

# Data Empowerment And Protection Architecture Executive Summary

*Draft for Discussion*

A Secure Consent-Based Data Sharing Framework To  
Accelerate Financial Inclusion

AUGUST 2020



# Draft Document For Discussion

All stakeholders are requested to provide comments by **1<sup>st</sup> October, 2020**.

Comments may be submitted through e-mail: **[annaroy@nic.in](mailto:annaroy@nic.in)**

# Acknowledgements

I would like to acknowledge the iSPIRT team for their initiative and effort in preparing this paper. Special mention is warranted for Siddharth Shetty and Kamyra Chandra. Others who contributed towards this paper include Arnab Kumar, Prithish Mishra, Ankan De, Aaryaman Vir, Gayatri VS, and Ayna Agarwal. The report was designed by a team at Iconscout, led by Dalpat Prajapati, Jemis Mali, and Falak Mehta.

This paper reflects the on-ground implementation of the Data Empowerment and Protection Architecture (DEPA) framework set to launch in 2020, and thus would not have been possible without the key players orchestrating rollout. This includes a number of departments of the Government of India (including the four major financial sector regulators (the Reserve Bank of India (RBI), Securities & Exchanges Board of India (SEBI), Provident Fund Regulatory & Development Agency (PFRDA), and Insurance Regulatory and Development Agency India (IRDAI)), the Ministry of Finance (including the Department of Revenue, the Department of Economic Affairs, the Department of Financial Services, and the Financial Sector Development Committee), the Ministry of Health and Family Welfare, the National Health Authority, the Ministry of Information Technology (MeiTY), and the Telecom Regulatory Authority of India. The list also includes representatives from non profit organisations (such as iSPIRT Foundation, DICE India, Sahamati, and CredAll); individual thought leaders on financial inclusion, data, and privacy (including Nandan Nilekani, Justice Srikrishna, Arundathi Bhattacharya, and Rahul Matthan); and key financial sector market players (including the top leadership of State Bank of India, IDFC First, HDFC Bank, ICICI Bank, IndusInd Bank, Axis Bank, and Kotak Bank amongst others). DEPA is truly an ecosystem-wide, joint public-private effort for a new and improved data governance approach.

This draft is intended to be a dynamic document that continues a vibrant discourse. This paper invites actionable recommendations from individuals and institutions who are passionate about refining and co-creating DEPA as it evolves.

**Anna Roy**  
Senior Adviser  
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# Foreword

In an evolving and fast paced digital landscape, headlines world-over have squarely placed data protection, privacy, and unauthorised data sharing or misuse in the limelight. Yet this lens is incomplete. In India, we not only need stronger data protection, but also data empowerment: everyday Indians need control over their own personal data to improve their lives. They should be able to leverage their digital history to access growth opportunities offered by different institutions. Imagine if a small business could use business invoices submitted to GST to digitally prove capacity to repay a working capital loan, and thus access cheaper credit.

With the Data Empowerment and Protection Architecture, India will be taking a historic step towards empowering individuals with control over their personal data, by operationalising an evolvable regulatory, institutional, and technology design for secure data sharing. Just as the launch of UPI transformed India's digital payments world irreversibly, it is expected that the RBI-driven Account Aggregator (AA) model will transform the way financial services are delivered through a unique architecture for consent-based data sharing. In the AA model, individuals can seamlessly share their financial data for the first time across banks, insurers, investors, tax collectors, and pension funds in a safe, secure, and consented manner. This has the power to transform the availability and affordability of financial products. Beyond the financial sector, DEPA also presents opportunities in health, jobs, and urban data.

This has become more exigent in a post-COVID world. Small businesses across the country urgently need a suite of financial products providing working capital support, and lending models that did not function effectively before the crisis will not serve us today. Solving these challenges at an infrastructure level -- asking what we can unlock to change the business and operating model for all financial and technology institutions in this time -- is the only way to achieve change at scale amidst a crisis. The recently announced Open Credit Enablement Network will also leverage AA infrastructure to democratise access to credit.

DEPA builds the right infrastructure. It inverts the traditional Western model where data is simply used to advertise and sell products, to one where data can be used to empower a billion Indians. It can show a new India Way on data governance that allows us to offer inclusive and affordable financial products that help businesses recover from the crisis and chart a path towards sustainable growth.

**Amitabh Kant**  
CEO, NITI Aayog

# Executive Summary

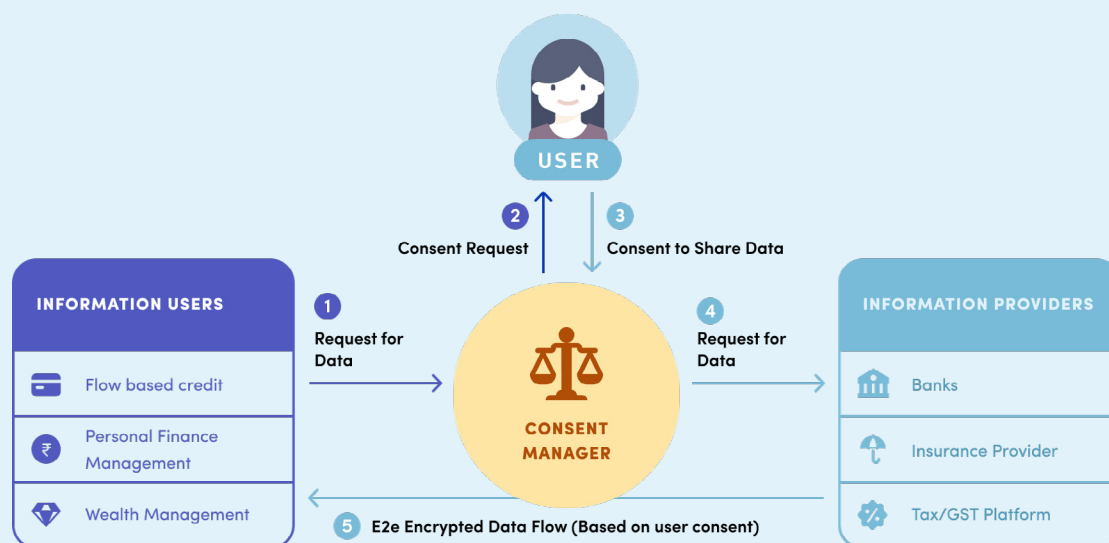
India's Data Empowerment and Protection Architecture (DEPA) is predicated on the notion that individuals should have control over how their personal data is used and shared. It is designed with the belief that agency over data could empower Indians with opportunities to improve their own lives.

Today millions of Indians are creating electronic transaction histories and becoming 'data-rich' at historic rates, even before becoming economically rich or even financially stable. Personal data helps people inform and build trust with key institutions providing life-altering services, such as hospitals, banks, or future employers. Knowing this, it is unreasonable not to give individuals agency over their data. DEPA is founded on the premise that individuals themselves are the best judges of the 'right' uses of their personal data, rather than competing institutional interests. They should not struggle to access and share their data.

Orchestrating a paradigm shift to empower individuals with their data requires three key building blocks: enabling **regulations**, cutting edge **technology standards**, and new types of public and private **organisations** with incentives closely aligned to those of individuals. DEPA seeks to provide a foundation for all three in India. It will not be a static policy or product; instead, **DEPA is designed as an evolvable and agile framework** for good data governance, given the rapid pace of change in this arena.

