (November 1, 2007): 451–66, doi:10.1080/13552070701630616.

13 C. Chandramouli, "Rural Urban Distribution of Population" (Census of India, July 15, 2011), http://censusindia.gov.in/2011-prov-results/paper2/data_files/india/Rural_Urban_2011.pdf.

Essay V2:

VULNERABILITIES
Migrants struggle with identities when moving across geographies

Kesarpur, we saw practiced forms of exclusion—not just by locals to outsiders, but between different factions, older and new migrants, different power levels and other networks, by denying identity credentials and therefore access to resources. Access to basic resources such as water and electricity was challenging and fraught with power dynamics (for example, landlords locking water taps except for a few hours a day, or even intercepting mail for ID documents).

Voting rights are crucial to enable migrants to access basic rights and amenities as well as recognition from authorities as residents of the area. The inability to vote one's elected representative to power in a democratic process excludes a person from voicing a concern related to the policies and governance of the area. As Imama recounts, while applying for her Aadhaar, the local leader tore her form saying, "*aap Bihar ke ho toh Bihar mein jake banao*" (if you are from Bihar then get it made in Bihar). Migrants routinely face such issues of alienation and exclusion from services and find it challenging and harassing to approach government officials for help.

Two final points: inclusion/exclusion is not just from state to state or rural-urban but on a micro-level, in territory disputes such as pavement spaces. Although Tarini the flower seller was from Bengaluru, she felt the attempts of fixed shop owners and others around her to burn down her cart and generally harass her (including one episode where her identity documents were destroyed in the fire) were because she was an "outsider of lower caste" and competing for pavement space. Secondly, migrants exercised considerable agency, such as Jamima above, or Biswajit, the sari seller in Bengaluru who had got himself a local PAN card and a bank account, but intentionally avoided getting a trade license, because he did not want to fall under the tax bracket. Some individuals therefore had more choice over deciding when to belong and not belong.

SUMMARY

As Gudia, who was waiting for three months of backdated wages because of a credential mistake after moving to Kesarpur, said: "we leave our homes and come so far just to earn a better living and raise our kids, but if we can't even do that properly then what is the point?" While Target 16.9 of the Sustainable Development Goals is to "provide a legal identity for all,"[14] this has little bearing if your legal identity belongs to a location where you no longer live. Identification is a major concern for migrants as they are more vulnerable, without support networks, and at further risk of being exploited. The burden is on the individual to prove who they are not—terrorists, foreigners and so on—so that even those who legitimately belong there fear being without credentials in case they are excluded for some reason. At the same time, denying local credentials can be an expression of power and a form of exclusion. Designers of identity systems need to make systems much more portable, provide better linkages between different sovereignties and geographies, and build in stronger grievance redressal to take into account this large demographic of people on the move.

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14 United Nations, "Sustainable Development Goal 16," 2017, https://sustainabledevelopment.un.org/sdg16.

Essay V3:

Enrolling into ID systems exposes vulnerabilities for many

LEAD AUTHOR:
Savita Bailur

AADHAAR ENROLLMENT CENTRE

Essay V3:

VULNERABILITIES
Enrolling into ID systems exposes vulnerabilities for many

"In Bangalore, you have to go to a hospital called Minto. It is in Market [Chamrajpet]. You get their blind certificate from there. And for the disabled ID card, you have to go to Victoria [hospital] and do it there. To make a disabled ID card, it is a very big process. You have to go to both Minto and Victoria mostly three or six times. For the children who are admitted in our school, after that they have to go to the Women and Child Welfare Department and then get it signed by our director."

John, *teacher, Bangalore*

John is a teacher at a school for visually impaired children from challenging economic circumstances. He himself has been blind from childhood and shared his experiences of getting many different kinds of identity credentials, from Aadhaar to a blind certificate and disabled ID (two different cards). John's experiences (which we will discuss below) raised two critical points—what happens if you are "different"—i.e., face challenges of disability, literacy, sexuality, or any other? And what happens even if you are not but feel vulnerable simply because of lack of knowledge? How do these vulnerabilities play out at the point of enrollment?

DIGNITY IN DIFFERENCE

The Principles on Identification for Sustainable Development[15] state that *"legal, procedural, and social barriers to enroll in and use identification systems should be identified and mitigated, with special attention to poor people and groups who may be at risk of exclusion for cultural, political or other reasons (such as women, children, rural populations, ethnic minorities, linguistic and religious groups, migrants, the forcibly displaced, and stateless persons)."* One of our aims in the research and in this set of essays is to understand to what extent barriers are being recognized and mitigated across India in terms of identity systems. Starting with disability—the Indian Census of 2011 states that 26.8 million (roughly 2% of the population) are disabled[16] but there is little written on how obtaining identity artifacts intersects with disability in India. What we hear from John, however, is that the process is complex and time-consuming. It took him three consecutive days to apply for his Aadhaar and he did not get it for

15 World Bank, "Principles on Identification for Sustainable Development: Toward the Digital Age" (Washington, DC: World Bank, 2017), http://documents.worldbank.org/curated/en/213581486378184357/pdf/112614-REVISED-4-25-web-English-final-ID4D-IdentificationPrinciples.pdf.

16 Social Statistics Division, "Disabled Persons in India: A Statistical Profile 2016" (New Delhi: Ministry of Statistics and Programme Implementation, Government of India, 2017), http://mospi.nic.in/sites/default/files/publication_reports/Disabled_persons_in_India_2016.pdf.

Essay V3:

two years (he took a break in between because he was so fed up of following it up). He says:

"I had to go three or four times [to the Aadhaar center]. I hired an auto for getting an Aadhaar card. It took three days, one day after the other.… Sometimes it was a rush. Sometimes when I went, the server [assistant] wasn't there. It's expensive."

John did not complain about the process of being identified as disabled—his recounting was more factual than feeling exploited in any way, although he did state that the process was long. However he also stated it was frustrating because of the time taken, the fact that he got pushed about in the center, that there were no forms in Braille and no specific help. He told us there was no raised lettering on any of the cards he holds, other than an ATM card. Even remembering an Aadhaar number is a challenge for him—he asks "why can't it be a combination of my surname and numbers, something I can remember?" [we note that the Aadhaar number is meant to be zero-knowledge (random) precisely to protect privacy, cardholders themselves might not understand this. It is revealing that he felt so disillusioned that he decided to take a break midway through the process because he was tired of trying. He also mentions his dependence on others—to take him to and from the Aadhaar center, to accompany him when he punches in his ATM number; to fill in forms (though he uses a screen reader where he has access). This question of vulnerability links to another on the extent of guardianship others may have over identity artifacts for those who may be disabled.[17]

We heard another experience in Garudahalli where Mariswamy, the postmaster and head of the dairy cooperative, tried to get disability benefits for his neighbor, Padma Akka, a mentally challenged senior citizen, but felt the authentication process was demeaning. The doctor's test to see whether she was disabled was to ask Padma Akka to sign in English, and when she could, Mariswamy recounts that the doctor shouted at them to leave, considering her ineligible for benefits. Similarly, Ahmad told us he had to be fingerprinted three times for Aadhaar: "see I am a construction worker. My fingers are all grazed with handling cement, bricks, and mortar. The marks on my fingers have been rubbed off by the kind of work that I do." As we discuss in essay V4, such procedures are challenging for intermediaries, but also need to be imbued with dignity.

A transgender activist we spoke to expressed similar concerns around dignity when being identified as trans-gendered:

"The government wanted us to get checked by the doctors. We were born as male only, with all male genitalia, but mentally we feel very strongly that we are females. When the situation is like this, how much does the government or the doctors know about us to judge us? This being the case, we don't need you to certify us. We are also human beings. We live in the same society as you."

Following the Indian Supreme Court's recriminalization of homosexuality in 2013 (Section 377), there are serious concerns amongst LGBT activists around prejudices in identification processes. A particular concern in Karnataka was Section 36A of the Police Act, which give police powers to "control objectionable activities of eunuchs"[18] and that a transwoman has to

17 Zubeda Hamid, "Disabilities Rights Bill: Activists Worried over Guardianship," *The Hindu*, June 17, 2015, http://www.thehindu.com/news/cities/chennai/disabilities-rights-bill-activists-worried-over-guardianship/article7322999.ece.

18 Sangeeta Bora, "Transgenders: Our Fight Will Not Stop till Sec 36A Repealed," *Deccan Chronicle*, January 27, 2016, http://www.deccanchronicle.com/current-affairs/270116/transgenders-our-fight-will-not-stop-till-section-36a-repealed.html.

Essay V3:

VULNERABILITIES
Enrolling into ID systems exposes vulnerabilities for many

register her residential address in a police station. The same activist interviewed said "if they (the individual) wants to go elsewhere, they should take permission from the police station. Now, if a child goes missing in that area, the police use their authority to enquire or to take in their into custody without any prior information. Their power makes us criminals...and all this information about the individual is on an Aadhaar card [i.e., they will know where she lives—so have the possibility of harassing her]. Who is responsible for this?"

Many others we spoke to shared their concerns around enrollment because they were "different." One person told us that an Aadhaar center franchisee was known to be unhelpful—and downright rude—to those outside his religion. In Kesarpur and Assam, as we have discussed in essay V2, migrants felt the barriers to obtaining a local identity were a form of exclusion. The attitude of the intermediary (essay V4) is also critical. John's concluding words on disability remind us that dignity is essential in designing the process of obtaining and using identity artifacts. When we asked him what advice he would give designers, he said: "anything that makes our lives easier. You don't want to keep asking people for help."

VULNERABLE CIRCUMSTANCES RATHER THAN DEMOGRAPHICS

In the 1970s hit movie Muqaddar Ka Sikandar (Conqueror of Destiny), Vinod Khanna's lawyer character says "Talwar ki ladai talwar se, pyar ki ladai pyar se, aur bekaar ki ladai sarkar se" or "a sword fights with a sword, love fights with love, and a jobless person fights with the government." "Only an unemployed person fights with government." It is popular rhetoric in Hindi movies—Identity Card, Jolly LLB, Khosla ka Ghosla, Well Done Abba, and others—to mock pedantic or zealous government officials. The majority of users we interviewed did not see themselves as meriting "special circumstances" but precisely the contrary— it was because they felt so invisible, insignificant, and helpless against the opaque juggernaut of bureaucracy that they felt vulnerable. Ironically, for example, Mariswamy—the postmaster who helped Padma Akka mentioned above—felt that the latter would have been more likely to get her BPL (below poverty line) certificate if she was lower caste (i.e., with a caste certificate, although we should note that we do not know Mariswamy's caste as this might influence his statement as well). Challenges of literacy and lack of confidence in a bureaucratic context compounded this vulnerability.

Maqbul, the bank agent in Assam, told us that 75–80% of his customers could read in Assamese, but not in English. He told us that the forms issued by the bank were in English and that there should be one in Asamese; he reasoned that it could be because s Parvati, a domestic helper, spent the entire morning in the bank trying to obtain an ATM card, only to be denied one because she could not sign the back of it (all the steps in the process until then accepted fingerprinting).

Essay V3:

VULNERABILITIES
Enrolling into ID systems exposes vulnerabilities for many

Intermediaries are critical at the time of enrollment, and while, as we described in essay V4, they may face their own challenges, they can be obstructive too. Dayanand, a 35-year-old security guard in Delhi, spoke of the challenges getting his Aadhaar card. He decided not to use a broker because they quoted him Rs. 200 ($3) to get an Aadhaar card but he did not get his card for one year. When he went in person to the Aadhaar center to inquire, he found out it was returned to him by the landlord where he used to live (at his sister-in-law's) saying they did not live there ("my brother-in-law and mother-in-law stay there, they received theirs"). Others in Kesarpur spoke of the "lala" or building manager of each building who intercepts post and returns it at whim. Jafar's was one such example when his ATM card was returned twice:

"so then they asked whether there was any issue with address. I said that no it is the right address but there are around 200–300 people in one building and around 100–150 rooms. And whoever goes to the building like the postmaster will first meet the landlord, the lala, who sits there, otherwise he can't go up or go to any rooms. And if it's any government official then the landlord will always ask why are you here, what do you want? I think in my case it was definitely the landlords who refused to take the ATM cards, because I submitted the correct electricity bill and the address was right so why would my card be returned? So I asked the postman and he said that he didn't know whom he spoke to but they had not taken the ATM card. Then I thought that the only way out was to play on people's greed...I told him that I'll give him money so he said okay and took my phone number. Then the next time that he received the ATM card he called and then I went myself and collected the ATM card.

The same thing happened with my brother who is here now. We opened an account for him in the bank and had to go ourselves to receive the ATM card on Saturday." It is the powerlessness many felt here that arose as a broader vulnerability, where the only solution is to pay off others to expedite processes.

It is the piecemeal information passed largely through word of mouth as well as long processes without updates that lead to dependence on intermediaries. When we observed and interviewed those waiting to obtain a caste certificate in rural Karnataka, the queue at the intermediaries sitting on the ground in front of the government office was longer than at the government office itself. The consensus between those in line was because intermediaries guaranteed it within a week and required fewer IDs, while the latter asked you first to come back after three weeks with the acknowledgement slip to check progress. Even though the intermediaries charged Rs. 300 (around $5.00) and the government office ($0.50), paying 10 times as much was considered acceptable because many applied for caste certificates under deadlines when applying for jobs which were reserved. We talked to Partha waiting in the government line, whose friend had told him about positions at the Karnataka Milk Federation, where he would earn better than his mechanic's job. The friend had told him to apply through reservation as he would have a better chance, so he had come for his caste certificate. However, as he could not afford to pay Rs. 300 to the intermediaries, he gave the official an extra Rs. 15 to see if that would help "speed up the process."

Essay V3:

VULNERABILITIES
Enrolling into ID systems exposes vulnerabilities for many

Finally, as we began our research our hypothesis was that rural demographics would find access to identification more challenging than urban ones. We presumed—as has been prevalent in the media[19]—that it would be precisely the challenges to literacy, knowledge of government processes, uneven power dynamics, or slower, non-technologically dependent systems (put simply, for example less access to information online) that would impact rural demographics more. To some extent this was true. Information available online (on obtaining identity credentials, access to benefits, etc.) was clearly not accessible for those rural interviewees we sampled. At the same time, we found the use of intermediaries common as in the caste certificate example above, and many migrants returning to their villages to "get IDs made" because of access to community groups, personal networks and because it was "easier there." The vulnerability then, was not about being urban or rural, but who you knew or who you could pay.

SUMMARY

Designating some demographics as vulnerable implies that others are not. While we saw that the point of enrollment exposed vulnerabilities such as literacy, a lack of bureaucratic confidence, feeling vulnerable because of being different in some way, we also realized that rather than vulnerable populations, there were also vulnerable circumstances (in the midst of the research, one of our research team lost a family member and commented that the death certificate was insensitive and intrusive, asking questions on diet, whether the deceased smoked and so on). These vulnerabilities have added implications in terms of the networked nature of data held for identity credentials. The Principles on Identification state that "in the absence of strong data protection laws, regulatory frameworks, and practices [currently in India, there is no privacy law], identification systems may reduce trust and undermine individual rights to privacy and consent regarding the use of their personal information. In some cases, they may put vulnerable groups at serious risk of harm."[20] We'll return to these issues, in light of the ways in which vulnerability is fluid, shared, and widespread, in the essays in section 3.

19 Nikhil Dey and Aruna Roy, "Excluded by Aadhaar," *The Indian Express*, June 5, 2017, http://indianexpress.com/article/opinion/columns/excluded-by-aadhaar-4689083/; Anumeha Yadav, "Can Biometrics Stop the Theft of Food Rations? No, Shows Gujarat," December 17, 2016, https://scroll.in/article/822922/can-biometrics-stop-the-theft-of-food-rations-no-shows-gujarat.

20 World Bank, "Principles on Identification for Sustainable Development: Toward the Digital Age."

VULNERABILITIES

Essay V4:

Intermediaries
are vulnerable users, too

LEAD AUTHOR:
Savita Bailur

CLIENTS WITH INTERMEDIARIES

Essay V4:

Doddaraghu: *"[When people lose their ration card] I give them ration for about two months, but at my own personal risk. I will anyway have their number. In my register, I will also note down the fact that their card has not been produced. At the same time, I will also inform others 'in case someone else is in possession of such and such a card, please do return it'…. Should the ration card still remain untraceable, we advise our customers to apply for a new ration card and we authorize the letter of request. This letter has to be shown at the Taluk office."*

Researcher: *"Do they take the letter of request for reissue to the Taluk office or do you?"*

Doddaraghu: *"They are supposed to take it. But if they say it is difficult for them, then I help them by taking it myself."*

Doddaraghu, ration dealer, Garudahalli

Doddaraghu has been a ration dealer for 15 years. He applied for the position after he found life as a farmer in Garudahalli too difficult, particularly with increasing droughts. The exchange above shows the dual roles he plays: he is at once an employee of the state with a formal role and responsibilities for following specific procedures, yet he is also a member of the community in which he has been living since birth, and has personal relationships that he continues to manage socially.

People in Doddaraghu's community need his help because the PDS system, like all complex "sociotechnical" systems, cannot account for every potential scenario and every individual need—it is designed to work well for most people, most of the time. And it is therefore often the less common edge cases where individuals find themselves stymied by a rigid system, looking for help from someone who can facilitate the processes and interactions that the formal system requires.

Many of our interview respondents had at some point needed help in navigating one or more of the identity systems they encountered. The reasons varied according to individual situations, but the common themes were:

- To expedite a process, e.g., have their application reviewed more quickly or receive their credential sooner than through "normal" processes

- To avoid or minimize time spent in-person, for example, if the opportunity cost of spending the day at the government office was too high

- If they did not have enough information, e.g., if the individual wasn't sure what the process was, and didn't have the network, skills (e.g., literacy) or confidence to find that information

- And finally, if they were physically or mentally unable to follow the process, for example, if they were blind or had mental health issues.

Essay V4:

VULNERABILITIES
Intermediaries are vulnerable users, too

A HELPING HAND

Who provides this help? Intermediaries can be front-line agents (e.g., public servants such as ration dealers or private sector employees such as SIM shop owners), independent workers who may charge more but liaise between all parties, but they can also be friends, family, a stranger in the queue, a stationery shop owner next to a site of an identity-based transaction where people might drop in to buy or borrow a pen.