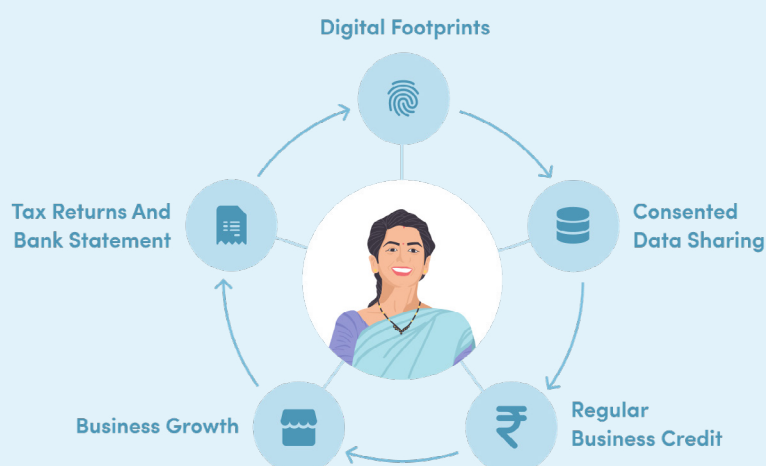
**In a nutshell, DEPA empowers people to seamlessly and securely access their data and share it with third party institutions.** A new type of private **Consent Manager institution** ensures that individuals can provide consent as per an **innovative digital standard** for every granular piece of data shared securely (using newly created standard **APIs**). These Consent Managers should also work to protect your data rights. This architecture replaces costly and cumbersome data access and sharing practices that disempower individuals, such as bulk printout notarisation and physical submission, screen scraping, username/password sharing, and terms and conditions forms providing blanket consent. DEPA combines public digital infrastructure and private market-led innovation: it creates a competitive ecosystem where any new Consent Manager can plug in to a network of information providers and users without setting up expensive, duplicative, and exclusive bilateral data sharing rails. And it ensures that data sharing occurs by default with granular, revocable, auditable, and secure consent. Consent managers can compete to reach different customer segments with accessible and inclusive modes of obtaining informed consent. They can also experiment with different business models. While consent cannot be the only back-stop, it is a powerful first step to empowering individuals with data.

## The Data Empowerment and Protection Architecture



DEPA needs to be flexibly applied to various sectors, and in each context led by institutions who tailor its implementation. Its first application is in the **financial sector** towards greater financial inclusion and economic growth. Even pre-COVID-19, 92% of small businesses in India lacked access to formal credit. Consented data sharing can reduce the cost and risk premium of offering loans to small entrepreneurs, by creating frictionless and secure access to data used to establish creditworthiness with individual consent. Most such loans today are offered based on collateral. Instead, offering short term working capital loans based on evidence of past turnover (eg through GST) that indicate a future capacity to repay (referred to as Cash Flow-based lending in the seminal **RBI MSME Committee Report**) is critical to solving the 20-25 trillion rupee credit gap faced by MSMEs in the country. Using DEPA, individuals and small businesses can use their digital footprints to access not just affordable loans, but also insurance, savings, and better financial management products. DEPA makes this possible only together with the other layers of **India Stack** built since 2010 (eg Aadhar, Aadhar based eKYC and Aadhaar based eSign for digital contracts; UPI for cashless payments; DigiLocker, etc.); and **Open Credit Enablement Network** for lending. DEPA marks another step in a decade-long journey building digital infrastructure designed to improve private service delivery.

## Virtuous Cycle for an MSME Entrepreneur



DEPA is going **live in the financial sector** in 2020 under the joint leadership of the Ministry of Finance, RBI, PFRDA, IRDAI, and SEBI.

RBI issued a **Master Directive** creating Consent Managers in the financial sector to be known as Account Aggregators (AAs), and seven AAs have already received in-principle regulatory licenses. Entrepreneurial energy has been building in incumbent and new market participants, who are now innovating to compete on new roles, products, and services. A July 2020 AA Hackathon attracted over 1250+ applicants. A newly created non-profit collective of Account Aggregators – the DigiSahamati Foundation (known as ‘**Sahamati**’) – is mobilising support to existing financial institutions to adopt the technical standards. They are also establishing open data governance and legal **working groups** to innovate on the technology architecture to further protect data rights and drive empowerment – those keen to shape the space are encouraged to join. **DEPA is also being piloted in the health sector in 2020:** On August 15, Prime Minister Modi **announced** the National Digital Health Mission, which includes a Health ID and a data sharing framework for personal health records. This is based on the **National Digital Health Blueprint** (July 2019) published by the Ministry of Health which in turn builds on the **National Health Stack** Strategy paper published by NITI Aayog in July 2018. **DEPA is also being launched in the telecom sector** following a TRAI consultation **report** on privacy released in July 2018 and a workshop held and a by TRAI Chairman RS Sharma in August 2020 with major industry players announcing the partnership allowing telcos to become financial information providers and users in AA. **The first major government department** to become a Government Information Provider (GIP) will be GST; future departments with data on individuals and MSMEs could adopt the specifications to improve the ease of doing business or create greater data portability of individual education, jobs, or transaction data.

DEPA, together with other layers of India Stack, could do for India’s data ecosystem what the TCP/IP Internet protocol or GPS – both powerful examples of American public digital infrastructure – did for communication and navigation respectively: introduce a new possibility that creates a Cambrian explosion of novel products and services that empower people. Breaking data silos and monopolies allows fintech or healthtech companies to compete on product design, analytics, and value creation, rather than data access, and simultaneously furthers objectives like financial inclusion which increase the total addressable market for all. Based on the Personal Data Protection Bill 2019 and the planned Data Protection Authority, DEPA is on the road to be applied in other sectors. This could empower individuals with not just financial and healthcare data, but also telecom, educational, or jobs data to better improve access to opportunities. DEPA is a new Indian model of data governance that can be shared with the world -- one that is evolving, and targets individual empowerment, economic recovery and growth, and a competitive data democracy.

# The Data Empowerment and Protection Architecture

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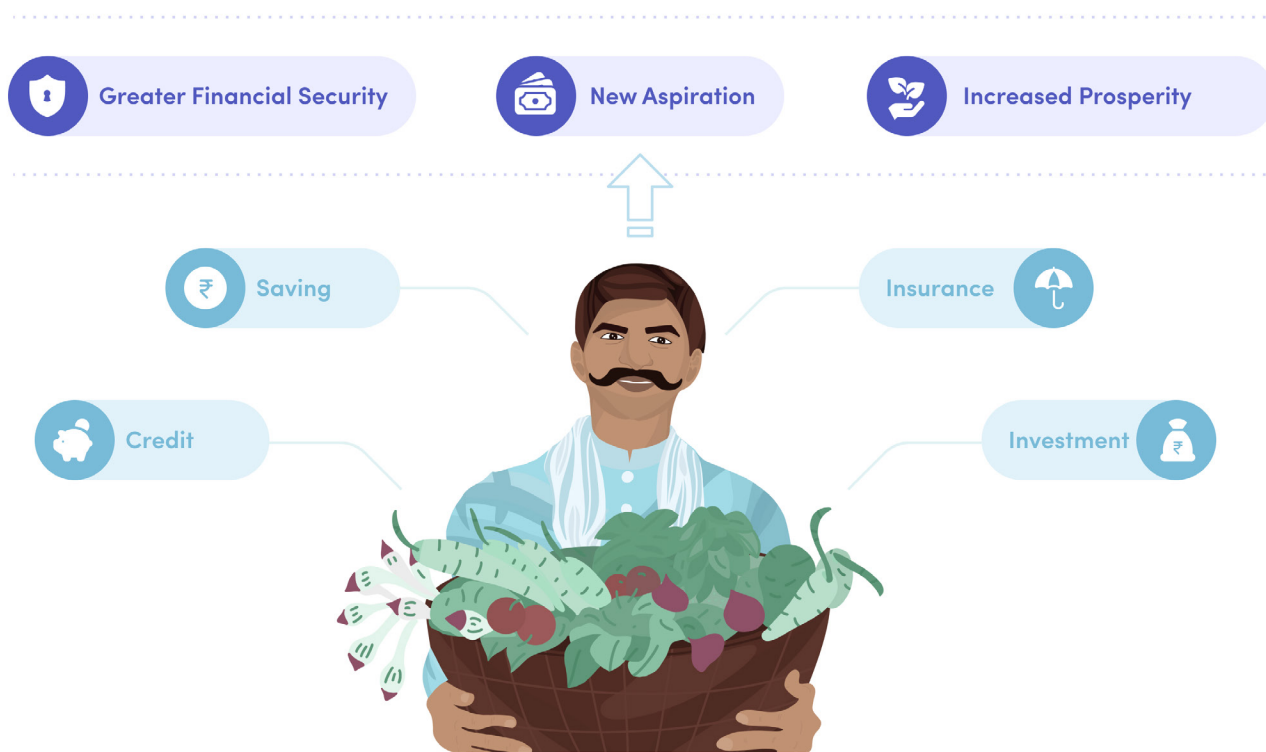
## 01