In our research, we came across many of these intermediaries—both "inside" and "outside" the system. Other than Doddaraghu, Tangamma, and Panchayat officials or SIM card issuers ("inside systems"), others were individuals such as those sitting outside the caste certificate office in Garudahalli, Aadhaar franchisees or PAN card issuers (public-private partners), and even NGOs, such as the labor rights NGO in Kesarpur or those working with waste recyclers in Bengaluru.

The perception of some intermediaries or "middlemen" can often be negative—they can be seen as corrupt,[21] exploitative,[22] exercising discretion in ways that suit them.[23] We saw much of this in our own research, as discussed in essay V3. Part of the exploitation is because many of these intermediaries are for-profit actors—i.e., they provide their services for a fee, or they may not be paid enough—yet both end up serving some of the most marginalized or vulnerable populations and so can take advantage of the discrepancy in their knowledge. And because of the information asymmetry involved (the individual typically doesn't know as much about the processes in question, hence why they seek help), these intermediaries can easily distort or fabricate the actual processes, fees, and timing required. Yet it's important to note that it's not just "the poor" who use intermediaries—wherever it is seen to be more time and cost-efficient, the preferred option is to outsource the entire process over to someone more skilled in the area (even if it means paying extra).

While these intermediaries can be exploitative, they are responsive to demand, and thus can be seen as indicators of where the formal state system has broken down or has friction or pain points that are costly to the individual. In this sense, they provide valuable services that directly address the needs of those for whom the system itself is inaccessible. Intermediaries can provide valuable services to help those for whom the system is inaccessible. Understanding these transactions with intermediaries can highlight points of friction that policymakers can then begin to address.

Intermediaries have always existed, but the discrepancy between new technologies and users who may not have the skills or feel comfortable using them, has made this role even more pivotal. Intermediaries also have varying levels of "capital" such as technical or social capital (who you know).[24]

Paradoxically, the risk here is also that such assistance may be based on networks and favoritism—for example, Tangamma, the Anganwaadi teacher in Garudahalli, helps Madappa to obtain a loan which strictly only his wife is eligible for. She says "we know what will

21 Silvia Masiero, "Digital Governance and the Reconstruction of the Indian Anti-Poverty System," *Oxford Development Studies* 0, no. 0 (November 16, 2016): 1–16, doi:10.1080/13600818.2016.1258050.

22 Reetika Khera, "India's Public Distribution System: Utilisation and Impact," *The Journal of Development Studies* 47, no. 7 (July 1, 2011): 1038–60, doi:10.1080/00220388.2010.506917.

23 Aloysius Irudaym S. J., Jayshree P. Mangubhai, and Joel G. Lee, eds., *Dalit Women Speak Out: Caste Class and Gender Violence in India* (Chicago: University of Chicago Press, 2011), http://www.press.uchicago.edu/ucp/books/book/distributed/D/bo19265380.html..

24 François van Schalkwyk et al., "Open Data Intermediaries: Their Crucial Role," *Web Foundation: Open Data in Developing Countries Phase 2*, August 15, 2015, https://webfoundation.org/2015/08/open-data-intermediaries-their-crucial-role/.

Essay V4:

help and what will work specifically for specific persons and who are deserving, responsible and likely to benefit from such loans." The problematic issue is that willingness to help will always be made at the intermediary's discretion (and therefore may equally exclude others).

BUREAUCRATS TO THE RESCUE?

Doddaraghu is an example of what Michael Lipsky called "street-level bureaucrats"[25]—those who have to translate and simplify what seem sometimes as bloated bureaucracy and complex policies issued from a faceless state. Unlike the individual intermediaries who exist outside a system, these street-level bureaucrats are agents of the state or of regulated industries (e.g., banks, mobile operators) and have formal roles with codified procedures and responsibilities.

Yet what we found in our research is that these agents often take on a dual role: in addition to their job as a PDS clerk, Aadhaar enrollment official, or SIM card registrar with formal duties for administering identity systems, they also perform actions and behaviors as individuals with their own code of ethics. And it is this dual role that we see in the quote from Doddaraghu at the beginning of the section, where he acts outside the scope of his formal position because of his personal relationship with certain individuals. While his example of allowing a person to take rations for months without showing a credential may be an extreme case, there are countless other actions that take place every day as bureaucrats act outside the official scope of their position in order to facilitate processes for individuals in need.

What's important about these interactions is that when a state bureaucrat or regulated service provider acts outside of their role, they often assume personal liability and risk that is not covered by their position. We heard many reasons for why they would "bend the rules," but one of the most common was because the agent felt they did not have support, training, or current information to follow standard procedure and so had to improvise and be resourceful in order to fulfill the spirit of their job (on the flip side they also didn't have accountability). For example, Aabid, a PAN card supplier in rural Assam, says he is looking for other jobs because the rules keep changing (specifically in terms of feeder ID documents—initially a School Leaving Certificate and village headman/mukhiya certificate were enough for authentication, but now a School Leaving Certificate, birth certificate and voter ID or driving license is needed). While it is his responsibility to keep up there is little information fed down to him. He believes there may be better communication if he becomes an Aadhaar agent as it seems more organized.

Similarly, because end users often have little concept of which public sector entities are responsible for what[26] and as identity-based systems become increasingly complex and interdependent, some intermediaries recount that they are pushed over their boundary of knowledge. For example, when we interviewed the LPG provider in Assam on the identity credentials needed to have access to a gas connection, he said his two biggest challenges were the IVR (interactive voice response) technology introduced to order cylinders as well as the need to have a bank account. In both cases, he said he tried to be the mediator, but particularly in the latter he felt he did not know enough about banking processes to really know

25 Michael Lipsky, *Street-Level Bureaucracy: Dilemmas of the Individual in Public Services, 30th Anniversary Expanded Edition* (New York: Russel Sage Foundation, 2010).
26 Stuart Corbridge, *Seeing the State: Governance and Governmentality in India* (Cambridge, UK: Cambridge University Press, 2005).

Essay V4:

VULNERABILITIES
Intermediaries are vulnerable users, too

what he was doing (Ahmed and his colleagues[27] narrate a similar experience of a SIM shop owner who is asked by clients about getting a voter ID).

Though these challenges often apply to agents of private firms, their incentives and reasons for acting outside of the formal system can differ. For example, in some situations banks or mobile operators may earn more revenue if they take shortcuts or otherwise don't follow all regulations (e.g., sign up new customers without fully authenticating). Equally, they have to shoulder the financial impact of fully complying with any regulations, which can be a disincentive that they must balance with the threat of legal punishment.

Mushtaq, a SIM card provider in rural Assam, told us the lengthy process of checking all details in forms. He needs to ensure that all documents, signatures/thumb impressions and details filled in the form are present and correct as if they are rejected by the distributors (to whom he himself must deliver these) it increases his workload and travel costs. To minimize against this, in cases where customers have difficulties filling in the forms, he does so himself—not out of altruism (his explanation) but because it saves him time and money in the long term.

COSTS OF BEING VULNERABLE

In many ways, intermediaries are no different from end users in feeling powerless to navigate systems. Revathi, a bank manager, told us that she was under pressure to match thumb prints and signatures especially during demonetization when a large number of new customers were illiterate. She also had to go out of her way to explain terms and assuage fears. Jafar, the migrant rights coordinator in Kesarpur said "along with the migrants, we also have to also live our lives. Even though I work in an NGO and I am more aware of identity cards than other migrants because of my work, I've had to face so much trouble. Just opening one bank account was so problematic. Then getting a SIM card. All these have small challenges." Jafar's statement made it clear that knowledge does not always transfer to power—or ability to take action.

Our research revealed specific ways in which acting like an intermediary can make someone more, not less, vulnerable. Some formal intermediaries, like those sitting outside the caste certificate office, are dependent on the established processes and personnel of the system not changing, as their livelihood is predicated on inefficiencies and opacity that they can mitigate for their customers. Even small policy changes can have a large impact on their business.

We heard multiple accounts of people relying on their own personal finances when coordinating help or transactions for those in need. Tangamma, the Anganwaadi teacher for example, uses WhatsApp to communicate with her supervisor at the district office if there are delays with Aadhaar processing— but frequent power outage or running out of her (personal) mobile data means that she falls behind on calls. While we were interviewing her, she had

27 Syed Ishtiaque Ahmed et al., "Privacy, Security, and Surveillance in the Global South: A Study of Biometric Mobile SIM Registration in Bangladesh," in *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*, CHI '17 (New York, NY, USA: ACM, 2017), 906–918, doi:10.1145/3025453.3025961.Security, and Surveillance in the Global South: A Study of Biometric Mobile SIM Registration in Bangladesh,\\uc0\\u8221{} in {\\i{}Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems}, CHI \\uc0\\u8217{}17 (New York, NY, USA: ACM, 2017

Essay V4:

VULNERABILITIES
Intermediaries are vulnerable users, too

to take a break to serve some clients, only to find that she couldn't send a WhatsApp because she was out of data. We offered our mobile instead, which she used to contact her supervisor.

Another challenge is that sometimes the dual roles collapse, and in the eyes of the individual being helped the intermediary becomes the face of the state.[28] For example, while we were interviewing Mahadev, the Aadhaar center franchisee in Bengaluru, he was interrupted by a phone call from a customer asking why his application was rejected. Mahadev mentioned that they are not supposed to give personal numbers, but when an applicant is desperate, he sometimes does, but he often cannot explain that the rejection is at UIDAI, not by him and he feels caught in the middle.

Such expenses also lead to opportunistic behavior such as making extra money on the side. At a Delhi liquid propane gas distribution center, for example, the franchisee said they were forced to sell on the black market because: "the distribution boys come from a very poor background. They don't get enough commission from the government for the distributorship. Sometimes the delivery boys have to travel 15/16 km daily just to deliver one gas cylinder. In Delhi, the boys get Rs 19.50 ($0.30) per cylinder per delivery as commission. In that Rs. 19.50, boys have to manage their vehicles, fuel the vehicle, get a helper, satisfy all the traffic keepers [i.e., sometimes bribe] and then deliver the cylinder. Sometimes the customers might stay on the fourth floor. The delivery boy needs to climb all the floors and then he should deliver the empty cylinder back to the warehouse. All for under Rs. 20."

SUMMARY

It is almost impossible in the Indian context to imagine identity-based transactions without people both outside and inside systems playing the role of intermediary. The role of the intermediary is pivotal but it is not a simple role—intermediaries hold different levels of capital, skills, networks, and have different incentive structures and vulnerabilities. If we borrow from financial inclusion literature, Maurer et al (2013) distinguish mobile money agents as either neutral channels or more helpful bridges.[29] In identity-based transactions, human intermediaries can be obstructive, neutral or helpful (either for profit or not). We found no evidence that those inside the system were "channels" or those outside "bridges"—as

we saw, there were many equally helpful and exploitative. In an ideal world, identity-based transactions would be disintermediated both for efficiency and to avoid bias, but as we found in our research, we are far from this and the bias can be just as positive (helping someone out, being flexible in the moment) as negative (acting out of prejudice). To build policy for how low income users access identity credentials, we first have to address the role of intermediaries, and acknowledge that while they may be exploitative or obstructive (as seen in essay V3), in cases where they are helpful, they also need support in many ways, particularly if they fall between multiple systems.

28 Masiero, "Digital Governance and the Reconstruction of the Indian Anti-Poverty System."
29 Bill Maurer, Taylor C. Nelms, and Stephen C. Rea, "'Bridges to Cash': Channelling Agency in Mobile Money," *Journal of the Royal Anthropological Institute* 19, no. 1 (March 1, 2013): 52–74, doi:10.1111/1467-9655.12003.

Essay V5:

There are persistent tensions **around gender and identity**

LEAD AUTHOR:
Savita Bailur

SUMITRA DIDI WITH HER ART

Essay V5:

VULNERABILITIES
There are persistent tensions around gender and identity

Interviewer: *"And all those years from the time that your daughter was born, to the time that she started going to school...all those years you had kept these documents safely?"*

Shailaja: *"Yes. And I have it safe even today."*

Interviewer: *"Did you know back then itself that such and such a document would be asked later at the school?"*

Shailaja: *"They say that every child needs it, no? They say details of birth and so forth must be shown at school. So I knew it too. They had asked for details when I went to school but I did not have a birth certificate. There were no such things back then. But hereon we will need all that."*

WOMEN AT AN AADHAAR ENROLLMENT CENTRE

Shailaja is a 28-year-old single mother who works in three houses as a domestic help. She left school aged 13, is estranged from her husband who left her for another woman, and moved to Bengaluru with her teenage daughter (her son passed away age 13). When we met her, she was re-opening her dormant bank account after demonetization as employers were finding it hard to pay her with cash. During the course of the interview she also told us that her in-laws had seized her previous passbook (as well as her Aadhaar, ration and voter cards).

Shailaja's awareness of identity documents was repeated by many of the single mothers we met—Kaajol, the kiosk and tea stall vendor who moved to Delhi from Kolkata, Sumana, the widowed ex-garment factory worker in Garudahalli, Jamima, also widowed, a street-cart vendor of bangles and other accessories in Kesarpur. A recurrent theme in our research was that by and large, the women we spoke to were very aware of the need for credentials, but many lacked the networks and resources (time, money) to obtain these easily, or were reliant on others, particularly men. Identity credentials for women are critical, particularly as increasing numbers of women enter the labor force. How can access to identity contribute to SDG 5, to achieve gender equality and empower all women and girls? In this section, we focus on two questions:

Do women face different challenges to men in obtaining and formalizing their identity?

And secondly, once they do have access to "an identity"—does it empower them in some way to ameliorate unequal gender dynamics?

Essay V5:

VULNERABILITIES
There are persistent tensions around gender and identity

WOMEN AT ENROLLMENT

Most of the women we spoke to were very aware of the need for identity credentials. As Shailaja herself said "*without this card* [the voter ID] *it is like we are dead.*" Mothers were very aware of the need for birth certificates and Aadhaar cards for their children. Shailaja's words illustrate this, but Jamima too recounted how her children needed a local address proof to obtain their Aadhaar and be admitted into school:

Jamima: *My kids have been in that school for the past five years, but it was only recently they asked me to provide a local address proof of three years. In 2013 because I had got my gas connection, I could use that as a three year local address proof. Then again for my younger daughter they asked me to submit the three year local address proof. That time I had a bank account, so I submitted that. For two kids I submitted the gas connection documents and for the other two the bank account documents as proof. They are lagging behind by two years because the teacher kept saying that I don't have an address proof. I fought for a whole year and then finally they were admitted…. That year I fought really hard. I overturned tables in the school saying that they had to admit my daughters into school. I was sick of hearing that they can't be admitted because I didn't have a local address proof."*

Much of this determination to identify children is linked to wanting a better life for them—as Parvati, a home help who fought to get an Aadhaar card for her son, said: *"I want my children to go to school and achieve a status that I never will get…I never climbed the stairs of a school."*

Male relatives tended to be key intermediaries in helping women get state identity credentials, echoing similar findings in Tanzania, Cote d'Ivoire, Pakistan,[30] and Bangladesh.[31] In our study, Jamima's father-in-law helped obtain her voter card; in rural Assam, Alvira mentioned "my father, brother-in-law and husband take care of these things." Another Assamese interviewee was uncomfortable being asked about identity and kept calling her 14-year-old nephew in to answer questions because "he knows more about this than I do." Similarly, when she moved to Bengaluru, Shailaja's brother helped her rent a room using his ID, while Kaajol's brother too helped with her documents once she moved to Delhi. While 18-year-old Moromi's father helped her fill in her PAN and voter ID forms, Moromi added: "for a few of the forms like bank forms, I filled it up because my father wanted me and my sister learn how to fill up the form." We therefore heard different explanations for "letting men deal with ID":—"they know better"; "they have better networks and can get things done quickly"; "I don't want to go to the enrollment space without a man"; "it's not the kind of space women should be" and so on.

To some extent, this speaks to reinforcing patriarchal traditions. One of our ice-breaker questions, described in the methods appendix was to ask "how would you identify yourself? How would you introduce yourself to someone?" Jamima responded with "I give people my village identity. My husband's name, I am so and so's daughter-in-law.". Sangeetha, in Garudahalli, said she would identify herself as "Postmaster Mariswamy's wife." This made it even clearer that many of the women identified themselves in a relational way and were embedded in a

30 GSMA, "Driving Adoption of Digital Identity for Sustainable Development: An End-User Perspective Report," February 2017, http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2017/02/Driving-Adoption-of-Digital-Identity-for-Sustainable-Development_An-End-user-Perspective-Report.pdf.

31 Syed Ishtiaque Ahmed et al., "Privacy, Security, and Surveillance in the Global South: A Study of Biometric Mobile SIM Registration in Bangladesh," in *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*, CHI '17 (New York, NY, USA: ACM, 2017), 906–918, doi:10.1145/3025453.3025961.

Essay V5:

VULNERABILITIES
There are persistent tensions around gender and identity

patriarchal network which impacted on enrollment (although there were exceptions, of course).

Many of the women we spoke to (particularly in Delhi, and rural Assam) felt uncomfortable in spaces of identity transactions. One respondent talked of an Aadhaar center as "a male space"—both in terms of functionaries and users. A social worker we interviewed (essay V1) was told by the Food Office to "get your husband or get some man" when she wanted to get a BPL [below poverty line] card. In addition, some female interviewees said they didn't like identification processes (like form filling) because they reminded them of the skills they didn't have. When we observed Shailaja and Parvati opening a bank account, Parvati was denied an ATM card because she could not sign it. She said "each time I have to go the bank and fill that form…it reminded that I must at least know how to sign my name even if I cannot read and write." Finally the delays and uncertainty in bureaucratic procedures impacted on their time away from home, having to be at home for their in-laws, children and so on. Many of our female respondents faced challenges simply because of the time cost of gathering all supporting documents, especially when they work outside the house—as Gudia, a factory worker in Kesarpur, noted, a day's running around to collect documents for credentials means a day's loss in wages.