## Financial Exclusion

A well designed pool of financial products is instrumental in pulling individuals out of poverty traps and stimulating the growth of micro, small, and medium enterprises (MSMEs). Yet currently, most of India's rural and urban poor population faces significant exclusion from accessing appropriate financial products for themselves and their enterprises – partly due to a lack of trust and asymmetry of data.

Financial **products** can enable increased **prosperity** (through savings and investment), greater security and **resilience** to income or health shocks (through insurance), and new **aspirations** (through credit for business or learning opportunities). However, India's poor **struggle to access** appropriately sized, priced, and timed financial products. For instance, many micro entrepreneurs or small businesses struggle to get short term working capital loans to cover liquidity shortfalls in running their livelihood businesses.

This is primarily due to the **high costs** formal financial institutions face in **reposing trust** in individuals or businesses with a largely **undocumented financial background**, and thus no digital trail to reference.



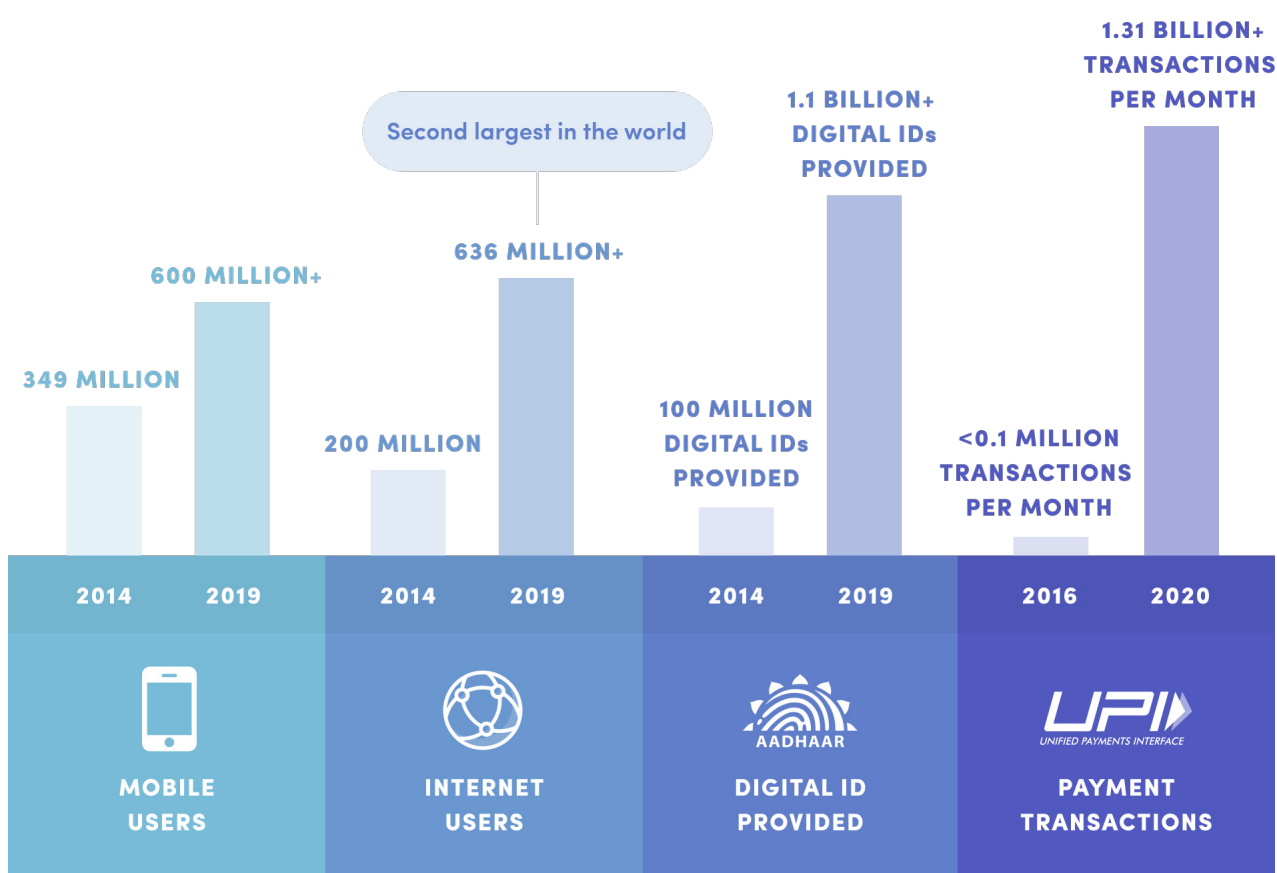
## 02

## Digital Opportunity

An opportunity is emerging: The lower socioeconomic strata in India has been rapidly accessing and adopting digital services over the last decade.

Across platforms such as **Aadhaar** (offering unique digital identification) and the **Unified Payments Interface (UPI)** (a mobile-based digital payments system based on a common technology standard), as well as through increasing **mobile connectivity**, tele-density and **internet usage**, members of the lower socioeconomic strata are for the first time becoming **data rich even before becoming economically wealthier**.

Small shop owners, farmers, traders, MSME entrepreneurs, rural Self Help Groups, and gig economy workers are increasingly generating a digital transaction history that could be use to inform and **build trust** with financial institutions. For instance, the total number of registered businesses under the previous tax regime was around 6.5 million (FY 2015-16), while in 2020 the number of formally registered businesses filing invoices and returns is around 10 million. A **survey** of 2700 MSMEs across 20 industries highlighted that over 60% of MSME owner respondents were digital users.



## 03

## Data Silos

Despite increasing digitisation and the tremendous value data could have for individuals to build trust with institutions, personal data (and particularly financial data) continues to remain in silos today. The custodian-centric data sharing model will struggle to scale to address Indians' emerging data access needs.

In a world where an **exponentially increasing** number of companies and institutions control an individual's data as custodians or fiduciaries, going to each actor individually to access and move data interoperably across data users is a model that will not scale. Gathering your own data directly from various financial institutions, for instance, is a **cumbersome** task – typically involving physical branch visits or call center engagements, sharing **physical documents** using browser uploads or USB sticks, or **screen scraping** and sharing of confidential username and password data with a third party. For those living in rural or semi-urban areas, the challenges around data access are further exacerbated.