Another key concern which arose much more for female interviewees than male at the point of enrollment was around privacy, particularly bodily privacy.[32] Ganga, a Rajasthani puppet seller in Delhi wearing the ghungat (or veil), emphasized the importance of her husband's presence during the Aadhaar registration process, to the extent of holding her hand down during fingerprinting. She added: "see even here on my business card which I have given you…it has my son's mobile number and contact. And on this side, it has

my husband's contact details. Nowhere is my mobile number mentioned. My mobile number [a feature phone] is only for my children. My phone is just for the family. My number is not for the public." Men are therefore still intermediaries even though the unique identifier is supposed to be for the woman (i.e., a phone number is supposed to be personal to Ganga, but it is her son's and husband's contact details on her card).

Another example was when we met Narisa at a rural (Grameen) bank in Bilgaon, Assam. She had come in to apply for a loan while we were interviewing the bank agent. She was reluctant to talk, stating "I don't know how to speak" but then told us she was applying for a loan for women (although the loan was in her name it was for her husband's chicken business). We asked if she had faced any challenges opening the bank account for the loan and she said it had been easy as her son had helped her fill in the forms and gather all proofs of ID, although neither husband nor son were able to accompany her that day. Her sense of discomfort was palpable when the male bank agent held her finger down for identification for opening the bank account.

Narisa was also uneasy having her face photographed because she wasn't sure where the photo would end up, and was scared of her husband if it "ended up in the wrong hands," adding that being outside the house was a rare occurrence for her—"I never go anywhere, I don't know much about anything." At this point, she said she had to rush as her boat was leaving (she lived on the Chars islands). After she left, the local fixer stated: "actually they have some traditional rule especially in backward societies that women should be at home only, she should not work outside home." His biased language reminded us of the clash of contexts for Narisa and particularly between a patriarchal domestic space and a patriarchal (in a different sense) outside, business,

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32 Ibid.

Essay V5:

NARISA, INTERVIEWED IN ASSAM, DID NOT WANT HER FACE CAPTURED IN ANY PHOTOGRAPHS

space, and her negotiation of both in the need for identification. This is clearly only one example—women of higher socio-economic demographics, and those more experienced were much more comfortable in these environments. However, Tarini, the flower seller we interviewed in Bengaluru, illustrated the common discomfort on obtaining ID credentials with these words: "why should I go to government offices like a man, and do all this."

ENROLLMENT NOT EMPOWERMENT?

Do women find value in the enrollment and use of identity credentials? It depends. For many women—particularly unorganized workers such as street cleaners and the garment factory workers of Kesarpur—an identity (including Aadhaar, a company ID, voter ID and ration card) was critical. After obtaining these, they felt they not only could access benefits (although they then faced other challenges here). In addition, accessing work through this could also contribute to a sense of empowerment. With credentials for themselves, women can be independent—Shailaja, for example, with her own mobile, her own bank passbook, voter

and Aadhaar cards, is able to carve out her life separate from her estranged husband. For Sumitra Didi, the Madhubani artist, the most important ID artifact was her artist's guild card because it made her proud. Identification as an individual emerged as a critical path to empowerment for these women. Yet others, like Anjali, a homemaker in Kesarpur, felt an Aadhaar card was no use, as what she really wanted to do was work outside the house and her husband would not allow her.

However, tempering this individual desire to *be* identified and be visible is the networked web of dependencies and hierarchies women are deeply embedded in. Digital identities (i.e., being on Facebook and WhatsApp) were closely guarded both by women themselves and their families in this demographic. Many of our female interviewees mentioned mobile privacy—being careful of what they shared on a mobile. Imama in Delhi, while acknowledging the importance of mobiles, was also wary of the dangers involved if her mobile fell into wrong hands. Privacy—at least amongst those we interviewed—was seen as very much a woman's responsibility rather than society more broadly—not to behave "badly" or "wrongly" ("galat" as the word used). This was especially the case of younger women. When we spoke to one father, he said "my daughters do not indulge in any wrong practices. They are good children." Brothers, too, appeared as online identity gatekeepers, either stating that they didn't want their sisters online or helping them navigate their identities online (e.g., by telling them to put a "nice" picture on their WhatsApp profile).

Another twist is that while many women obtain identity credentials—such as ration cards (in the eldest female's name), open zero balance accounts (part of the financial inclusion effort of the Indian government), and apply for increasing schemes for women, many of these are eventually used by men. On more than one occasion (for example as

Essay V5:

VULNERABILITIES
There are persistent tensions around gender and identity

FILLING A BANK ACCOUNT FORM

seen in the case of Narisa in Assam, Madappa in Garudahalli, others in self-help groups) we found women's names being used for loans for their husband's businesses. Hence, many men are reliant on the identification and visibility of female family members, but this doesn't always add value for the women themselves, but rather the men.

Srilatha Batliwala defined women's empowerment as "control over material assets, intellectual resources and ideology" and "the process of challenging existing power relations, and of gaining greater control over the sources of power."[33] Women owning and controlling their own identity credentials go a long way to empowerment (consider Shailaja who recognized this and fought to regain access to her credentials from her in-laws). Yet, Narisa, Anjali and other experiences we heard, along with other primary research, suggests that this has not entirely happened.

THE ROLE OF LABOR RIGHTS ORGANIZATIONS

As increasing numbers of women enter the labor force, they appear caught between organized and "unorganized" systems, with the need to have identity documents but without the know-how. In our interviews, Hasiru Dala, a waste management social enterprise, found that female waste pickers were keen to obtain Aadhaar cards, not just because of access to services, but so that they would not be harassed by police on the street and could "legitimize their existence." There have also been news reports of sex workers feeling "empowered" because of access to Aadhaar[34] but activists spoke to us about the privacy concerns some had voiced to them.

The site where we encountered the most important role of labor rights organizations was in Kesarpur. While many women (and men) work in the garment factories, they can be denied IDs both at work (because they are hired by intermediary contractors who don't want to provide IDs) as well as proof of residence documents at home by landlords. Those we spoke to praised the support of labor rights organizations such as Nari Shakti Manch and Mazdoor Ekta Manch who helped women obtain IDs. Following her own challenges getting an Aadhaar card, Jamima said: "after I started working with Nari Shakti Manch, I myself have enrolled more than 250–300 kids." But much of this enabling others is dependent on volunteer time—she added "but now I don't do any of these things anymore, I don't get time." While these centers are clear, accessible intermediaries, they are also resource-constrained and need financing.

An additional under-supported ID intermediary for women is the sangha or self-help group model—voluntarily organized women's groups

33 Srilatha Batliwala, "The Meaning of Women's Empowerment: New Concepts from Action," in *Population Policies Reconsidered: Health, Empowerment and Rights*, ed. Gita Sen, Adrienne Germaine, and Lincoln C. Chen (Cambridge, MA: Harvard Center for Population and Development Studies, 1994), 127–38.

34 Abhilash Botekar, "Sex Workers Feel Empowered with Aadhaar," *The Times of India*, March 18, 2015, http://timesofindia.indiatimes.com/city/nashik/Sex-workers-feel-empowered-with-Aadhaar/articleshow/46602993.cms.

Essay V5:

VULNERABILITIES
There are persistent tensions around gender and identity

largely in rural regions. In our interviews, we found sanghas helped women open bank accounts and facilitate the process of loans (by obtaining loan-related documents on their behalf, including Aadhaar cards, PAN cards and registering individual enterprises, such as shops, household professions, etc). Respondents such as Shwetha (a garment shop-owner) said that she had learnt entrepreneurial skills and confidence in paperwork. Individual empowerment was possible through collective efforts, as highlighted in interviews by Shwetha, Sangeetha, Venkatamma and other members of sanghas at Garudahalli. This was possible through continuous harnessing of social capital, flatter structures, and shared knowledge systems (a shared understanding of official processes that work, or informal relationships with intermediaries that could be strengthened).

SUMMARY

If access to identity is to empower women and progress towards SDG 5, we need to address the broader context that women are entrenched in. "Women" are neither homogenous, nor passive, not victims, but they are embedded—to greater or lesser extents—in complex relationships. Small changes are happening but depend on the agency of individual women and those who support them. It was the constant harassment by her in-laws and husband which finally led Shailaja to relocate to the city (whether or not she had all the necessary credentials to get her by) for the sake of maintaining her dignity. She pushed herself to learn to sign for an ATM card, she lives independently as sole provider for her daughter, but also depends on her brother's family, initially for obtaining her accommodation, for her daughter's admission to school, obtaining a bus pass and so on. Similarly, Susheela in Garudahalli said the death of her husband made her take socially unpopular decisions such as

working as a single mother, which led her to open a bank account. It may be argued that women such as Shailaja and Susheela have not gained absolute agency and empowerment. Nonetheless, they have sought to navigate and express themselves within specific power-ridden contexts they belong to, and identity credentials have been key in opening this door.

Designers and implementers of ID systems can incorporate gender-sensitivity in numerous ways—they can ensure that a woman's bodily privacy is respected particularly during biometric registration (having female registration agents or dedicated times—some of which is operational but not standardized); address male patriarchy on why women holding their own credentials are critical to their agency (although this is a deep cultural context), and work more in partnership with intermediaries such as labor rights organizations and sanghas.

IMPLICATIONS

These problems and vulnerabilities can be mitigated **with better designed identity systems and policies**

IMPLICATIONS

Essay I1:

Critical issues—such as privacy—are often abstract to the user. Use clear language to describe them

LEAD AUTHORS:
Emrys Schoemaker and Bryan Pon

PRIVACY IS UNIVERSAL BUT CONCEPTS DIFFER

Essay I1:

In carrying out this research on everyday experience of negotiating identity transactions, we often struggled with the words we used to explore abstract concepts, such as privacy, with participants. You can see this in our essays on framing the very concept of identity, where for example, Ganga, the puppeteer in Delhi described her identity first and foremost as an artist. Similarly, translating concepts such as empowerment highlighted how ID systems can introduce new kinds of vulnerability, such as one respondent's experience of bribing intermediaries in his attempt to register as scheduled caste to access employment opportunities. Many of the concepts involved in identity systems are hard to research because they are abstract. For example, how would you define "privacy"? Like so many of the terms in the debate around identity systems it's a tough concept to describe, as it's an abstraction with lots of different aspects to it. Translating abstract concepts into real world language is a challenge, as we discussed in our essays on the material nature of digital artifacts, around questions of individual sovereignty and the nuanced ways in which gender shapes everyday identity practices. The conversations around abstract concepts and abstracted digital systems must necessarily involve engaging with people who do not necessarily share the same conceptual vocabulary to speak about their experiences. These and the many other similar challenges are not just methodological quirks to researching complex experiences, but rather a core challenge in the design and deployment of inclusive, ethical digital systems, in the field of ID specifically but also beyond. This essay outlines the challenges of translating abstract concepts into language that people understand, and the significance of this for the development of ethical, principled ID systems.

The design of new identity systems, technologies, and artifacts has been strengthened by the emergence of common standards and principles, such as the Principles on Identification for Sustainable Development. A strength of these guiding documents is their emphasis on understanding user needs and concerns, and their principles on the use of digital identity technologies to help realize people's "right to participate fully in their society and economy."[1] Yet these overarching frameworks are insufficient in detail to support their operationalization into concrete policy and tangible design. Without an understanding of user's everyday experience of these abstract principles, policy and design runs the risk of making faulty assumptions. A striking example of this is the question of privacy, about which it has been heard said that "the poor don't care about privacy." In part, we believe that this kind of belief is the product of failing to ask users important questions in ways that translate abstract principles to everyday experience.

Getting this right is crucial, particularly around the issue of privacy. The "Principles on Identification for Sustainable Development," make two recommendations explicitly about privacy: #6, "Protecting user privacy and control through system design" and #8, "Safeguarding data privacy, security, and user rights through a comprehensive legal and regulatory framework." The Omidyar Network argues that privacy is central to building the trust in new identity technologies, terming them "trust architectures." We argue that translating abstract principles such as privacy into terms that users understand more [tangibly/concretely] can mitigate the risk of "disempowering individuals."[2]

1 World Bank, "Principles on Identification for Sustainable Development: Toward the Digital Age" (Washington, DC: World Bank, 2017), http://documents.worldbank.org/curated/en/213581486378184357/pdf/112614-REVISED-4-25-web-English-final-ID4D-IdentificationPrinciples.pdf.

2 Mike Kubzansky, "Digital Identity: No Empowerment without Privacy," *Omidyar Network*, July 2014, https://www.omidyar.com/blog/digital-identity-no-empowerment-without-privacy.

Essay I1:

IMPLICATIONS
Critical issues—such as privacy—are often abstract to the user. Use clear language to describe them

REFRAMING PRIVACY: HARMS AND BENEFITS, NOT PII

To operationalize the abstract concept of privacy we drew on established social science research into privacy and developed questions that enabled people to share their experiences and perceptions of privacy in relation to the use of identity technologies. We found that privacy is often described as an abstract principle or in individualistic terms, such as concerns around the protection of personally identifiable information (PII), leading to questions that simply ask if people care about privacy, or the framing of personal information in financial terms. Even if the concept of privacy is understood, framing it around financial dimensions of PII leads to answers that support the conclusion that the poor attach little value to privacy. When we asked key stakeholders for their views, a number highlighted the possibility that "Western" cultural norms around privacy might be dominating debates about privacy and the design of new identity systems.

This framing of privacy is, however, only one way of conceptualizing privacy, and doesn't translate well to every culture and context. Privacy scholars argue that there is no universal concept of privacy, that it "is too complicated a concept to be boiled down to a single essence."[3] Furthermore, others argue that the cultural translation of privacy outside of the West further complicates traditional conceptions of privacy, especially around evolving technologies.[4] Privacy involves experiences of validation, judgment, legitimacy—not just about eligibility for services but also acceptance by community and peers. In order to operationalize the abstract concept

of privacy in a way that elicited people's actual experience and perspectives, we drew on existing research on privacy in India and reframed privacy from an abstract principle or a narrow focus on PII to one of the harms people experience and perceive in relation to privacy failures.[5] In addition to exploring the ways people managed and shared information, we also asked people to identify the kinds of information they were concerned to protect and their opinions on the kind of harms that might result if their private information was revealed.

We found that many respondents were not concerned about identity theft, and were comfortable with the idea of their personal information being collected by others, even when they were aware of the risks of it being stolen. For example, when we asked people whether they were concerned about losing their artifacts or their personal information being shared, they framed their response in economic terms and, being poor, felt they had nothing to lose. As Mansoor, a male street trader of woolens at a Bangalore market, said: "If a poor man's ID like my ID is lost, it doesn't matter…I have nothing to lose. I have no money." Based on this abstract framing of privacy it's understandable why many policymakers conclude that poor people don't care about privacy, develop identity systems that place low priority on privacy. Yet we believe that, to the contrary, everyone cares about privacy, but understanding in what ways requires asking questions in the words and language that people use. It requires seeing the world through their eyes.

3   Daniel J. Solove, "A Taxonomy of Privacy," *U. Pa. L. Rev.* 154 (2005): 477.

4   Syed Ishtiaque Ahmed et al., "Privacy, Security, and Surveillance in the Global South: A Study of Biometric Mobile SIM Registration in Bangladesh," in *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*, CHI '17 (New York, NY, USA: ACM, 2017), 906–918, doi:10.1145/3025453.3025961.Security, and Surveillance in the Global South: A Study of Biometric Mobile SIM Registration in Bangladesh,\\uc0\\u8221{} in {\\i{}Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems}, CHI \\uc0\\u8217{}17 (New York, NY, USA: ACM, 2017

5   A Sethia and N. Kher, "The Indian Identity Platform ('Aadhaar'): The Implications for Citizen-Government Relationships in a Developing Country Context" (The Internet, Policy & Politics Conferences., University of Oxford, 2016), http://ipp.oii.ox.ac.uk/2016/programme-2016/track-a-politics/government-i-civic-technologies/aradhya-sethia-nimoy-kher-the-indian.

Essay I1:

We also found that many respondents shared their personal identity credentials and were comfortable with the idea of their identity being in the hands of people they knew and trusted. Remember Rahul, Ganga's son, who described how people share ration cards amongst each other, saying *"We give our ration card to one of our neighbors and say 'ok today you get your ration with this. Take it for a month.'"* Where relationships are built on trust that is established over time, patterns of sharing personal information are common. Similarly, the use of shared personal identity artifacts also involves trusted relationships. Doddaraghu, the ration shop owner from Garudahalli in rural Karnataka, described how they accept people who bring family members' cards to claim rations because *"We keep seeing the people, who come and take ration from our shop. We interact with them every day."* We found that in many cases the sharing of personal information forms part of traditional practices and is built on trusted relationships.

We found that respondents placed real value on their privacy when it was described in terms of the harms that might arise from privacy breaches in which information exposure contravened cultural norms. For example, Ganga, a craftswoman from Rajasthan who sells handiwork at a Delhi crafts bazaar and her son Rahul described their discomfort at having to share a portrait photograph when registering for an Aadhaar card. For Ganga, Rahul and many other respondents, cultural norms demanded that the female face remained veiled, a demand in tension with Aadhaar and other ID systems' requirement that a recognizable profile photo be supplied. By reframing privacy from an abstract concept to people's everyday experience

we were able to identify how seemingly innocuous aspects of design, such as the provision of a photograph, contravened cultural norms.

Respondents identified health and financial information as categories of information they feared would cause harms if they couldn't control how they were revealed. After respondents had identified these categories, we asked respondents if they would mind their neighbors accessing their medical records or bank account, most respondents said yes, and that it would cause some form of harm. For example, remember how Ayesha, the community health worker in North East India, speculated that women might stop sharing medical information with their doctor if they believed that medical records were linked to databases held by other people in different contexts. We found that people negotiate privacy in terms of a constant shift between the need to reveal certain aspects of oneself, but at the same time to be responsible towards one's duties either as a citizen, or a micro-entrepreneur, etc., vis-a-vis the state. People negotiate a dynamic interplay between a need for privacy and a duty to be visible to the state.

Essay I1:

OPERATIONALIZING ABSTRACTIONS FOR PRINCIPLED POLICY AND DESIGN

Reframing the abstract concept of privacy in terms of people's experiences helped operationalize the concept to reveal otherwise hidden insights. For example, privacy is a highly gendered concept, with female experiences of privacy shaping behaviors and attitudes towards identity technologies. For example, Rahul, the son of puppet maker Ganga, described how the presence of photographs on identity credentials violated cultural norms around female visibility. We also found that privacy can only be understood in the context of the relationships within which it operates, including but not limited to the state. The users we spoke to actively sought to selectively negotiate how and when they were visible to the state. For example, Biswaroop, a sari-seller from urban Bangalore, described how he chose not to report a theft in order to avoid registering a complaint, which would reveal his shop was illegal. In contrast, Devi, a street-side peanut seller, sought to register for multiple credentials in order to access multiple forms of benefits linked to different credentials.

In India, privacy policies are a contested area. On the one hand, deliberations on the Right to Privacy Bill have been at a standstill after the last meeting on it in 2015, apparently following concerns by the intelligence agencies.[6] On the other, the Assistant Secretary General Narasimha stated in relation to the privacy of WhatsApp data, that personal data is a reflection of an individual's personality and integral to dignity and life.[7] More recently the central Government of India stated to the Supreme Court that privacy was indeed a fundamental right, but a "wholly qualified"[8] one. We suggest that taking a user centered approach that reframes abstract concepts such as privacy in terms that people themselves use can help the development of policy that reflects people's everyday experiences and needs.

First and foremost, our research shows that there are real differences in attitudes and behaviors toward privacy based on specific identity categories such as class, gender, and religion. The individual identity and the context of identity artifact use shapes the implications of how identity systems impact people's lives. Yet the specificities of local contexts, such as the nuances of gendered privacy norms or the negotiation of the state's demand for visibility, are difficult insights to obtain. Indeed, the ways in which individuals negotiate all digital contexts are subtle, nuanced practices that are challenging for policy development and system design. Policymakers need to meet people where they are with user research that doesn't rely on abstractions. And that research has to cast a wide net to capture all of these perspectives.

6   Yatish Yadav, "Privacy Bill Held up due to Intel Agency Reservations—The New Indian Express," *The New Indian Express*, March 7, 2017, http://www.newindianexpress.com/nation/2017/mar/07/privacy-bill-held-up-due-to-intel-agency-reservations-1578461.html.

7   Bar & Bench, "WhatsApp User Policy: Personal Data Integral to Life and Dignity, Centre to Supreme Court," *Bar & Bench*, July 21, 2017, https://barandbench.com/whatsapp-personal-data-life-centre-supreme-court/.

8   Krishnadas Rajagopal, "Privacy Is a Fundamental but Wholly Qualified Right: Centre," *The Hindu*, July 26, 2017, sec. National, http://www.thehindu.com/news/national/privacy-is-a-fundamental-right-govt-tells-sc/article19364245.ece.

Essay I1:

IMPLICATIONS

Critical issues—such as privacy—are often abstract to the user. Use clear language to describe them

People have different ideas about what information is sensitive and what isn't, as we showed with our examples of the cultural specificity around images of women and concerns about possible harms resulting from privacy breaches. The best identity systems would follow principles of minimal disclosure to limit what data is shared during identification and authentication, and ideally utilize zero-knowledge proofs to conduct authentication transactions so that the requesting entity only receives a "yes/no" and not any PII. Such measures would make significant contributions towards strengthening individual agency and realizing the promise of empowerment enshrined in the Principles on Identification for Sustainable Development.

It's not just the design of technologies of course, but also the social and political context. Importantly, this also means looking beyond the individual as user to the system as a whole. For example, in the context of privacy, it's important to design systems that can strengthen the ability of intermediaries to play enabling roles, and mitigate their power to constrain individual benefits. Finally, as the debate around privacy legislation in Indian courts shows, identity ecosystems will always function better if privacy laws and regulations are clear and well-enforced.

Essay I2:

Intermediaries are critical—and need more support and accountability

LEAD AUTHOR:
Savita Bailur

QUEUE AT THE COUNTER FOR CASTE CERTIFICATES AT THE TALUK OFFICE

Essay I2:

IMPLICATIONS
Intermediaries are critical—and need more support and accountability

In the course of our research, it was consistently Individuals like Doddaraghu and Tangamma, the intermediaries we discussed in essay V4, who are critical gateways to ID systems. Complex socio-technical systems serving millions of people can never meet the needs of all users, all the time. The result is a long tail of use cases—of users—that struggle to interact with what is often an opaque, faceless system that doesn't support their needs. That these are most often edge cases and less common situations means that those most affected are often already marginalized in some way for being poor, or uneducated, or illiterate.

Yet when an individual wants to access food subsidies, pension payments, voting, driving a car, or other social services, the onus is on them—not the state—to prove their eligibility. For many people, navigating the formal identity systems to do so can range from challenging to impossible without help, creating demand for identity intermediaries such as Doddaraghu, Tangamma, all SIM card vendors, LPG distributors, Aadhaar franchisees and other intermediaries discussed in essay V4 who can facilitate interactions with the system.

Whether these are formal intermediaries who specialize in offering a specific service—for example, expediting caste certificate applications—or system agents who act outside their formal role to provide help to those in need, our research has shown that these kinds of facilitation provide a critical interface between dynamic, messy human lives and rigid technological and bureaucratic systems. Instead of ignoring their presence, policymakers should seek to explore and understand their role first, as they represent windows into the frictions and pain points of any identity system. This doesn't mean that policymakers should seek to eliminate their existence, but rather recognize and understand their presence, mitigate exploitative tendencies through awareness and transparency, and reward positive behaviors through appropriate incentive structures and accountability.

Essay 12:

KNOWLEDGE AND TRANSPARENCY

One key reason people seek out help from intermediaries is because they don't possess adequate knowledge to navigate the system. This knowledge gap can be due to the supply side (the processes and requirements are complex and not explained in sufficient detail in easily accessible formats), the demand side (the individual has limited capacity to find relevant information, due to constraints in education, literacy, confidence, social position, geography, etc.), or, most often, a combination of both.

India is infamous for its complex bureaucracies and multi-level government structures and processes, and we encountered multiple examples of how this manifested in identity systems administration and the challenges faced by individuals. For example, individuals trying to change the name or phone number on their Aadhaar card, or simply get a ration card, which appeared the most convoluted of all ID processes.

Of course, the value of many intermediaries is predicated on the user not having access to information on how the system works. Much of this information is currently disseminated through technology, including websites (e.g., https://india. gov.in/, which has a "Most Searched" feature—with the main results coming up as birth certificates, UIDAI procedures, and class textbooks). Most of those we spoke to were either not literate enough or did not have the skills to navigate websites like this (and many of the links on the websites do not work).

INTERMEDIARY HELP IN FILLING FORM

Essay I2:

When people can't determine which forms or supporting documentation are truly necessary, or how long an application process takes, or what the actual fees are, intermediaries step in to mitigate the uncertainty. If an identity system increases its public outreach and information dissemination efforts, the value proposition for these intermediaries drops. While increased transparency may eliminate work for some intermediaries, we believe that roles based solely on information arbitrage are more likely to exploit consumers and deliver lower-value services.

In addition, our research showed that many intermediaries would welcome increased knowledge and awareness of system functionality. As described in 2S4, we heard from many intermediaries that uncertainty around process often left them feeling vulnerable, as they were shouldering liability for individuals without completely clear knowledge of how their efforts would be received by the system. For example, Mahadev, who as an Aadhaar franchisee, felt caught between UIDAI's decisions and what he had to tell a member of the public if their form was rejected, or Doddaraghu who gave rations out of goodwill if a card was lost, because he knew the delay in reissue would impact on the individual.

By making key information more accessible, system designers and policymakers can increase awareness and transparency in the system, boosting user confidence and reducing some cases of exploitative information arbitrage. Improved transparency and knowledge would especially benefit agents of the state, who often have to take on the liability of acting outside their formal roles in order to facilitate transactions.

INCENTIVES AND ACCOUNTABILITY

Often the points of friction where intermediaries step in are due to misaligned or insufficient incentives within the system or with relying parties. For example, many Aadhaar centers are run by 3rd-party firms contracted by the government, and those firms earn money to enroll people, but not to amend their credentials, for example changing their address or telephone number. This leads to very long queues and poor experience for those seeking to make changes, and thus drives people to seek ways of circumventing the formal process.

Indeed some intermediaries we spoke with justified "earning a bit on the side" because of their poor pay. For state agents and regulated firms, the decision to go outside their prescribed role to help an individual is often done at personal risk and cost. Finding ways to better structure incentives for these employees (such as giving them data quotas to use on their phones) could help ensure high levels of service without increasing their vulnerability.

System designers should also recognize that while the dual role that some intermediaries play can be beneficial because they are able to "bend the rules," it can be just as problematic because they can use power at their discretion. This dichotomy is especially prevalent in rural areas, where traditional village political structure means panchayat officials are expected to be both formal agents of identity systems (i.e., with power to sign off on various paperwork) but also often bestow, or withhold, informal assistance based on longstanding personal relationships. We also saw intermediaries in Kesarpur wielding power against migrants as a form of exclusion.

Essay 12:

IMPLICATIONS
Intermediaries are critical—and need more support and accountability

Policymakers need to first observe or be aware of this dual behavior and research the everyday practices at centers where intermediaries are key. We then need to put in place the checks and balances of intermediaries by taking into account what they risk or gain by playing the role of an agent, and most importantly where they stand in a system of connected power nodes (for example in a rural context, the taluk office, panchayat, Anganwadi and government school are important power nodes in the rural set up). Such monitoring, accountability, and regulation should ensure that they cannot result in an incestuous appropriation of power, particularly against particular class, caste, religion or other demographics. Stronger regulation is needed, and is being implemented.**9**

Related to this, when some of our users reported injustice in being denied credentials by intermediaries, it seemed that they did not have recourse (e.g., Jamima's children being denied Aadhaar, and so unable to attend school or Immama's papers being thrown in her face were just two examples of these). Importantly, exploitative behavior doesn't always come at the point of enrollment, but sometimes even earlier, when feeder documents are needed. We saw this in Kesarpur with the landlords and company owners emerging as critical obstructive intermediaries, creating challenges in obtaining "proof of address" documents such as electricity bills in contexts when rental agreements are temporary and utilities such as electricity may be stolen in any case.

When this appears to be a form of exclusion, there is insufficient information available to users on how to report this behavior or on grievance redressal. The current complaints mechanisms and effectiveness of them need to be evaluated, as the general response from our research was that they were not easy to understand (and there was a fear of approaching local police who may collude with those who wielded the power). India has a strong Right to Information movement, and while there are concerns on how it is currently under-resourced, strengthening the link between RTI and challenging when using intermediaries to enroll in identity credentials (for example, a dedicated phone line for this or localized WhatsApp number a user could call), would strengthen the government's commitment to accountability. Although currently users can report malpractice at UIDAI contact centers, or go to an online portal where one can register a complaint, but none of those we talked to had tried this.

9 PTI, "Aadhaar Centres Only at Govt. Premises from September," *The Hindu*, July 2, 2017, http://www.thehindShikha Salarial, "Aadhar Card: Aadhaar Enrolment Hits a Roadblock as Agencies down Shutters," *Times of India*, July 16, 2017, http://timesofindia.indiatimes.com/city/noida/aadhaar-enrolment-hits-a-roadblock-as-agencies-down-shutters/articleshow/59613791.cms.u.com/news/national/aadhaar-centres-only-at-govt-premises-from-september/article19197918.ece.

Essay I2:

IMPLICATIONS
Intermediaries are critical—and need more support and accountability

Trust plays a large part in how end users approach intermediaries and many non-profit organizations are trusted more than either government or private sector, because their intentions were altruistic. In our research, we saw the importance of sanghaas and labor rights organizations very helpful to individuals (especially women) while John, the visually challenged teacher mentioned it would be helpful to have NGOs as "one stop ID shops" for those who were disabled, because they would be more sensitive and specialized in dealing with disabilities. Policymakers need to understand how NGOs are helping end users get access to identity credentials, particularly those in vulnerable circumstances. Second, they need to address the resourcing they have in place, as the lack of funding was mentioned by Jafar Akbar of the Migrant Rights Group in Kesarpur, as well as Hasiru Dala, the waste recyclers community in Bengaluru.

SUMMARY

Our research found that in the demographics we spoke to, intermediaries were critical in facilitating identity transactions. The challenge is that as the legitimacy of these intermediaries varies, so does their accountability. By tracking and understanding the different roles intermediaries play in a system, designers can identify key pain points and the relative impacts they have. Formally acknowledging these roles and incorporating them into the system design process can enable more of the benefits of intermediaries while mitigating their most negative impacts. Not every intermediary function should be seen as a problem to solve, and instead of banning their presence, policymakers should think about regulating their actions.

Essay 13:

Multiple ID elements are a feature, not a bug

LEAD AUTHOR:
Bryan Pon

MULTIPLE ID ELEMENTS

Essay 13:

IMPLICATIONS
Multiple ID elements are a feature not a bug

Historically, states have developed identity systems in response to specific needs for visibility and surveillance over their residents—for example, birth and death certificates to track populations and thus the allocation of resources, voter cards to determine eligibility for participating in elections, and passports to control state borders and international travel. More recently, many states have launched national identity systems,[10] such as Aadhaar in India, which seek to provide a singular credential that can serve most if not all functions.

These national identity systems are being driven by the increasingly complex needs of the modern state, but also because advancements in technology—especially biometrics, encryption, and mobile telephony—now enable large-scale, digitized identification and authentication on a cost-effective basis. For many emerging market economies, the low penetration of paper-based functional identity systems, such as civil registries (birth, death, marriage certificates), have encouraged the launch of digital national identity systems, in what is often characterized as a classic "leapfrog" process of skipping over outdated infrastructure investments and moving into cutting-edge digital technology.[11]

The incentives for the state to integrate or subsume existing functional identity systems into a single, unifying national identity system are relatively straightforward: there are tremendous cost savings, because disparate and unconnected identity databases facilitate large amounts of fraud, duplicated effort (and identities), and higher management costs; and there are significant benefits to surveillance and visibility, as individuals can now be tracked across domains and over time.

And as our research shows, there are benefits of a single identity credential to individuals as well. Having only one credential, instead of many, can simplify identity management, reduce time and resource costs for enrollment, and streamline access to services. And of course, many benefits that accrue to the state—such as increased surveillance that deters criminal activity, or cost savings from reducing fraud—lead to aggregate benefits that help the individual as well.

Our user research, however, revealed a number of ways in which individuals benefit from having a plurality of identity credentials or elements available to them. These include:

Agency and choice—When people are allowed to present different identity credentials to authenticate themselves, they can exercise some control over both information disclosure and credential security. For example, showing a voter card instead of a driver license would allow an individual to authenticate herself without revealing her age or height or weight. In terms of security, being able to use less important credentials when possible reduces the likelihood that a critical identity credential is stolen or hacked in some way, providing the individual a way to compartmentalize their data and risk. While most people we spoke with did not describe this level of caution, Jafar Akbar revealed how he intentionally tried to manage what he shares: "The government has made [Aadhaar] compulsory in many places, so this scares me a little. For me this card is a tracking device. When someone asks me for ID and specifically Aadhaar, I always ask what other proof can work. I don't say that I have an Aadhaar card."

10 Sarah Coney et al., "Review of National Identity Programs," Evans School Policy Analysis and Research (EPAR) (University of Washington, September 18, 2015).

11 Alan Gelb and Anna Diofasi, "Scoping Paper on Identification and Development" (Center for Global Development, 2016).

Essay 13:

IMPLICATIONS
Multiple ID elements are a feature not a bug

Resilience against shocks—Many respondents talked about the difficulties involved in modifying or replacing state-based identity credentials. Byzantine bureaucracy, convoluted processes, and long waiting times (both in queues and processing) mean that getting a replacement credential carries high opportunity (and sometimes financial) costs. Having multiple official credentials provides individuals with alternate ways to authenticate themselves in case a credential is lost or invalidated. In contrast, if people had to rely on a single credential, any issues (such as loss of the card) could mean that the individual is left without any real way of authenticating herself. This can be especially critical for those with the least capacity to absorb the cost of taking time off work to visit a government agency.

Stretching rigid systems to cover dynamic needs—Some of the people we spoke with kept multiple credentials with different identity information in order to be eligible for the services they believed they are entitled to. For example, a migrant moving to the city will typically have to show proof of a local address from a landlord or utility in order to open a bank account. Yet if they change their voter card that they have with their village address to their city address, they may lose official record of them being from the village, which presents its own problems. In essay V2, we describe the challenges many migrants face in becoming formally accepted in their new community, including access to services. Multiple credentials are thus used by many people as a way to compensate for rigid identity systems that can't accommodate the more complex and dynamic needs of many individuals.