Moreover, data is stored in different formats and porting specific data (proportional to the need) from one database to another service provider is not a standardised process. These issues, described here in the context of personal data, also apply to other forms of data such as derived data (eg. credit scores) and public or anonymized data. Finally, there is a **lack of harmonisation** around the regulations for data sharing within and across sectors. These factors together mean that **individuals and small businesses lack control** over their own data.



## 04

## Risks of Inaction

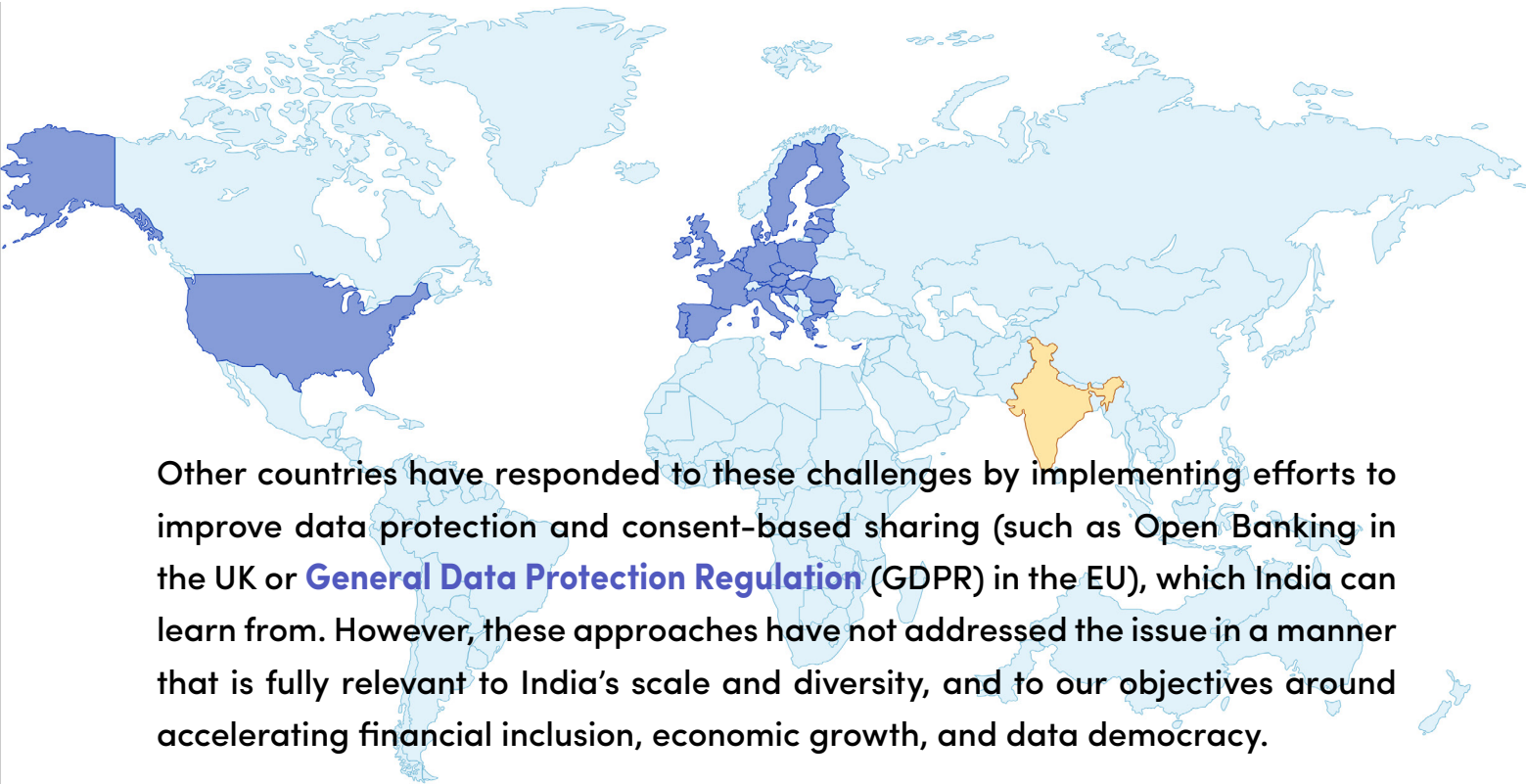
Unless an evolvable, interoperable, and secure data sharing framework is implemented, newly generated data on Indians will at best remain in silos without benefiting individuals who urgently require it to access better services, and at worst be misused without individuals' knowledge and consent.

In today's world, personal data is used to create **deep profiles**, **walled gardens**, or **barriers to exit** due to business needs of large corporations controlling user data. Making it simple and secure to share this data with the individuals' consent would empower them to use data to improve their well-being themselves (via ease of access to new financial products and services), or to contribute data to research and better-designed machine learning models that benefit them. However, this is only possible if action is taken to ensure ease of data flows between siloed data fiduciaries housing information (e.g. different banks, NBFCs, insurance companies, government departments, etc.) with user consent. Moreover, incidents such as the Cambridge Analytica data breach have highlighted global gaps in data sharing and consent approaches - and with an increasing penetration of public digital services in India, risks such as **data farming** and other malpractice that arise from a lack of a robust and privacy protecting data sharing framework will grow exponentially over time.



## 05

## A Global Challenge



Other countries have responded to these challenges by implementing efforts to improve data protection and consent-based sharing (such as Open Banking in the UK or **General Data Protection Regulation** (GDPR) in the EU), which India can learn from. However, these approaches have not addressed the issue in a manner that is fully relevant to India's scale and diversity, and to our objectives around accelerating financial inclusion, economic growth, and data democracy.

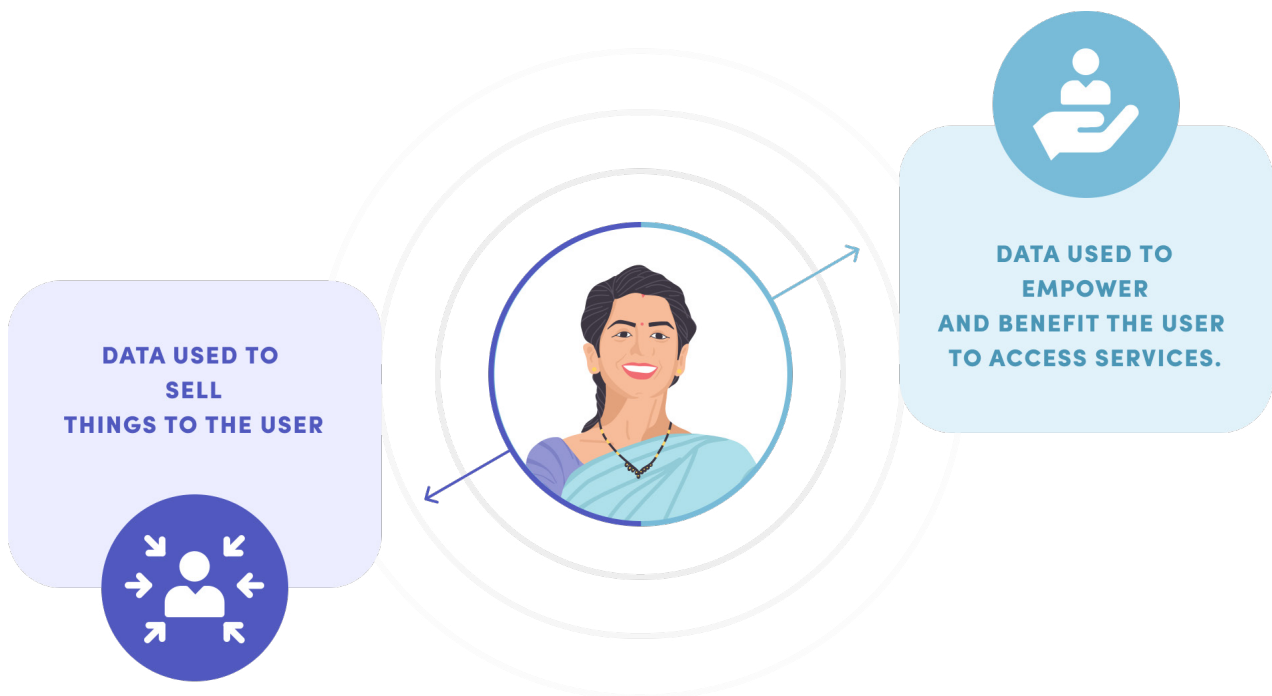
■ **The United States** to date does not have a nation-wide data protection law in place. **The EU** has opted for strong data protection laws (through policies encouraging the right to be forgotten and data minimisation), but fundamentally approaches the issue from a prevention-of-harm perspective rather than through the lens of individual empowerment through data.

■ And although **Open Banking** exists as a regulatory mandate in the UK, it has not been implemented at scale partly due to misaligned incentives between market forces and regulatory authorities, as well as the lack of a shared technology architecture adopted by banks. Some learnings from these approaches on strong data protection ought to be captured in India's Personal Data Protection Bill, but replicating their data sharing strategies would not go far enough to achieve India's objectives in our national context: that of individual **empowerment** and financial inclusion through data, of encouraging a vibrant and competitive **data democracy**, and of building an environment for small and large **businesses to thrive** based on legitimate and high value **use cases** for data sharing that ultimately help individuals and MSMEs prosper.

## 06

## A Paradigm Shift towards Data Empowerment

India needs a paradigm shift in personal data management that transforms the current organisation-centric data sharing system to an individual centric approach that promotes user control on data sharing for empowerment.



The problem is not that companies are benefiting from individuals' data; the problem is that **individuals and small firms do not benefit**. The mission of the Data Empowerment and Protection Architecture is therefore to provide individuals and small businesses with the practical means to **access, control, and selectively share personal data** that they have stored across multiple institutional datasets – to maximise the benefits of data sharing for individual empowerment whilst minimising **privacy** risks and data misuse. By giving people the power to decide how their data can be used, DEPA enables an individual to control the flow of and benefit from the value of her personal data, relying on not only institutional data protection measures but also restoring **individual agency** over data use.

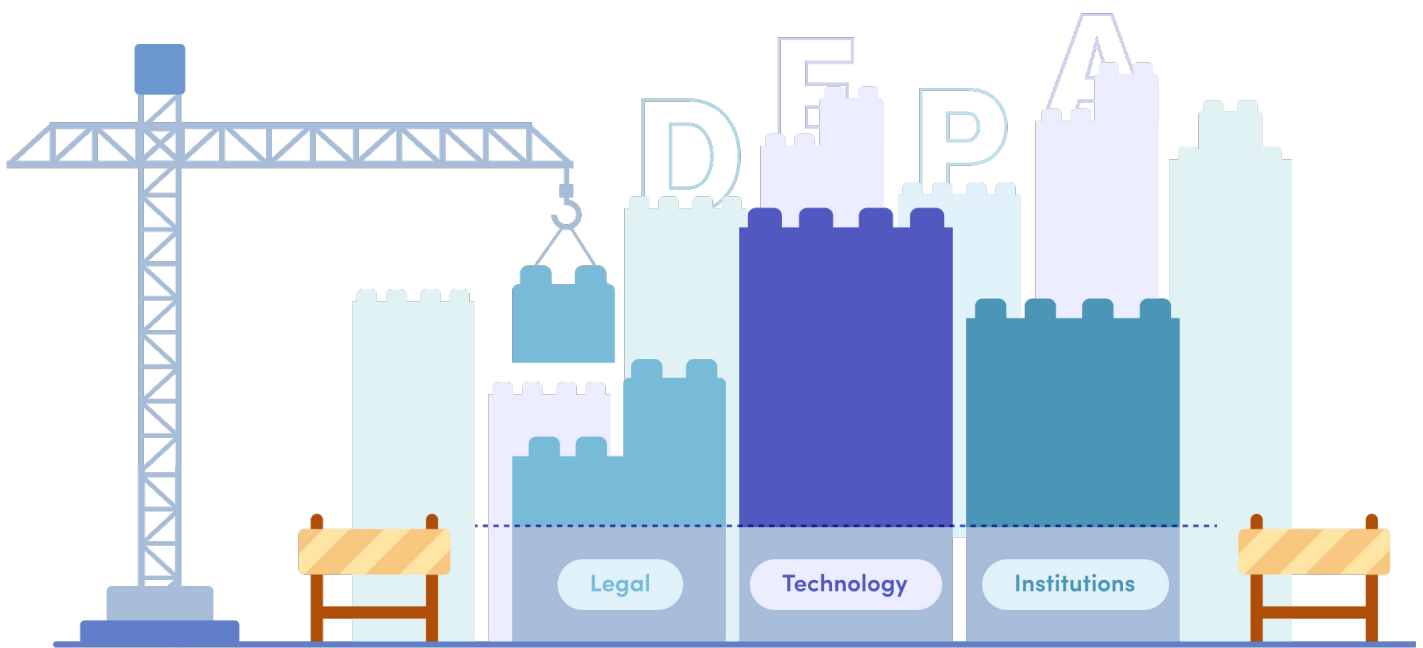
07

## An Evolving DEPA Framework

The Data Empowerment and Protection Architecture (DEPA) is a strategy for data empowerment towards economic well being for all. Based on an underlying legal and regulatory framework, DEPA introduces new types of institutions, and cutting edge and evolvable technological building blocks to enable true data empowerment.

Legal, market, and technology infrastructure are all needed to bring this to life, with a **'jugalbandi' of public and private** players: governments offering digital infrastructure as a public good, and private players innovating on it to offer better services. Moreover, because the generation of vast amounts of data and its related storage, analytics, sharing, and overall management norms are rapidly emerging fields, our legal and policy framework, technology architecture, and institutional data governance will need to **dynamically change** over time to meet new and emerging needs.