AN IDENTITY CARD IN ASSAM

Essay 13:

IMPLICATIONS
Multiple ID elements are a feature not a bug

BANK PASSBOOK
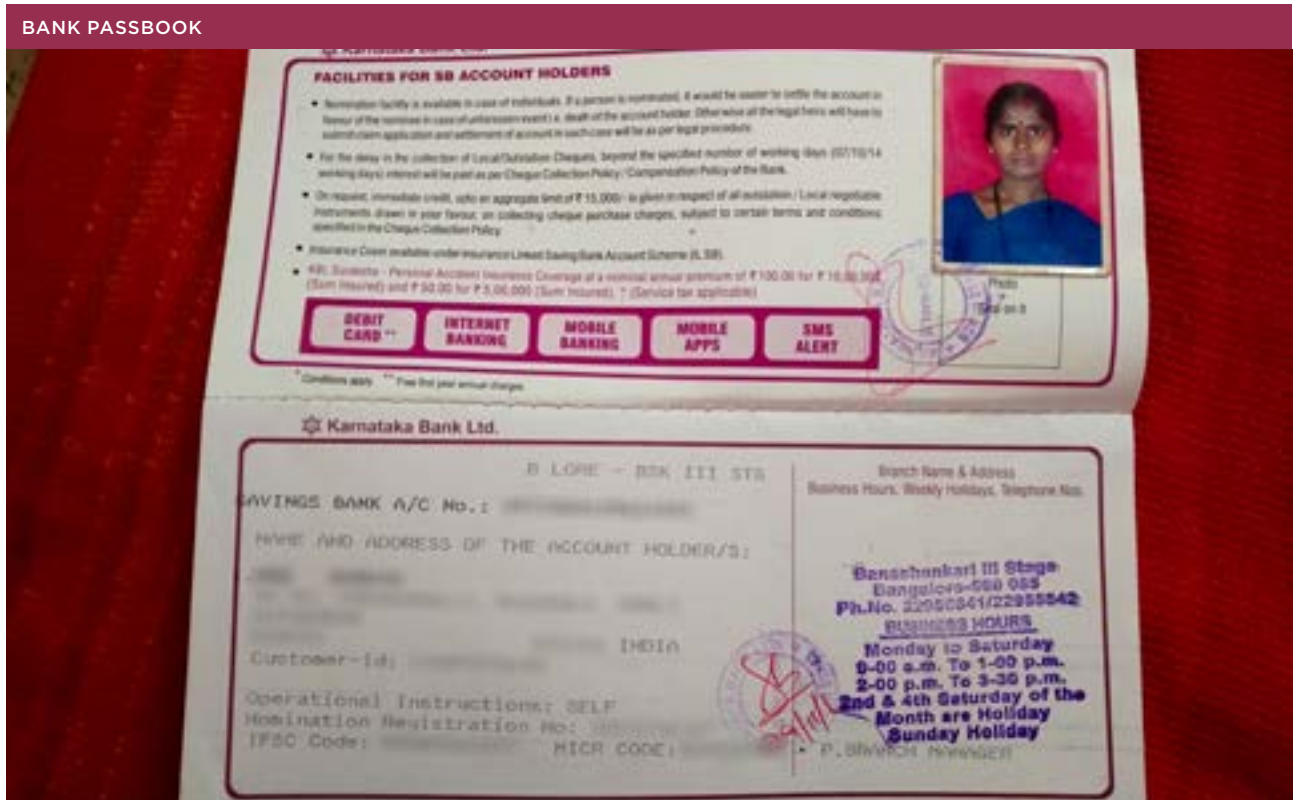
Proponents of singular identity systems will argue that these issues can actually be addressed via the technological architecture and design of the system. Digital identity systems using sophisticated encryption can enable "zero-knowledge proofs," which hide any personal information about the individual and only provide a "yes/no" answer to authentication requests. And it is technically possible to have a single digital identity that is linked to multiple credentials with different information, allowing an individual to have, for example, a signed certificate from the village panchayat and a rental agreement from a Delhi landlord both attached to her singular unique identity. In other words, technologists might argue that a singular identity system, well-designed, could address all of these concerns.

Yet cutting-edge digital technology systems are rarely a great equalizing force in terms of accessibility and benefits. Aadhaar's fingerprint readers are often inoperable in rural areas with poor telecommunications networks, leading to less-secure workarounds. In Pakistan, the NADRA enrollment drive required sending agents on foot into rural mountainous areas, wearing large

Essay 13:

IMPLICATIONS
Multiple ID elements are a feature not a bug

backpacks full of the expensive computing and biometrics technology required to do enrollment. In other words, relying on sophisticated technological systems to bring about inclusion for the most marginalized is fraught with problems.

Although the framing of this issue—multiple identity credentials vs. a singular credential—reflects the lived experience of individuals in India and many other countries, the quantity of credentials is actually not the key issue. The three concerns described above reflect ways in which multiple credentials help people cope with the challenges they face in identifying and authenticating themselves using formal identity systems.

Therefore, while the choices and design of the technological system are undoubtedly critical, we focus here on the needs and goals of the individual. By understanding how and why people utilize multiple credentials to better manage their identities, system designers and policymakers can gain insight into some of the key challenges facing users, regardless of the identity technology being used. Finding ways to design for agency and choice in sharing of identity information, creating mechanisms for easy identity management by the individual in case of shocks, and designing both technical architectures and processes to be more flexible for edge cases will improve any identity system.

CONCLUSION

From India
to the World

From India to the World

"Program administrators and government officials should be exposed to the user side and perspective at each stage."

Technology Designer, Bangalore

If there is one theme that runs across our research, it is that human interactions remain as important to the construction and use of identities as new digital transactions are becoming.

On the one hand, many of our 150 respondents told us that possessing ID credentials opened the door to many direct benefits, such as obtaining subsidies and SIM cards, the ability to vote, drive, and more. Women in particular felt a sense of empowerment when identities formalized them, particularly in entering the labor force. Enrolling in Aadhaar was also a standardized process (in comparison to voter IDs, for example) which many appreciated (although getting the feeder documents for it was often a challenge). Identity credentials, particularly voter IDs and Aadhaar, also imparted an empowered sense of "belonging" and of "being Indian," dynamics that help materialize a sense of inclusion in an imagined community.

On the other hand, as we saw, there were also multiple practices, parallel processes, and meaning in every transaction, not to mention the vulnerabilities many faced. Indeed, we found that the way people use identity artifacts reveals the push and pull of negotiated life in ways that go beyond narrow verification of identity in a specific context. From the use of credentials in the exercise of power to the intrinsic meaning attached to artifacts, identity systems are incorporated into the social fabric of everyday life. This incorporation in many cases is intangible yet full of significance.

Our conversations about these tensions and interplays—between the human and the technical, the analog and the digital, and between empowerment and vulnerability, are already underway. Concurrent to the fieldwork, the project conducted a set of stakeholder consultations, sharing our research process and emerging findings in an interactive process that included workshops in Delhi and Bengaluru with people from a broad cross section of the identity community. At these workshops Indian experts and stakeholders working on identity technologies emphasized the importance of putting users—people—at the heart of the development of identity systems. As the technology designer in Bangalore said at the end of a long workshop on research findings, policymakers and program administrators can develop better identity systems if they understand how users of these technologies experience and perceive the management and authentication of identity.

This final section presents key implications in the words of experts who generously contributed their knowledge, expertise, and insight to advancing this research on the complexity of identity practices in India. They serve as voices from India that can inform efforts to build more principled, empowering identity systems in the wider world. We conclude the report with focused, actionable recommendations drawn from the sections of the report.

Conclusion

From India to the World

IMPORTANT LESSONS FOR US ALL

By surfacing the voices and lived experiences of real people, the Identities Project has generated deep insights into the day-to-day practices of identity in India. These insights reflect learnings from Indian experiences of managing identity artifacts, but they are also insights that others can learn from as they develop identity technologies in other contexts. In many ways, this user-focused, empirical work is a natural complement to high-level guidelines such as the Principles on Identification for Sustainable Development[1] [The Principles], providing the on-the-ground experiences that contextualize and make real the policies and system functions that otherwise exist only in the abstract.

The Identities Project adopted a wide lens approach, exploring the complexity of individuals' use of identity technologies, but going beyond the constraints of a narrow focus on use cases, on "technologies-in-use" and on instrumental functional activities. This approach reveals both the benefits and challenges presented by identity technologies. We found that people find value in the use of identity credentials in a wide range of ways, from recognition of eligibility to receive social services to verification to access private-sector services such as bank accounts and SIM cards. At the same time, we show how the introduction of new identity artifacts can also introduce challenges, such as shifting, rather than eliminating, vulnerabilities. For example, we saw how women were able to use modern identity credentials to formally access state benefits such as rations, but also faced increased vulnerability through male control over their credentials or being made visible through the demand for unveiled photographs.

SEE THE WHOLE PICTURE

The Principles[2] explicitly recognize the importance of designing identity systems that are responsive to people's needs, systems that are "flexible, scalable, and meet the needs and concerns of end-users (individuals)."[3] Too often, however, consideration of the end-user manifests in a range of circumscribed use cases representing specific tasks or processes, and thus misses the broader picture and social context within which those actions take place.

To better see and capture this broader context, we relied firstly on expansive interviewing techniques, but also developed a method of data collection and analysis which we call the "transaction lens." This approach considers each interaction between the individual and the system or its agents as a transaction, and that studying these interactions provides a window into many of the complex underlying belief systems, power relationships, institutional constraints, and hidden meanings that shape the individual's experience managing her identity. By recording these transactions and creating a novel way of presenting those experiences, we hope to expose this complexity in a manner that is intuitive and accessible.

Importantly, the transaction lens sees not only the individual, but also the agent (e.g., a ration shop owner, policeman, bank manager) with whom they are interacting, and can therefore tell a broader story that includes both perspectives, and the beliefs, goals, power relations, capabilities and challenges of each. The transaction lens also sees artifacts, such as a photocopied ID card, as important actors in the interaction, as they are embedded with social meaning and power beyond their original or designed

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1   World Bank, "Ten Principles on Identification for Sustainable Development" (Washington DC: World Bank, February 2017), http://documents.worldbank.org/curated/en/213581486378184357/pdf/112614-REVISED-4-25-web-English-final-ID4D-IdentificationPrinciples.pdf.

2   Ibid.

3   Ibid., 12.

Conclusion

From India to the World

intent. With this lens, even mundane identity transactions—e.g., presenting a ration card to get supplies—are full of meaning and significance. The transaction lens highlights how identities are often located not in individuals but in established relationships with people and institutions.

Remember Nalin, who described how *"the Gram Panchayat used to cross verify and vouch for someone whenever required."* Nalin's identity, like so many others, was rooted in relationships that have history and are shaped by the wider social context in which he lives. The value of identity artifacts is also shaped by context and can mean that functional credentials serve unanticipated purposes, or that foundational systems can fail in their aspiration to be a universal credential. For example, many of our respondents in Assam described the 1971 electoral roll as the most important artifact in their inventory of identity credentials. A design exercise that focused on singular individuals or use cases would struggle to capture these complexities of the everyday presentation of identity artifacts. This is why we argue that taking a broad approach to studying identity transactions—including both end-users and intermediaries—is critical to understanding how these systems can most effectively serve and empower users.

Expanding the focus from singular functions and use cases to the use of identity artifacts in everyday practices reveals how all identity interactions are full of meaning and significance. For example, although verification of identity is required to open a bank account and a bank account is a prerequisite for many other credentials, it's not uncommon for personal relationship to be a sufficient source of authentication. Remember Doddaraghu, the ration shop owner

from Garudahali in rural Karnataka, describing how people bring family members' cards and describing authenticating recipients because *We keep seeing the people, who come and take ration from our shop. We interact with them every day.*

Conclusion

From India to the World

AGENCY, PRIVACY, AND POWER

"Rigorous user education mechanism around privacy control, agency, and choice right from the beginning of the deployment."

Identity Technologist, Delhi

A core tenet of our research has been that agency, privacy, and power are present in every interaction in which identity negotiation takes place, and are critical factors in determining whether identity technologies are empowering for users. Reflecting concerns about the power that states have to determine which identity credential people use, a number of stakeholders from India flagged the importance of considering how use of credentials is empowering or disempowering. As one expert recommended, *Examine how trust and accountability work in the system and how power equations change because of the ID system: how are citizens and users being empowered or disempowered?* Remember how in many of the accounts we've shared respondents such as Shailaja, Anjali and many others described how they had to use specific cards in order to access the services they needed. Remember also how Shailaja described how she had to enter her husband's name, even though they have been separated for years, or how Anjali described the power her landlord had because new identity credentials require evidence of local address. Our research findings emphasize that digital identity credentials rarely disrupt these power relations.

Designing digital identity systems around users' needs, and ensuring that users are aware of their utility is an important aspect of operationalizing the principle of empowerment that is at the heart of the Principles.[4] Strengthening digital literacy—of the utility of digital identity systems, of the way digital identity systems function and the capabilities to effectively use digital identity systems is key to realizing the empowerment potential of these new technologies. Strengthening the ability of individuals to be in control over their process of registration, their ability to understand and access the benefits linked to the use of ID credentials are lessons that designers of ID systems should incorporate into their planning.

As we've argued, in addition to power, privacy is perhaps the most important dimension that determines how users experience the use of new identity technologies. Privacy was also recognized by many of the experts as a critical issue in the design of future identity systems. For example, one technology expert emphasized the importance of anonymity, urging policymakers and developers to *Design for anonymous users too—don't make it mandatory. Identity and services based on identity should be distinct ideas*. Privacy is the most challenging area to address in the design of ethical, inclusive identity systems. As we've argued, the best identity systems should follow basic principles of minimal disclosure to limit what data is shared during identification and authentication, and ideally utilize zero-knowledge proofs to conduct authentication transactions so that the requesting entity only receives a yes/no and not any PII. Putting individuals in control as much as possible over the management of their data is key to realizing digital ID services' potential for empowerment and sustainable development. Addressing privacy issues requires an understanding of the contextual nature of privacy, and the particular harms that result when it is breached.

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4   World Bank, "Ten Principles on Identification for Sustainable Development."

Conclusion

From India to the World

LESSONS FROM INDIA

My advice is for India to serve as a lesson to the rest of the world designing ID systems on "what not to do."

Civil Society Activist, Bangalore

The development of identification technologies in India has been incredibly rapid and incredibly controversial. Whilst it has successfully been incorporated into a wider diversity of government and private sector services, it has attracted a great deal of debate and criticism, as indicated in the quote above. Importantly, nearly everyone we spoke to as part of our research, users and stakeholders, recognized the importance of utility of identification technologies, but were concerned about the implementation. Indeed, discussion at events emphasized the need to assess and articulate the benefits of digital identity systems, particularly as they are layered over informal, analog interactions.

The Principles[5] are an important step towards building a common foundation from which to build identity systems that mitigate the challenges presented by these new technologies and to strengthen their potential to be truly empowering. We argue that these principles are a necessary step towards that goal, but that alone they are not sufficient. As we showed in our discussion around privacy, the abstract concepts embodied in the principles can only be realized if they are translated into the language and understood as practices that users experience in their everyday lives. User research that takes a wide open, transaction based approach can help reveal these complexities that are needed to inform the design of truly ethical and empowering digital identity services.

CONCLUSION

The Identities Project is not a comprehensive account of all ID systems in India nor an exhaustive list of the practices and vulnerabilities that individuals experience. Nor is this a full tally of the benefits vs the harms of identity systems, but rather a richer exploration of the benefits and harms as recounted by the individuals we spoke to. There remains work to be done to explore these benefits and harms in greater depth and to identify further challenges to the successful implementation of digital identity technologies. The experience of identity technologies is always individual, subjective, and specific to context—and each context needs this deep dive. If designers are to build identity based on the strongest of principles they need to know what these concepts mean in the experiences of the users they are designing for. The ultimate goal of building digital identity systems has to be to meet the needs of the individuals who use them. As one of our research respondents put it we want ID systems that make our lives easier, not harder. Empowering individuals and making their lives easier can be best achieved when their views and experiences are incorporated into the design of new digital identity systems.

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5 Ibid.

APPENDICES

Methods in more detail

Methods in more detail

*"What did you use for 'identity' in Hindi…
or Kannada…or Assamese?"*

(Asked by numerous participants at workshops)

RESEARCH AIMS

We had four clear aims in designing this research:

- Surface and convey the experience
  of managing identities and identity
  artifacts, from the perspective of people
  in lower-income communities in India

- Uncover pain points and under-articulated user
  needs around identity management including
  the implications of identity systems from
  voter IDs to Aadhaar cards and social media

- Suggest principles to improve user experiences
  and the design of identity services

- Integrate (1–3) to protect/promote
  individual privacy, agency and dignity

However, even equipped with these aims, we had to
think through many of the on-the-ground realities of
what it meant to "surface and convey experiences"
or understand pain points. We share these here.

EXPERT INTERVIEWS

In addition to our kick-off meetings where
we designed our research questions, chose
target demographics and other details, we
started by interviewing expert informants
working in the "digital identity" space.
We set out the following questions:

- What do you consider the key policy
  and implementation issues around
  identity systems in general?

- Given your role as a [ABC] organization,
  what are the specific challenges you face?

- Which actors are shaping the conversation
  around identity systems?

- What do you consider the current knowledge
  gaps, areas where the sector needs to
  learn more in order to advance?

- How does your organization approach
  user privacy with regards to digital
  data and/or identity systems?

- Do you know of any other work that explores
  the user perspective, either within identity or
  in other sectors, that you found valuable?

- What questions would you want to ask users?

Appendix 1: Methods

Methods in more detail

We consulted the following experts in interviewing ranging from half an hour to an hour, either in person or over Skype:

Table A1: Expert informants

Abraham	Sunil	CIS	Founder
Adinol	Shailee	BanQu	VP Partnerships
Agarwal	Pravin	BetterPlace	Founder
Bansai	Rajesh	ex-UIDAI, now BFA	Assistant Director General
Bhadra	Subhashish	Omidyar Network	Associate, Digital Identity
Blagsveldt	Sean	Babajob	Founder
Chandran	Pinky	RadioActive	Founder
Desai	Vyjayanti	World Bank	ID4D Program Manager
Dubbudu	Rakesh Reddy	Factly	Founder
Fisher	Tom	Privacy International	Research Officer
Hosein	Gus	Privacy International	CEO
Madhukar	CV	Omidyar Network	Director, Digital ID
Madon	Shirin	LSE	Professor
McCann	Neill	UNDP	Lead Electoral Advisor
Medhi Thies	Indrani	Microsoft Research	Researcher
Mhatre	Seb	DfID	Data Innovation Lead
Nagpal	Himanshu	BMGF	Senior Program Officer
Parthasarathy	Balaji	IIITB	Dean, Professor
Porteus	David	BFA	Founder
Reid	Kyla	GSMA	Head of Digital Identity
Seth	Aaditeshwar	GramVaani	Founder
Subramanyam	Kalyani	Naz Foundation	Program Director
Varghese	Anupam	Eko	VP, New Products
Wensley	Mark	Mastercard Foundation	Senior Program Manager, Financial Inclusion
Whitley	Edgar	LSE	Professor
Yadav	Anumeha	Scroll.in	Journalist

Appendix 1: Methods

Methods in more detail

FOCUS GROUPS AND ROUNDTABLES

We also conducted two focus groups with IIITB students to test our interview guide, as well as a radio show focus group with RadioActive in Bengaluru (including spokespeople from transgendered communities, autorickshaw drivers, sex workers, domestic helps who RadioActive works with) to surface some of the discussions around identity credentials. We held regular workshops throughout the course of the research, starting with a kick-off workshop in November 2016, an internal post-pilot workshop in February 2017 with IIITB faculty, broader roundtables in Delhi and Bengaluru in April 2017, and panels in Washington DC, at the Stockholm Internet Forum, and London.

A RADIO SHOW FOCUS GROUP

Appendix 1: Methods

Methods in more detail

USER INTERVIEWS

Demographics

Our interest was in low-income demographics, with a sample of 10% in each site as middle-income smartphone users (on average two people per site as middle income). The occupational profile of respondents included street vendors, domestic helpers, factory workers, auto drivers, and security guards, among others, interviewed in public spaces, or sites of identity-based transactions. We did not consciously seek those without identity credentials and only encountered two respondents out of 150 who had no credentials whatsoever (the Nepalese cooks in Bengaluru mentioned in the report) through our snowball method.

Table A2: Age-Gender Distribution of sample

	10-19	20-29	30-39	40-49	50-59	60-69	Grand Total
Female	1	23	20	17	4	1	68
Male	1	35	20	10	11	3	80
Trans	–	–	2	–	–	–	2
Grand Total	**2**	**58**	**44**	**27**	**15**	**4**	**150**

Appendix 1: Methods

Methods in more detail

Income

Calculating income was more challenging. Although we looked to the Indian National Sample Survey we could not find income classifications easily and so based our criteria on Pew (2015)[1] categorization:

Low: Monthly income less than Rs. 4,000 (under $2 a day)

Low-Middle: Monthly income between Rs. 4,000 and Rs 20,000 ($2–$10 a day)

Middle: Monthly income between Rs. 20,000 to Rs. 40,000 ($10–$20 a day)

Upper Middle: Monthly income higher than Rs 40,000 (higher than $20 a day). (We are aware there is a great diversity within this range, but as they were not our key demographic, we have used this broad scale.)

Table A3: Income group distribution of sample

	Delhi	Karnataka	Assam	Grand Total
Low	25	34	16	75
Low-Middle	4	23	6	33
Middle	12	5	10	27
Upper Middle	4	1	10	15
Grand Total	**45**	**63**	**42**	**150**

(Note: Assam numbers for middle and upper middle demographics were higher as we were asking questions around privacy, which included smartphone usage.)

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[1] Rakesh Kochhar, "A Global Middle Class Is More Promise than Reality," *Pew Research Center, Global Attitudes & Trends*, July 8, 2015, http://www.pewglobal.org/2015/07/08/a-global-middle-class-is-more-promise-than-reality/.

Appendix 1: Methods

Methods in more detail

However, asking income questions is always problematic—first, rather than individual salaries, we asked for family incomes, as this is more relevant for homemakers, students and others. Further, not only do most find such questions intrusive, but a monthly salary estimation may not be apt for traders, seasonal workers or daily wage earners. In the absence of direct information, we calculated salaries (and also starting from expenditure as this was easier for many to talk about) based on disparate information. For example, although one may assume that a domestic worker (such as Shailaja, a single mother) may earn well, we calculated that even if they clean three houses a month at Rs. 1,500 each (as Shailaja did) they would earn less than a pani puri salesman (such as Ajit), selling 20 pani puris a day at Rs. 20 each (both were the sole earners in their families). Therefore, Shailja was in the low income category by these calculations, while Ajit fell into low-middle.

Table A4: Occupational distribution of sample

	Entrepreneur	Organized	Student	Unorganized	Grand Total
Agriculture		4			4
Artist				6	6
Govt employee		10			10
Homemaker				14	14
Non-Profit worker		2			2
Pvt employee		2			2
Roadside hawker				18	18
Senior citizen		1		1	2
Service		22		43	65
Small Scale Entrepreneur	18	1			19
Student			8		8
Grand Total	**18**	**42**	**8**	**82**	**150**

Appendix 1: Methods

Methods in more detail

LOCATION

We decided to focus on six sites for comparison and contrast—an urban and peri-urban (rather than purely rural) location within three states. We chose the states of Karnataka in the south, the National Capital Territory (NCT) of Delhi in the north and Assam in the east.

Table A5: Fieldwork location

	Delhi	Karnataka	Assam
Urban	Delhi	Bengaluru	Guwahati
Peri-urban and rural (all pseudonyms)	Kesarpur	Garudahalli	Bilgaon, Kodolitol, Feharbari

Table A6: Participant distribution across states

	Delhi	Karnataka	Assam	Grand Total
Rural	22	30	20	72
Urban	23	33	22	78
Grand Total	**45**	**63**	**42**	**150**

Appendix 1: Methods

Methods in more detail

The choice of three states was determined by multiple factors. First, geographic range was key in obtaining a diversity across India. Second, although our study was not focused solely on Aadhaar, in terms of state-wise penetration, the UIDAI statistics[2] capture Aadhaar penetration as spread evenly across these states, as Delhi ranking first out of 36 in Aadhaar penetration, Karnataka at 20 out of 36 and Assam as 36 out of 36 (Assam's 7% penetration of Aadhaar is due to a focus on the NRC rather than Aadhaar).

Finally, our choice was influenced by practicalities—with IIITB based in Bengaluru, and the core research team fluent in Kannada, the state of Karnataka was a good first site to test our interview guide and methods. We then worked beyond Bengaluru in Garudahalli, a village of 2,000 around three hours north of Bengaluru (building on previous research contacts). However, in north India, explorations beyond Delhi led us to the peri-urban site of Kesarpur, rather than the exact corollary to Garudahalli in the south. We added to this the "edge" case such as Assam, where Aadhaar has achieved less penetration, but where issues of citizenship in belonging to the National Register of Citizens are just as problematic.

2 "State/UT Wise Aadhaar Saturation" (Delhi: Unique Identification Authority of India, May 22, 2017), https://uidai.gov.in/images/state_wise_aadhaar_saturation_as_on_22052017.pdf.

Appendix 1: Methods

Methods in more detail

QUESTION DESIGN

Our questions initially started with building rapport with the interviewee—if a street trader, for example, buying something from them, and then introducing ourselves as researchers, with a letter of authorization and cards with the research phone number. We then broadly followed the format as below:

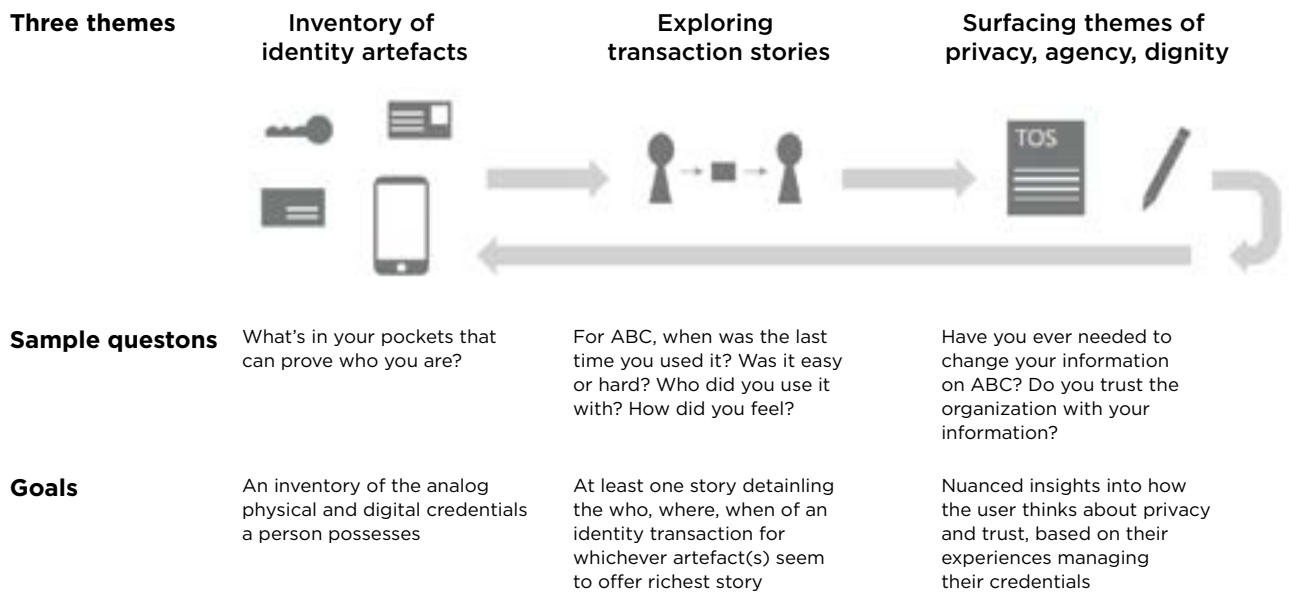| Three themes	Inventory of identity artefacts	Exploring transaction stories	Surfacing themes of privacy, agency, dignity
Sample questons	What's in your pockets that can prove who you are?	For ABC, when was the last time you used it? Was it easy or hard? Who did you use it with? How did you feel?	Have you ever needed to change your information on ABC? Do you trust the organization with your information?
Goals	An inventory of the analog physical and digital credentials a person possesses	At least one story detainling the who, where, when of an identity transaction for whichever artefact(s) seem to offer richest story	Nuanced insights into how the user thinks about privacy and trust, based on their experiences managing their credentials

Figure A1:
Goals and types of questions

Appendix 1: Methods

Methods in more detail

We followed an initial protocol in Karnataka and Delhi (Table A7), and refined it further for privacy questions in Assam (Table A8, following):

Table A7: Initial Interview guide for Karnataka and Delhi

Goals	
Setting up the interview **Practices of using identity credentials** **Background**	Name, phone number (for contact), age, gender, address, last education year completed, house owner or no?, mobile phone? primary income source
Establishing incentives for enrolling **Practices of using identity credentials** **Pain points**	Can you tell us what it was like to sign up for ABC? Why did you sign up for ABC? (also listen out for peer group, friends, family?)
Understanding transaction stories	For all of these, the story of the transaction: What did you use the last time to prove who you were? Who did you interact with? How did you feel about it? Ideas/prompts: For government: utilities, buying land, loans, traveling, etc. For private-sector: SIM, bank account, employer, purchases For individual: Informal work, money lender, etc.
Exploring intermediaries and trust	What was the process like in obtaining ABC? Who helped you? Or did you help someone else? Do you get help from govt officials/bank managers, etc? What was the experience like? Are there some people (formal and informal) who you have trusted more and had a better experience with? What kinds of experiences have you had—positive and negative?

Appendix 1: Methods

Methods in more detail

Table A7: Initial Interview guide continued

Goals	
Deconstructing privacy	How would you feel if any of your cards were lost (or if someone used your Facebook under your name)?
	Has someone finding out about identity ever caused problems? e.g., problems with privacy on Facebook? Information on Aadhaar card (name (caste?)/address)?
	Who would you trust most with your personal information? government, mobile operator, Facebook?
	How would you feel about providing access to your social media information in exchange for financial services?
Exploring what agency might look like	Have you ever tried to change any information on a card? What was that experience like?
	What aspects of information should be on an Aadhaar card? Or all other cards? What do people know about you on Facebook?
	How do you manage all your ID cards, if you have to apply for one, renew one, etc.
	What do you think about the control over the information in the identity credential—are you satisfied/worried about who has access to it?
Understanding how dignity is defined and experienced	How do you feel now about the process of getting ID cards? Do you ever feel challenged?
	Do you have any friends or stories of anyone who has had a difficult experience with getting or using an ID card?
	With reference to social media—do you know of anyone where their information has been misused?

These questions were extremely useful in giving us an insight into user practices. However, before conducting fieldwork in Assam, we felt we needed to refine our protocols to a) focus more on privacy b) on smartphone usage (the first two were related), and on male/female dynamics (following feedback from roundtables). Therefore, our questions became more streamlined and focused:

Appendix 1: Methods

Methods in more detail

Table A8: Refined interview guide for Assam

Goals	
Noting demographics, inventory, practices	What identity credentials do you have with you?/Do you have different names/ addresses on any of them (a reminder we are not from the government!) Interactions (agency): Which ones did you use over the last week/month—and with which institution (different officials)? Which institution asked for which credential? Do you ever show one ID in place of another? Why is that? Dignity: Were you able to decide which credential to show? How did these interactions make you feel?
Understanding male/female dynamics	Who keeps hold of the ID cards in the house—is it the husband/wife? Why? Who enacts most in transactions? Why?
Understanding smartphone usage	What kinds of identity-based actions or transactions do you have to do on your phone, e.g., to access a bank account/Facebook etc etc? How do you find them? Do you know what happens to the data you enter? How do you feel about sharing this information? (To a woman—do you think you might use a smartphone differently to a man and is there anything you are more careful about? To a man— how do you feel about your wife/sister/daughter, etc., using a smartphone?)
Deconstructing privacy	When you enrolled for a SIM/Aadhaar/bank account, what information did you give? Who/which institution holds this information? Specifically, who has access to your telephone number and your biometric data? Do you think the information is shared with anyone? Are you comfortable with them sharing it (with govt depts, banks, private companies)?
	How would you feel if every time you used this XXX (card, SIM, bank passbook), a record of that was sent to the XXX government so that they could track your activity over time? What if it was the police who could track your movements and interactions—with hospitals, PDS etc?
	Some companies are now offering lower prices to people who provide personal information. For example, some banks will offer better loans to people who can provide a history of their mobile money transactions, or even just their phone calls and airtime top-ups. What do you think about this kind of deal? Would you be willing to share your detailed mobile phone records with a bank or other company if it meant you could get a better loan?
	How would you feel if your medical records were shared with your family/friends/ colleagues? Would you share your health information with a new health service if they gave you a discount or cash promotion for all of your previous health information?
	What information would you be comfortable sharing? What would you never share?
Final note	Keep sensitively asking "why do you think that/why is that?/can you share an example?", e.g., if respondent says "I'm not educated enough to know that," ask "why do you think that?" or "I think the government can be trusted more than the private sector"—why?

Appendix 1: Methods

Methods in more detail

We found sharing our own identity credentials (especially to verify our research role) a light-hearted and casual starting point to enter into discussions on artifacts to both introduce ourselves and the research on identities. Simple terms for documents were easy to translate, although understood in different ways in different states: For a voter ID card, most respondents used the phrase "voter ID," though in Delhi, another term used was "pechaan patra" (literally document which recognizes you); for a birth certificate, the English was sometimes used, or sometimes translated to "janma-pramaan patraa"; public distribution system (PDS) cards were commonly referred to as "ration cards" or by color: BPL (or below poverty line) as green, AAY (Antodaya Anna Yojana) (AAY or poorest of the poor) as red/pink, etc. Other certificates we heard (not carried on person) were the caste certificate or "Jaati-pramaan patra"; proof of address was "paani-patra" (rural), "rent agreement" (urban), while in Garudahalli in Karnataka, respondents mentioned "vasa-sthalaa drudikarana patra" (closest translation = authorization letter for status of domicile).

The artifact break down in interviews was as follows:

Table A9: ID inventory

	Delhi	Karnataka	Assam
Aadhaar	43	57	9
Voter ID	38	56	35
Ration card	16	35	19
Driving License	11	15	10
Passport	4	3	8
PAN Card	20	24	25

Other demographic distributions were as follows (all self-reported):

Table A10: Occupation-gender distribution of sample

	Entrepreneur	Organized	Student	Unorganized	Grand Total
Female	3	20	5	40	68
Male	15	20	3	42	80
Trans		2			2
Grand Total	**18**	**42**	**8**	**82**	**150**

Appendix 1: Methods

Methods in more detail

Table A11: State-wise gender distribution of sample

	Delhi	Karnataka	Assam	Grand Total
Female	19	22	23	64
Male	26	39	19	84
Trans		2		2
Grand Total	**45**	**63**	**42**	**150**

Table A12: Marital status distribution of sample

	Assam	Delhi	Karnataka	Grand Total
Married	27	35	43	105
Separated			2	2
Unmarried	15	9	17	41
Widow		1	1	2
Grand Total	**42**	**45**	**63**	**150**

Table A13: Religion distribution of sample

	Delhi	Karnataka	Assam	Grand Total
Buddhist	2			2
Christian		1	3	4
Hindu	32	55	11	98
Jain	1			1
Muslim	10	6	28	44
Sikh		1		1
Grand Total	**45**	**63**	**42**	**150**

Table A14: Resident status of sample

	Delhi	Karnataka	Assam	Grand Total
Migrant	34	31	28	93
Non Migrant	11	32	14	57
Grand Total	**45**	**63**	**42**	**150**

Appendix 1: Methods

Methods in more detail

Table A15: Income distribution of sample on migrant status

	Low	Low-Middle	Middle	Middle–Upper Middle	Grand Total
Migrant	48	13	30	2	93
Non Migrant	29	15	10	3	57
Grand Total	**77**	**28**	**40**	**5**	**150**