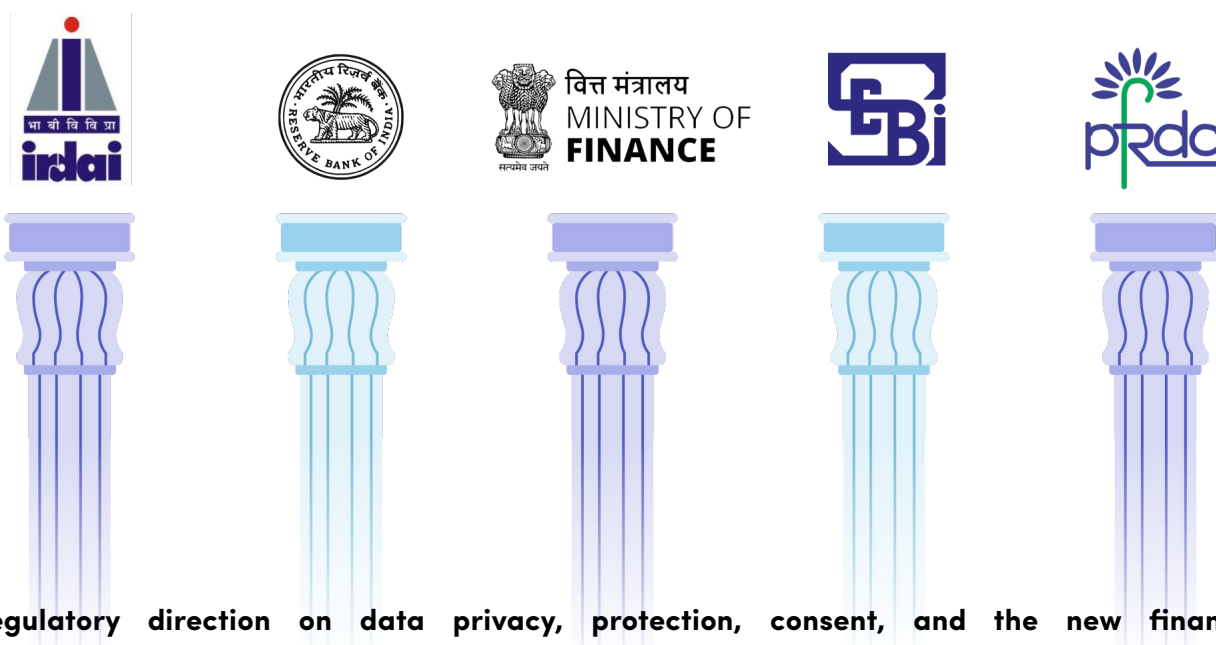
The DEPA framework is not a static policy, product, or infrastructure; rather, it is an **evolvable program** that offers a process and structure for an evolution of data policy by building a **dynamic technology foundation** based on shared standards that can be upgraded over time, and **institutional arrangements** which realign incentives and empower experts who care deeply about building next generation data governance to co-create the future. DEPA can be adopted sector by sector based on potential value add and readiness.





08

## Regulatory Foundation



**Regulatory direction on data privacy, protection, consent, and the new financial institutions required for DEPA's application in the financial sector was provided** through a Supreme Court Judgement on the fundamental **Right to Privacy** (Aug 2017), the **Personal Data Protection Bill (PDP) 2019** and its precursor the Justice Srikrishna Committee Report, and (for the financial sector) the **RBI Master Direction on NBFC-Account Aggregators** of September 2016. In the financial sector, four regulators across banking, securities, insurance, and pensions (RBI, SEBI, IRDAI, PFRDA) and the Ministry of Finance have come together to implement this model. This regulatory foundation is also expected to evolve with time (eg. with the forthcoming Data Protection Authority) as India's experience and public discourse around data protection and sharing grows richer. Regulation for data empowerment likely needs to be sector-specific, so TRAI and policymakers in spaces such as health and urban who have also indicated intent to adopt will devise a sector-specific regulatory architecture under the aegis of the PDP and Privacy Bills.



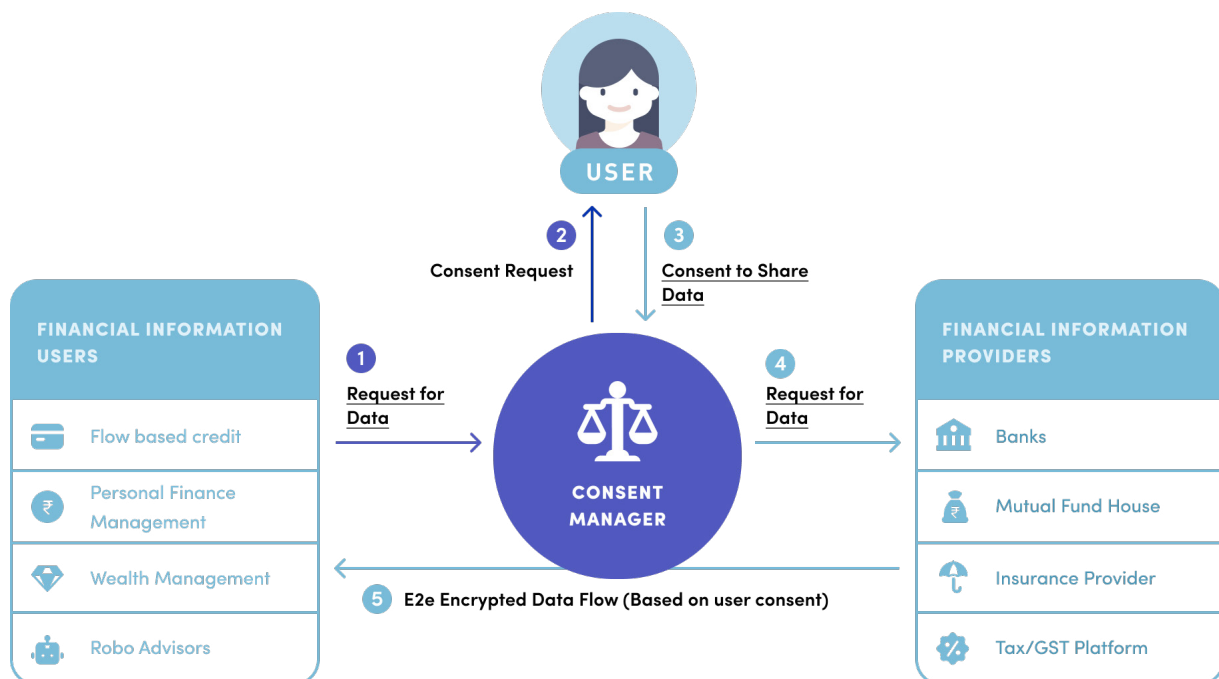
*and many more...*



09

## A New Class of Institutions

DEPA's Institutional Architecture will involve the creation of new market players whose incentives align more closely with individuals: user Consent Managers. These Consent Managers in the financial sector will be known as Account Aggregators, and a non-profit collective or alliance of these players will be created called the DigiSahamati Foundation ('**Sahamati**').



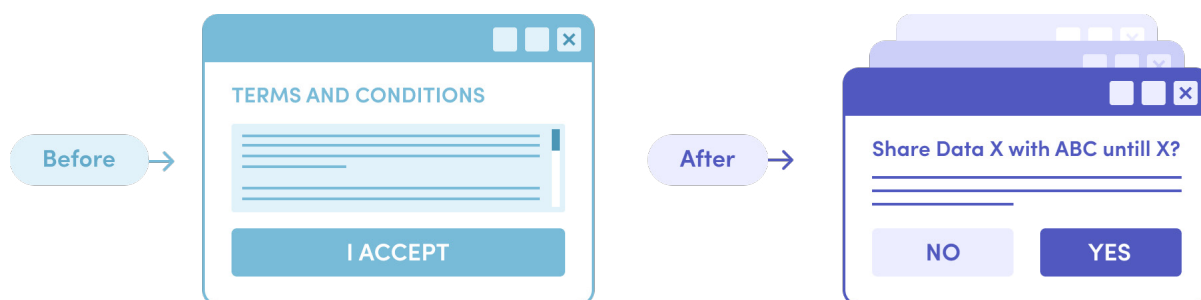
The PDP Bill introduces the concept of “consent managers” to manage a data principal’s **consent for data sharing** through an accessible, transparent and interoperable platform. These consent managers are ‘**data blind**’ and will not see or use personal data themselves; rather they will serve as a conduit for encrypted data flows. In the future they could also help individuals and small businesses **protect and enforce their data rights**. Consent Managers in the financial sector will be known as **Account Aggregators (AAs)**. A non-profit collective for the AA Ecosystem called **Sahamati** will provide procedural and best practice guidelines for all participating institutions, support organisations to adopt and go live, and continue to foster innovation in protecting data rights across the AA network through new shared technology building blocks.