STORAGE AND ANALYSIS

We translated and transcribed the interviews to English, established a process and storage protocol using a tracking sheet to record details on the interviewees (demographics), process (transcription to coding to analysis, etc.) and on the interview itself (language of interview, by whom, etc.) We utilized a two-stage process for qualitative analysis of the transcripts. In the first stage, after our very first pilot research in Bengaluru, we held numerous working sessions to discuss core emerging themes and undertook a day of affinity mapping. After this, and before we began our Assam fieldwork, we then created a more formal coding guide which served to both analyze our Karnataka and Delhi data, as well as prepare us for Assam (codes available on request). We then coded all interviews, and field notes.
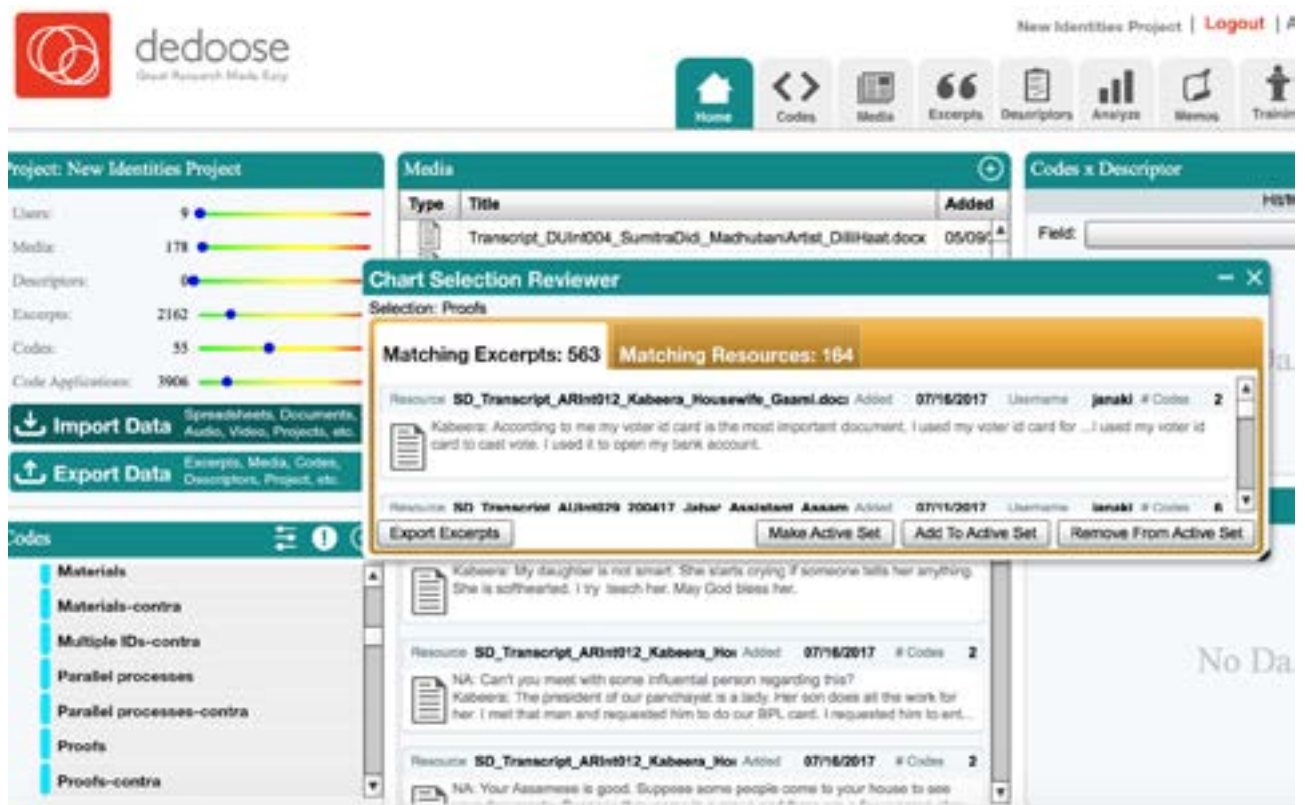

Figure A2: Coding and qualitative software

APPENDICES

A reflexive discussion of privacy, agency, dignity

APPENDICES

Appendix 2: Reflexivity

"If you go to the field and ask people 'hey, show me your ID cards,' no way on earth is someone going to answer you, they're going to say 'who are you?' So it was really about hearing people's narratives, their contexts, building rapport…. The stories were poignant, sometimes painful…so as a researcher you always have to think about the balance between objectivity, subjectivity…and how can we substantiate these individual findings to an overall policy level?"

Sarita Seshagiri, researcher

We would like to reflect further on the methods discussed in Appendix A1 here—how do you approach a stranger and ask them to share their thoughts around identity, obtaining identity credentials, practices on privacy and other identity-based experiences? As one respondent told us in Delhi when we asked how he felt about sharing his data with the government: "well I don't know you and you are also asking me all these questions, and I don't know what you will do with it." Here we discuss some of the issues we faced as a research team, including "untranslatable" terms, issues of interviewee confidence, trust and recall, how to capture and store PII (personally identifiable information) and challenge of writing up 150 interviews, including addressing our own cognitive biases. Researching identities also made us as researchers reflect about our own identities and identity credentials. We hope others conducting qualitative research on new practices of identities in a connected age may benefit from these thoughts.

Appendix 2: Reflexivity

THE "UNTRANSLATABLES"—DIGITAL IDENTITY, PRIVACY, AGENCY, DIGNITY

As we began the project we drew on our experiences as social researchers, promising to step back from the exclusive focus on a single artifact, or indeed on a single identity system. Even in our initial conversations, the array of components of identity was large and heterogeneous enough to preclude us from speaking about identity in the singular. We agreed, from the start, that we would be open to discussing multiple elements of identities with respondents, ascribed and constructed, digital and non-digital, state-based and private-sector.

This wide lens immediately raises important questions, such as what happens when pre-digital forms of identity become codified in a digital form? Eventually, of course, we had to discern "what do we mean by identity at all" and how to translate these concepts in our interviews. We talked about "how would you introduce yourself to others" (gurtoo, kandoo hidiyedoo in Kannada or pehchaan in Hindi, porichoy in Assamese) or "how would you like others to see you"—all of which struggled to capture the multi-dimensional nature of the term (and we also had varied responses from responses as to "well, it depends on what context—the other doesn't have to know everything about me").

Respondents often equated privacy ("what do you see as information which is only for you") to financial privacy, and in some cases bodily privacy, but name and address were often seen as in the public domain, and not personally identifiable information (we discuss this further in essay I1). It was also marked that privacy was seen as the owner's responsibility, e.g., for women not to post "wrong" information online.

Assam was the last state in which we conducted research and following feedback at workshops and a review of our preliminary findings, we took a deep dive into privacy. This presented the greatest challenges in formulating questions, particularly those that moved beyond understandings of privacy as PII to broader perceptions and experiences of privacy. Reframing privacy from PII to probing around harms caused by privacy breaches, particularly in a digital context, provided insights into how identity technologies might cause harms through reducing individual ability to control what others know about them. To do so, we built two specific hypothetical questions around health and financial information. Respondents had not specifically chosen these as areas of concern, but when we set up scenarios, they agreed these were sensitive and would be of concern if shared in conjunction with other data. We ensured these data points were not treated as first-hand user experiences in themselves but rather as opinions or user perceptions and as clear artificial constructs to hypothetical questions.

A final digital/non-digital distinction was that while we were focusing on identity as credentials—and not on the material (card) nature of it—every respondent talked of identity in terms of a card, rather than a digital concept. The jump here from "Aadhaar card" to "Facebook" as a digital identity was therefore also problematic for some respondents—"what does Facebook have to do with Aadhaar?" This led us to hypothesize that identity as an overarching concept was difficult for many to understand—whereas identity which serves a purpose (identification for government, self-identification for social media) was more digestible.

Appendix 2: Reflexivity

APPENDICES
A reflexive discussion of privacy, agency, dignity

In addition, two significant challenges we faced were firstly that the research team felt uneasy in many sites of identity-based transactions such as government offices (private sector environments such as SIM card providers felt more comfortable). This was partly because of the environment of government offices (similar to what many interviewees felt), but also because members of the team sometimes felt they were adding another layer of questioning to interviewees who sometimes already appeared hassled. Secondly, it took a while for many of the research team (again like the interviewees) to accept the research aims, as these seemed extraneous ("that's just how it is"). Finally, questions on caste and religious groups were largely seen as as too intrusive and so it was a challenge for us to directly explore potential issues around identity credentials and these.

CONFIDENCE, TRUST AND RECALL

As with any in-depth interview process, we encountered many subjects who were hesitant or refused to speak with us. In the research design, we initially considered compensation in the form of mobile airtime, but we decided against this in case it artificially skewed responses just for compensation. However, as discussed in Appendix A1, we did buy goods from traders as an opening interaction (and kept a photographic archive of them)—these also formed a useful material exhibit on the history of the interviewees as well as personal recollections. But here we outline challenges specific to this research topic that exacerbated common challenges. The first was that identification is so routinized that many thought it immutable ("it's like this, we can't do anything about it, why talk about it"—also generally regarding bureaucratic processes). Again, this perspective was sometimes shared by the research team, some of whom found the questions harder to conceptualize and operationalize—the transaction story lens in particular was tricky to apply and we found it needs further development in the field.

At other times, identification, especially for lower income demographics, was seen as something beyond the interviewee's capacity to discuss ("what will I know about answering for a study? I don't even speak English. I just do what I have to. Bank cards and such are for educated/moneyed people.") Women (especially in north India and Assam) were particularly hard to solicit experiences from, as they would sometimes direct us to male family and friends stating they "knew more about these things" while they—the women—"only sit at home." An additional concern around identity was whether we were gathering information for malicious purposes. Our Assam researcher mentioned that she faced aggressive groups crowding around her when she asked respondents about citizenship issues. People, especially men, were confrontational and told her that it did not matter what they said, and suspected her of gathering data to frame them. "You people from the government are going to write whatever you want. Why ask? We are legal residents and have been living here since generations."

Despite us repeating our research perspective, rather than "checking up on people," interviewees might have initially also felt the need to give positive responses especially in the case of Aadhaar. There was a sense of having to comply as it is a government initiative, so as to not seem like a "troublemaker." Thus initially the answers to questions such as "why did you make an Aadhaar card?", would receive responses like "the government has said we should make it, so of course we will" and "being a good citizen."

Appendix 2: Reflexivity

APPENDICES
A reflexive discussion of privacy, agency, dignity

We addressed lack of confidence by reiterating that all information would be anonymous (to the level of village names), that there was no "right or wrong answer" and in the case of women, we did particularly want to talk to them, not their husbands. We also built rapport by ensuring female researchers could talk to female interviewees, while young male researchers could bond on mobile phone content and "skirting the law" with young male interviewees. Our research credentials also went a long way in assuaging concerns. Once rapport was established, almost all interviewees allowed us to audio record (but not video). In all cases, we respected interviewee privacy—where recording was not possible or where interesting issues arose in spontaneous discussions, we noted these down. From the outset, our aim was a local language speaking mixed gender research team. However, in Assam, while we spoke Assamese, we did not speak some Bengali dialects (including Dhakaia, Goalparia and others), but we found the addition of an interpreter broke rapport.

One final issue specific to our questioning about identity credentials was that of memory recall for what are typically infrequent events. For any of us, recounting the chronological sequence in which we obtained identity credentials is tricky. In addition, we often only remember the situations which present challenges as we do not recall the details around smoother processes, other than that they were easy (a common story-telling narrative is to focus on a beginning (problem), middle (challenging circumstances) and end (resolution).[3] This tended to bias answers (we often only heard challenges). In addition, midway through the research we added a question on which identity credentials interviewees had been most asked for in the past month and whether they had been asked for one card in particular. This

was extremely hard for interviewees to recall and reiterated how our identity transactions are often so ingrained that they become imperceptible to us.

EXAMPLES OF INTERVIEW INTERACTIONS

In hindsight, despite all these challenges, eliciting such personal experiences was only possible through building rapport, speaking local languages, asking open-ended questions, and the overarching skills of the research team. One example of sensitive questioning (in Garudahalli, translated from Kannada) was:

Sangeetha (interviewee): *"What will you do from a study on this?"*

Researcher (Sarita Seshagiri): *"Just to understand people's perspective on the use of these ID cards that they possess. What do they think about the services or facilities they have or are supposed to have access to? Next, people also have their identity online in terms of Facebook or WhatsApp. Then, how are people managing their identities. In general, what could be improved for people in terms of privacy and security of data."*

Ragamma (interviewee): *"When you came through Mr Jagannath and you mentioned your name, and you introduced yourself as someone's daughter and granddaughter and who you are, where you are staying. That gave us a lot of trust. We know Mr Jagannath really well. His forefathers have known my forefathers well. We could get a sense that you are someone we could trust. So for someone like you, I will have no issues telling you my personal details. If someone from somewhere just walks in and asks me, I will not bother to answer and speak."*

Nagamma: *"We will not speak with such people."*

Researcher: *"Why will you not speak with others?"*

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[3] Catherine Kohler Riessman, *Narrative Analysis* (Newbury Park, CA: Sage, 1993); Barbara Czarniawska, *Narratives in Social Science Research* (Newbury Park, CA: Sage, 2004).

Appendix 2: Reflexivity

Ragamma: *"Somehow…we do not know what kind of people they are. We cannot guess what is in their minds and hearts."*

Researcher: *"I am glad you trusted…honoured. Tell me, you must have been to Bangalore several times?*

Ragamma: *"Yes of course. My daughter married and is now settled in Bangalore. So I keep going and visiting her every now and then.*

Researcher: *"What difference do you see between Bangalore and Garudahalli?*

Ragamma: *"The thing is you cannot trust the people there (Bangalore). Here in the village, the ambience is so different. You can talk to people and share things. There the people around us are not people that we know really well. They will be saying things and thinking things. Some will dupe you into trusting them."*

Researcher: *"Have you experienced this? Or, have you heard people say so? Newspapers?*

Nagamma: *"We see the news and we also read. We get to hear these things."*

Ragamma: *"I have studied only till the 3rd standard. I have not studied much. But I do know there are so many fraudsters in Bangalore."*

Researcher: *"Tell me about it. I want to know."*

Ragamma: *"You know how things are. Fraud is a fraud."*

Researcher: *"But I want to know. Quite possible that what you see as fraud, and she (Sangeetha) thinks is different. And what (Sangeetha) sees as fraud is different from what she (Nagamma) thinks or what I think. So do tell me."*

Another skillful example was in the high migrant area of Kesarpur:

Researcher (Ananya Basu): *"So if anyone asks you what is your identity? Do you relate to your village or Delhi?"*

Rumina (wife): *"Village, we are from our village."*

Researcher: *"You feel like you still belong from Chhapra?"*

Asif (husband): *"I'll tell you the truth, there's no need to hide anything. We are around four brothers. Our father's land is not enough for all four to settle in the village."*

Rumina: *"We do go and visit at times. Once our kids grow up and earn a living maybe we can think of building a house."*

Asif: *"My brothers live there, we visit once in 2/3 years for 10 days and come back."*

Researcher: *"Like you I am also an outsider here, I am from Calcutta but working here in Delhi now…"*

Asif: *"Where in Calcutta?"*

Researcher: *"Do you know Sealdah station?"*

Asif: *"Tell me where exactly."*

Researcher: *"You know Calcutta?"*

Asif: *"Yes I know Calcutta very well."*

Researcher: *"I stay in south Calcutta, Jodhpur Park. I've grown up there so if anyone asks about me, I always relate myself to Calcutta. It is what I identify with, so I understand. But now that I'm working here in many instances I have been asked for a Delhi ID proof. Although these documents are only paper, but even so when there is a stamp to certify a residence proof, there is a voice inside that says that although this document states otherwise…"*

Rumina: *"But my home isn't here…"*

Researcher: *"Yes, but my home is actually somewhere else. So this is what I want to ask you, have you felt the same as well?"*

Appendix 2: Reflexivity

APPENDICES
A reflexive discussion of privacy, agency, dignity

Asif: *"The Aadhaar card was made only because it is a necessity. It is required for everything nowadays. Whether it is the company, or where we are staying on rent, or even if we are traveling to any place, the Aadhaar card is a must. It is not my identity."*

Such personal interactions were only possible because our research team was humble, patient and open, and shared their own experiences and conflicts (although we were also aware of biasing responses, as we discuss below).

PRIVACY IN PHOTOGRAPHY

We were meticulous about both privacy and PII in photography in our research design. Early in the research, we agreed not to use written consent forms as signing a document presented an extra level of concern and intimidation for many of our respondents. As the "informed" element of "informed consent" was more important to us than if consent was written or oral, we instead showed reports of our work on our research mobile phone to ensure the respondents understood the purpose of the research.[4] We strove to balance the goal of using photography to raise the visibility of respondents while also protecting the privacy of those for whom photos were a concern. For this reason, we have fewer photographs of women, particularly in Kesarpur and Assam (where many female respondents stated "my husband will not like it"). We also maintained judgement where some interviewees were pressurized by others—for example Maqbul, the Grameen bank manager in rural Assam was happy to have his photograph taken, but when Narisa, a customer (essay V5), did not want hers taken, he insisted "let them take a photo, nothing will happen."

We respected Narisa's privacy and only took a photo of her using the fingerprint reader for her bank account, with no photo of her face, and showed it to her to make sure she was comfortable.

A contrary challenge was when respondents wanted to use us as a voice—for example in Kesarpur, some respondents were so fed up of their conditions that even though they were aware of the privacy risks, they asked: "make a video of us and show everyone how bad our working conditions are… we don't care." However, we had to reiterate the risks of doing so. Equally, we were extremely careful taking photographs of any cards with PII—without exception, respondents were very free sharing these (as they did not consider the details as private) but we made sure photographs were blurred (an example was of Devi's ID cards— which all showed different dates of birth and two different names but we blurred all other data on the cards). Finally, we also conducted a responsible data audit with SIMLab who reviewed and approved our data capture and processing.

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4   Josh Woodard, "What Is Informed Consent in Digital Development Photography?," *ICTWorks*, March 16, 2016, http://www.ictworks.org/2016/03/16/what-is-informed-consent-in-digital-development-photography.

Appendix 2: Reflexivity

ANALYSIS AND WRITING UP

Qualitative research is interpreted twice. First, by the interviewee (their responses, storytelling, performance and so on. For example, one question was "why do you have an Aadhaar card—how has it helped you" and when a non-Indian researcher was present, the answer was "because I am Indian," but in the presence of the Indian research team, it was much more practical, about obtaining benefits from the state. Second, interview responses are interpreted by the interviewer (equal "performance" in the interview about learning but also subjectivity in analysis and writing up). We were clear that this research would not and could not be representative, but we were also aware of our own biases when designing this research and open to answers which contradicted these. For example, while initially we asked questions around caste, gender, and other "vulnerable groups," we found that these issues were not simple, but rather intersectional and layered—a woman may find it more helpful to have a man assist in "making her ID cards" or someone of a lower caste may have more benefits because of a caste certificate, rather than another individual who is poorer but of a higher caste. We specifically accounted for this by building in codes to flag data that was in contradiction to our initial thinking.

Finally, we were also aware of researcher impact, when we heard responses such as "I did not know so much about information being misused. But now having spoken to you, I understand the importance of personal data and how it can be misused" (Amit, henna artist) or the Tibetan sisters who felt we were trying to tell them that the problems they were facing in changing their contact number for the bank in Ladakh was "for their own privacy" (essay V2). We had to emphasize that we were only asking questions, not giving suggestions. In addition, we were conscious—as in all research—that while we had invaded the privacy, personal space and time of our very generous respondents, we did not have the chance to discuss the findings with them. We are grateful to all respondents, from whom we learned so much and on whose behalf we are working in this study.

APPENDICES

Personas for Designers

Appendix 3: Personas

The Identities Project is about talking to regular people as they go about their day-to-day lives, learning from their stories and perspectives how individuals navigate and manage their identities in different circumstances.

Even after interviewing more than 150 people across three states, including all levels of income, education, gender, literacy, caste, we have still only scratched the surface of the diversity of lived experiences around identity in India. And while this project was not designed to be statistically representative of any population in India, we do think it's helpful to highlight a few individuals who embody distinct characteristics and experiences.

The four individuals described here are actual people (though their names have been changed), these stories are their real experiences, and these words are their own expressions.

Appendix 3: Personas

Mansoor Ali

Mansoor is a sidewalk shopkeeper of woolens.

He is a jolly man, who likes to laugh through his sorrows.

NAME:
Mansoor Ali

GENDER:
Male

54 YEARS

MARITAL STATUS:
Married

DEPENDENTS:
2 sons, 1 daughter,
(married with a child)

PROFESSION:
Woolen clothes seller
on the sidewalk

SALARY: RS.150 –
RS.250

HOME OWNER:
No

OWNS PHONE:
Yes

EDUCATION:
None

SOCIAL MEDIA:
No

IDENTITY ARTIFACTS:

AADHAAR (A)	VEHICLE LICENSE (VL)	DRIVING LICENSE (DL)	HOSPITAL CARD (HC)
VOTER'S CARD (VC)	RATION CARD (RC)	BANK PASSBOOK AND ACCOUNT (B) No ATM card	

LOCATION:
Bengalaru (near Tribhu-
van Theatre)

LANGUAGE:
Kannada

Bangalore
Rural

Appendix 3: Personas

Mansoor Ali continued

PERSONAL PROFILE

Mansoor is a sidewalk shopkeeper of woolens. He is a jolly man, who likes to laugh through his sorrows. He has been carrying all his ID card originals (Aadhaar, voter's card, vehicle registration card, driving license, and bank deposit slips) and also his wife's Aadhaar card, voter's card, from the past few weeks. This is to help him quickly exchange cash at the nearest banks (due to the demonetization which had just occurred before the time of interview).

He has an informal moneylender, who comes to the sidewalk several times a week to lend and receive cash. Mansoor also has a small pocket diary of the lending and borrowings. He was keen to safeguard the privacy of his relationship/identity of his moneylender, since he said he has known him for several years and did not want anything untoward to happen from us asking for the identity of the moneylender or taking snaps of the diary, etc.

Mansoor suffers from fits and also appears to have a neurological disease. He recently was admitted to the ICU unit of NIMHANS [a mental and neurological health hospital in Bengaluru] and also got himself a hospital card from NIMHANS. He has strong ties with his wife and a daughter who he dotes on. But he despairs of his sons. His daughter is the most educated among his children. Balancing health expenses and household expenses, along with the recent expense of his daughter's wedding has been a major worry for Mansoor.

QUOTES

As he is illiterate, Mansoor relies on others, especially his daughter, to help him with filling out forms or applications, for example at the bank.

"When my daughter comes and if there is an expense, then we deposit some money or we take out money. I don't know how to do it on my own.... I don't know how to deposit and I don't know how to withdraw. I have to go to the bank and ask people around 'Sir please help me deposit this. Sir please help me deposit this.' It's like that."

He tried using an intermediary to help him renew his driving license, because he couldn't afford to take the time off of working. But the broker only secured a 1-year renewal period, instead of the standard 10, so his license has already expired again.

"Now Madam, I have all these responsibilities. I have to run my shop and I have to maintain my family. Or do I go all the way to Rajajinagar and spend hours there to renew?... So I went to Rajajinagar and gave money to this broker, who got it renewed for me just for a year. See? It is valid only for year. Everyone says the DL is for this 10 or 15 years and here it is renewed only for a year. So I had enough."

Having very little wealth seems to shape Mansoor's perspective on life, and also on whether he is worried about identity theft.

"I don't have a house of my own. I have nothing. I just earn a little. If I earn more than usual then I leave my shop here and I say 'come let's visit this temple or that.' It happens. [Regarding someone taking my identity card] Take whatever you want. I am not a thief. I am not scared of anyone. Will the police see this and put me in jail? So, let them! (laughter)."

Mansoor doesn't have a use for a mobile phone, and has no interest in the internet.

"No, I don't carry a phone with me. If someone has to reach me...then one of my neighboring shopkeepers come and call me and say 'hey you have a call from someone....' My wife does call me sometimes. She also is not educated. But she uses the mobile phone back home."

Appendix 3: Personas

Devi

Devi is trying to negotiate a dual identity

(in terms of ID artifacts) between two rival states of Tamil Nadu and Karnataka through registering and surrendering of ID cards.

NAME:
Devi

GENDER:
Male

27-30 YEARS

MARITAL STATUS:
Married

DEPENDENTS:
One five month old son

PROFESSION:
Peanut seller

SALARY: RS.500 – RS.3000 per day

HOME OWNER:
No, owns plot of land

OWNS PHONE:
Yes

EDUCATION:
3rd standard

SOCIAL MEDIA: No, he is unable to read or write but uses the calculator

LOCATION:
Basavanagudi (near the Bull Temple and Ganesha Temple), Bangalore

LANGUAGE:
Tamil, Kannada and some Hindi

Bangalore Urban

IDENTITY ARTIFACTS:

AADHAAR (A)

From his home in Tamil Nadu (COPY)

VEHICLE LICENSE (VL)

From Karnataka (COPY)

DRIVING LICENSE (DL)

PAN CARD (P)

Kept at home as he is afraid to lose it and pay for a new one

VOTER'S CARD (VC)

RATION CARD (RC)

BANK PASSBOOK AND CARD (B)

He has numerous bank accounts

Appendix 3: Personas

Devi continued

PERSONAL PROFILE

Devi maintains and manages a dual identity (in terms of ID artifacts) between two states of Tamil Nadu and Karnataka through registering and surrendering of ID cards. The discrepancy in the written records of his name and year of birth (Aadhaar has different details as compared to the voter's card) would be interesting to check if and when they are used simultaneously.

His switching from the informal trust system symbolized by the "Marwari" moneylender to the formal system of banks and private lending institutions. His coping mechanism/workarounds to overcome the challenge of illiteracy and economic challenges, i.e., working relationships with middlemen, people who represent the state or "agency" and private players to still meet his needs, is worth exploring further through other interviews/users. Identity issues came up early when his name was considered feminine and then had to be changed. He has found a way to cope with possible loss of ID cards by using photocopies that are laminated and made to look official.

About having multiple names

"There was this school in Tamil Nadu, which refused to admit me because I had a feminine sounding name. So when I got a driver's license I changed my name to Durgadas. Actually I use both names. I was born and raised as Devi, because the school refused to admit me, my father changed my name to Durgadas. It was an emergency situation, where my name had to be changed for me to get into a school. But he had not foreseen that it will be a problem in the future for a person with two names."

About whether he is afraid of identity theft if he were to lose an ID card

"If it is a rich person, who has lost his ID, it will matter a lot to him and his money. If a poor man's ID like my ID is lost, it doesn't matter that someone else at the most will get to know my address and where I live and come and find me. I have nothing to lose. I have no money."

On why he carries only photocopies

"Apart from these IDs (photocopied from the original), I have a PAN card. But it is at home and not here. I have no use for that here. It will be a big problem for me if I lose it here...what with all these goods that I have to transport and also sell here. If it is lost, I will have to spend lots to get a new one made. This is why even all these cards are just photocopies of the original."

Personal relationship with Marwaris

"I myself have known him for 27 years. The Marwaris [moneylenders] are accommodating. They see you. They know you. They lend you money. They don't even give you formal receipts. They in fact let you enter the figures in their book. Again when you come back to release your gold, they let you sign in their book. They let you count your cash and you can go. They have seen your face for several years and they know you. They have their principles these Marwaris. Whereas banks don't. They tell you how much you have to pay, which could be in lakhs in one cold manner. If you are unable to repay the loans with interests then that's it."

Appendix 3: Personas

Preeti

Preeti teaches at a design school

She lives in Assam, where Aadhaar isn't used for ID

NAME:
Preeti

GENDER:
Female

29 YEARS

MARITAL STATUS:
Single

DEPENDENTS:
No dependents

PROFESSION:
Design school teacher

SALARY: $4,600–$6,200/year

HOME OWNER:
No, lives with parents

OWNS PHONE:
Yes, iPhone 6

EDUCATION:
B.Sc in Interior Designing

LOCATION:
Guwahati, Assam

Guwahati, Assam

IDENTITY ARTIFACTS:

| PASSPORT | Ⓟ | VOTER'S CARD | ⓋⒸ | DRIVING LICENSE | ⒹⓁ | PAN CARD | ⓅⒸ |

| NRC | Ⓝ | FACEBOOK | INSTAGRAM |

FACEBOOK
"Feels 'addicted' to checking, so sometimes deletes app"

INSTAGRAM
"Limited followers, enjoys it more"

Appendix 3: Personas

Preeti continued

PERSONAL PROFILE

Preeti is a teacher at a design school in Guwahati, in the northeastern state of Assam. She's a middle-class, educated, single, young woman who is very thoughtful and reflective about her different identity credentials, including digital ones such as social media.

Like most people in Assam, she doesn't have an Aadhaar card, because the state has paused Aadhaar registration, instead focusing on the NRC, or National Register of Citizens, a list of Indian citizens dating from 1951 that has become the key source for proving genealogically one's status as a citizen of India and not Bangladesh.

For day-to-day needs, Preeti finds that her PAN card is the most valuable; she uses it from the airport security to opening bank accounts, tax filing, etc. She carries the driving license on her to preempt any traffic violations and mitigate any risk from being booked by a policeman and not having the required IDs.

Preeti is educated and very capable, but recognizes that many people are less fortunate, and face additional challenges in managing their state-based identity credentials. She described the difficulty in navigating the process to get the NRC, saying that even for people like her who could figure out the process, hiring an intermediary is common.

Relies on intermediary for NRC

"For NRC, the entire process is very difficult. It's very harassing. You are bound to keep an agent and it's becoming a way of earning money for the agent sitting in a cybercafé doing it for people. It's very difficult for the common people, it's very difficult. For us somehow as we are educated we can do it by ourselves but then most of the people it's not possible it's quite a harassment for them."

About whether she would grant access to social media for a better loan

No, I don't think so. Absolutely not. How that thing is going to work and social media, anyways, you are so skeptical about what you post, who your friends are, giving it to any private company I don't think it's very safe. I don't find it very safe.

Social media

"It's very annoying to see all the posts. At times when I get so irritated with it I just delete it. When I know that I am checking too much then I know that I have to delete it, I can't get addicted to that. I don't think I have the app in my phone so that it doesn't become a trouble for limit to what people can follow you. That's good. Facebook, I think I have too many friends so I me…. [But] Instagram has a limited number of people. I follow a lot of bakers as I like to bake so I need to see those posts. So I don't delete Instagram. You can limit to what people you follow, you can don't need to see everyone."

About whether government offices should share identity information

"Somewhere I think if they share the things it will become a little easier because otherwise every time you have to provide [your credentials]. For example, if I apply for a visa and if they share it also somewhere the process of the security they check, right? They do a background check on you…. If every time we don't need to carry our paper, if it's there with them and they can identify us, then our work will be easier, every time we don't need to carry our papers, it becomes somewhat easier."

Appendix 3: Personas

Sumitra Didi

Sumitra Didi belongs to the Dalit community
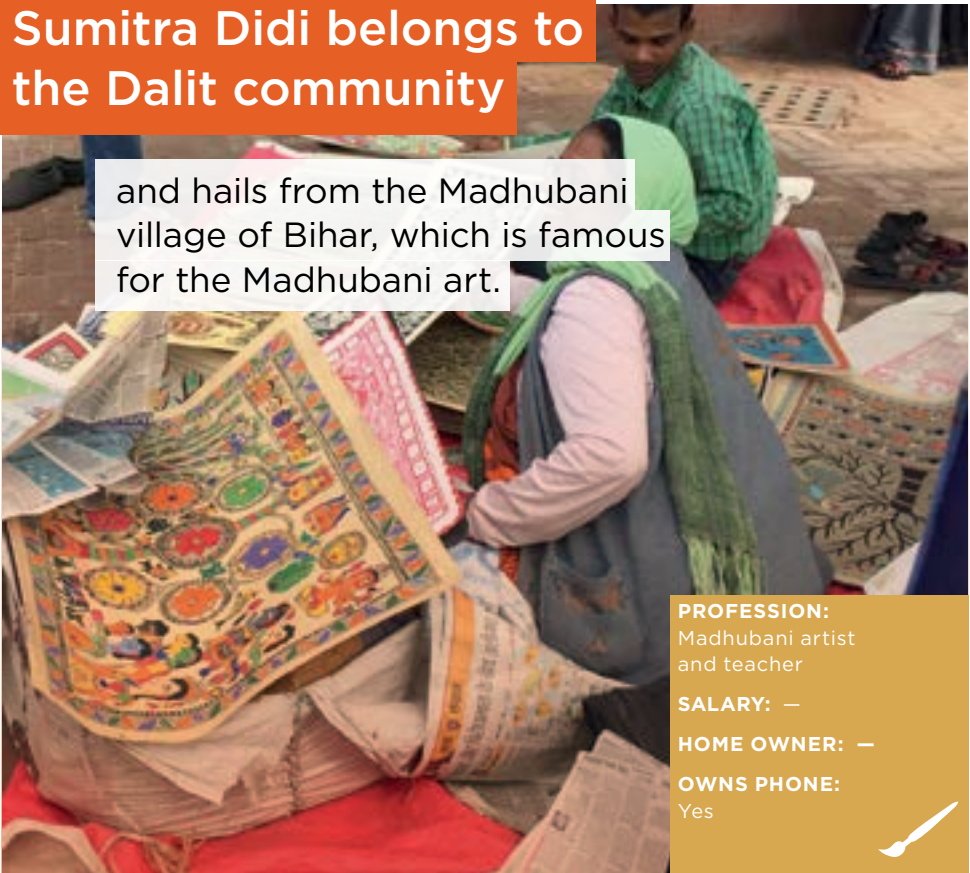
and hails from the Madhubani village of Bihar, which is famous for the Madhubani art.

NAME:
Sumitra Didi

GENDER:
Female

55 YEARS

MARITAL STATUS:
Married

DEPENDENTS:
2 sons, 2 adult daughters

PROFESSION:
Madhubani artist and teacher

SALARY: —

HOME OWNER: —

OWNS PHONE:
Yes

EDUCATION:
10th

SOCIAL MEDIA:
No

IDENTITY ARTIFACTS:

AADHAAR (A)

She has had this for 5 years

MINISTRY OF TEXTILES (MT)

VOTER'S CARD (VC)

She considers this the most important

BANK ACCOUNT (B)

LOCATION:
Dilli Haat
(Delhi, Delhi Urban)

LANGUAGE:
Hindu

Delhi Urban

Appendix 3: Personas

Sumitra Didi continued

PERSONAL PROFILE

Sumitra Didi belongs to the Dalit community and hails from the Madhubani village of Bihar, which is famous for the Madhubani art. She mastered the art under the tutelage of her mother and mother-in-law. It is something of a family, traditional profession to take to this art. Sumitra Didi's childhood and youth was among the rich and educated landlords and intellectuals of Bihar, which made her "forget her background and mingle with them as equals"…the sense one gets from her narrative reproduced below.

A chance meeting with one of these influential people brought Sumitra Didi and her art to the foreground, which led her to win the National Award in the late 1990s and a chance to showcase her work abroad. Immersed in tradition, i.e., the ghunghat [veil] in front of elders in the village and family and yet raising her voice for her rights from the government, Sumitra Didi's identity is a complex mix of opposites. She is a guru-ma for the young people of her village and her words of advice mean a lot to them. She had to get a new set of ID cards a few months ago when she lost it all in a train robbery.

Among all her ID cards/documents, she considered the artisan card to be the most important, because it shows her for what she is… an artist. It also allowed her access to various national art exhibitions and meets. She considers the identity in her state credentials as being temporal, while the identity in her art is forever.

Speaking to her identity in her art

"I was telling someone from yesterday…I am an artist. My identity is in my art. What am I without my art?… [Unlike the government ID cards], my expression is my art and that has no age, no gender and no address…. We sing it and we paint it. That is our tradition. Do visit us once madam and you will see the glory of our art. We will grow old but our art will survive through our children and their children."

"The thing about ID cards is that today, I had left my ID cards back in my room in Munirka, when I came here. There was this young boy, who was at the security gate outside. He started speaking nonsense. 'You cannot go in [to Dilli Haat, the market where she was a vendor] without your ID card.' I said, 'what? What if I don't have my ID cards? I myself am here, right? Identify me. Why do you need my ID cards?' Then he started speaking nonsense that he cannot let me in. Young boy, who was not even born when I and other artists struggled to get Dilli Haat made in the 1990s. We struggled in the heat of the sun and in the dust of this soil. I told him, 'enough. Do not make me lose my temper. Enough. I will buy a ticket and go inside alright. But I am angry that you do not know me for who I am but want an ID card as the only way that I can gain entry inside.' Then another security guard came. He said, 'Oh mata-ji go inside, go go. He is just a young boy, please do not be angry.' And he asked this young man to let me in. That was today."

On not feeling confined to perceptions of her caste

"This gentleman Banerjee had taken a very old house in our village. On his fields my aunt and mother used to work. And we would also interact with people who would come and visit his house. In their company, listening to their words of knowledge, I never felt that I had been born into a Dalit family. I am a Dalit by birth. I am a Paswan. But my interaction and intermingling with these people did not make me feel small. After all a lotus blooms in a swamp. I felt enlightened in their presence. I too wanted to do something."

APPENDICES

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This is a combined list of all references cited across all 12 essays, the
introduction, the conclusion, and the appendices

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