## 10

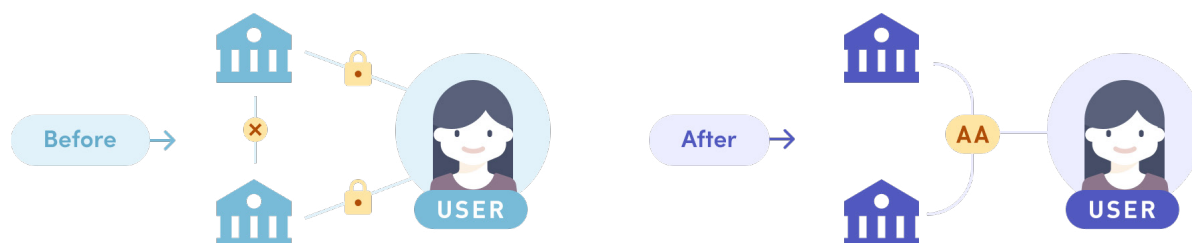
## Technology Foundation

DEPA's technology architecture is a first of its kind interoperable, secure, and privacy preserving digital framework for data sharing through

- 1 **The Consent Artefact:** is a technology Standard for programmable consent to replace the all-permissive terms and conditions forms. The consent individuals provide is designed on principles acronymed **ORGANS**: **O**pen standards (ensuring all institutions use the same approach interoperably); **R**evocable (by individuals); **G**ranular (provided for each time you share data, stipulates how long data can be accessed, etc.); **A**uditable (in machine readable logs of consent provided), provide **N**otice to all parties, and **S**ecure by design.



- 2 **Open APIs for Data Sharing:** allow many new consent managers to 'plug in' to a common sharing system rather than having to build bilateral relationships with information providers to access data.
- 3 **Financial Information Standards:** allow a data recipient to quickly interpret and understand information from a new institution.



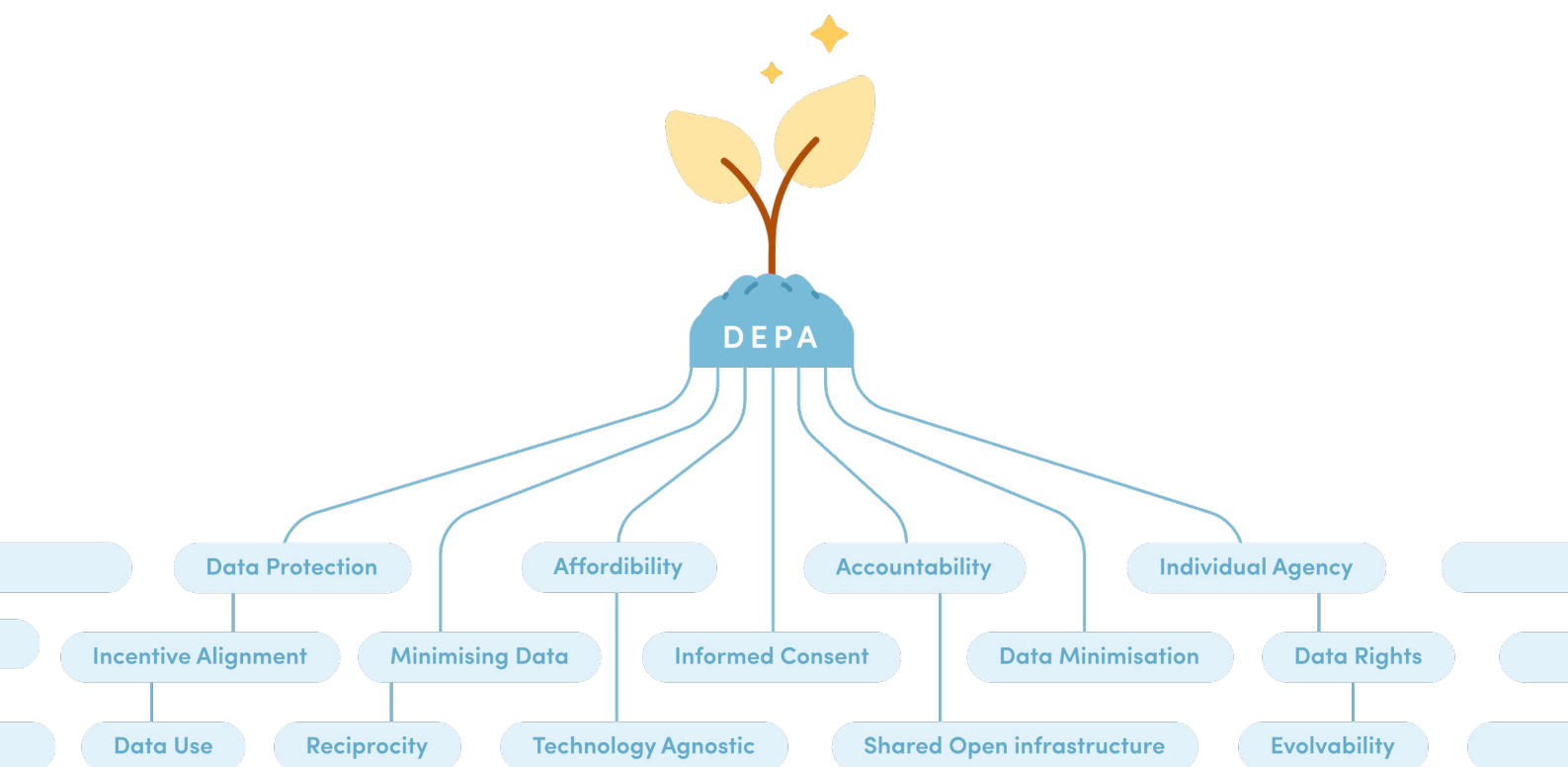
These are the first key building blocks of the technology framework; further elements (for instance, tools to prevent over-consent or a lack of informed consent) are evolving under the leadership of Sahamati and will be implemented within and across sectors as the market develops. Since data security and protection is a critical prerequisite for empowerment, DEPA also relies on the adoption of related standards for data storage and processing techniques.

## 11

## Guiding Principles

DEPA's model and architecture choices are guided by a set of key design principles. Because DEPA is an evolving framework, these principles are intended to steer future technology or institutional decisions.

These principles are: restoring individual agency; promoting informed consent for every data transaction (rather than blanket consent for data use); building in accountability for institutional data controllers (i.e. consent as not the only backstop); building an open infrastructure for data sharing (minimising bilateral or closed-loop networks); building incentive alignment between new public or private institutions and the needs of individuals around their data; ensuring accessibility and affordability of data sharing; remaining technology agnostic (through open standards); supporting data minimisation; ensuring reciprocity of data use and data provision (institutions cannot be users of data in the system without also being providers); enabling other key data rights; ensuring evolvability of technology and institutions by design; and using penalties as deterrents to data misuse where required. New institutional and market players will continue to bring these principles to life through their innovations as the DEPA framework matures. Those interested in helping DEPA evolve as an ecosystem could join the Sahamati [Data Governance Working Group](#).

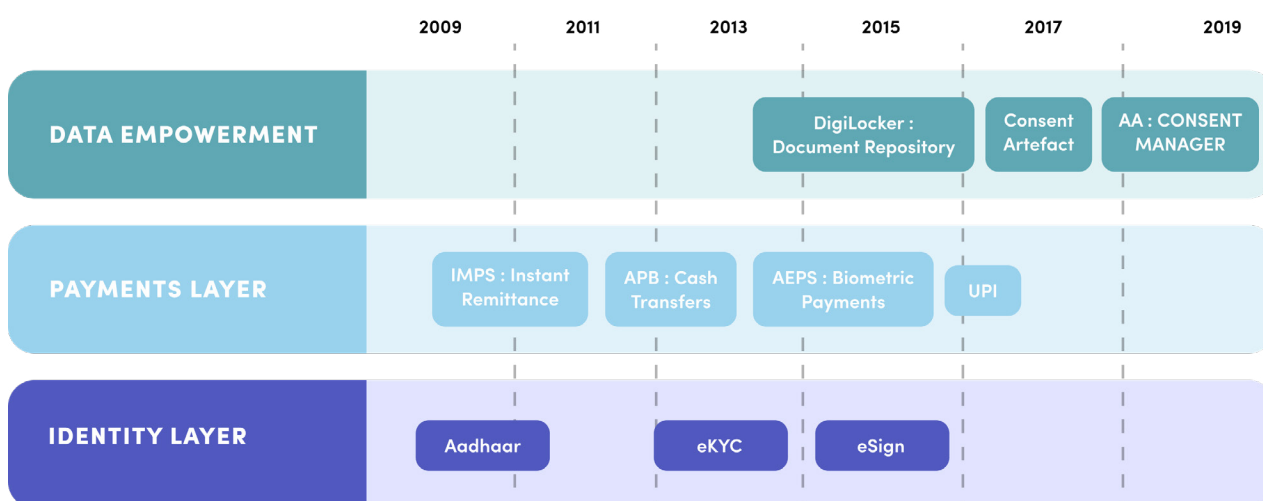
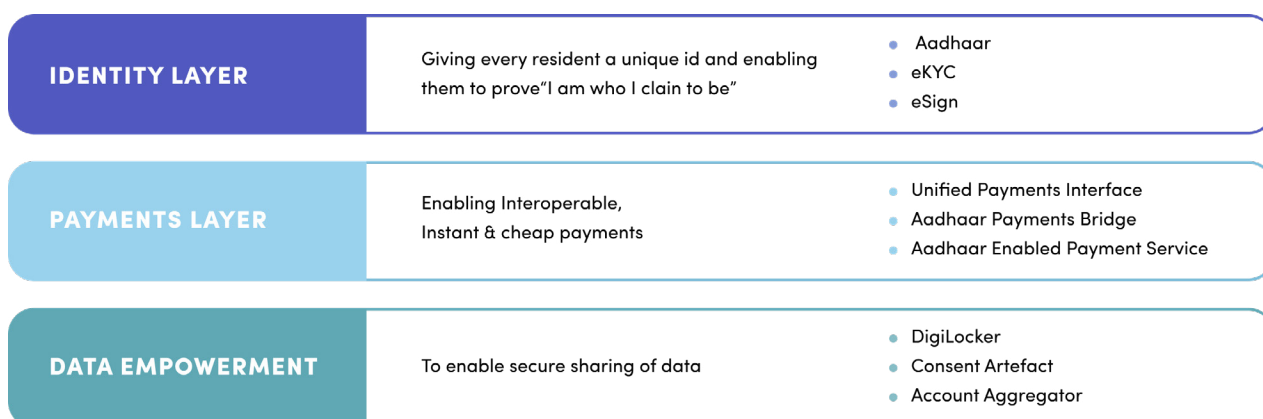


## 12

## Combinatorial Layered Innovation

DEPA as a layer of secure digital data sharing through consent forms the final layer of **India Stack** - a series of digital public goods designed to enable private market innovators to improve digital services for India across a range of sectors.

The other key layers of India Stack include unique and digitally verifiable proof of **identity** (Aadhaar, launched 2010), a low cost and interoperable mobile digital payments **platform** (the Unified Payments Interface, launched 2016).

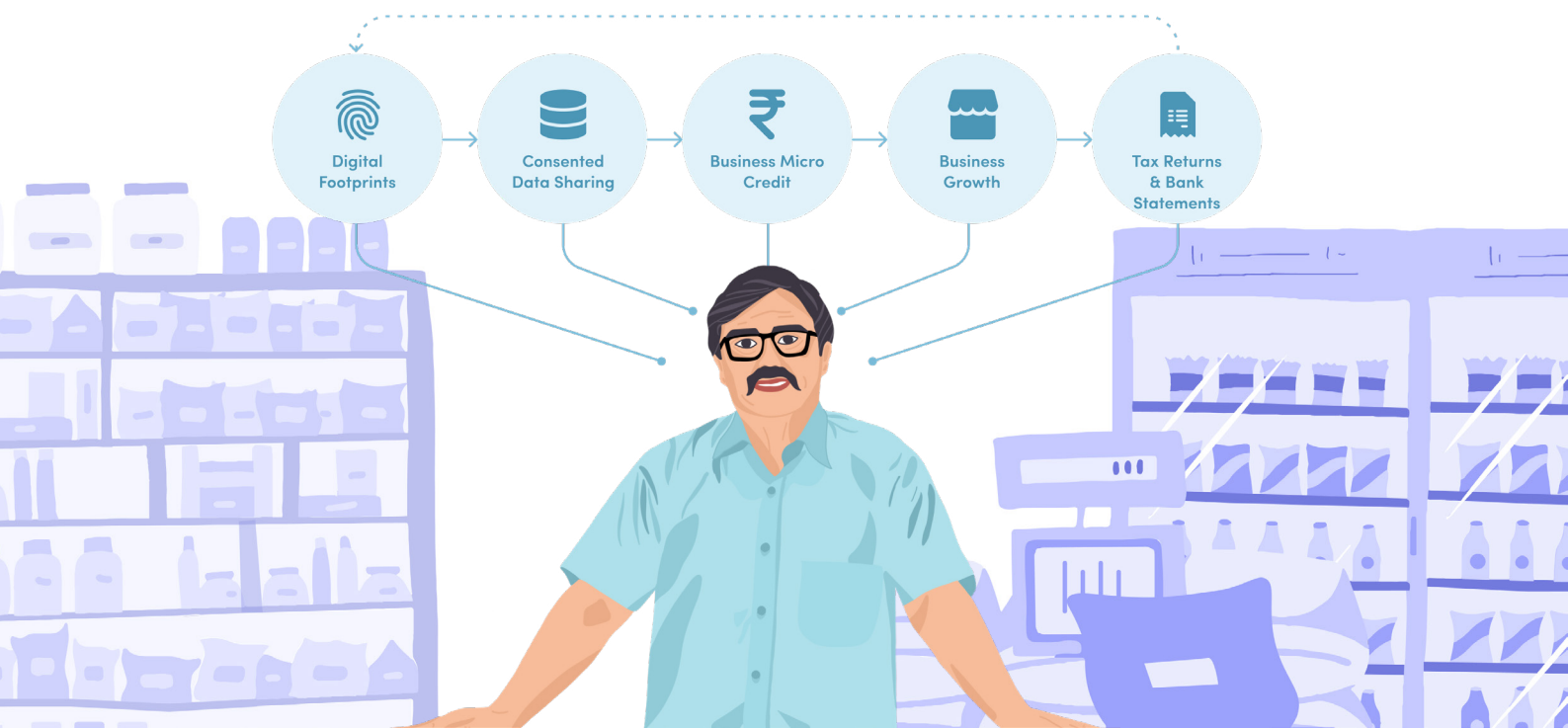


## 13

## Impact on Kirana Storeowner

DEPA, India Stack, and other digital public goods such as the Open Credit Enablement Network (**OCEN**) and the **Public Credit Registry** could change the life of a small business owner through new and tailored financial products, such as cash flow based lending.

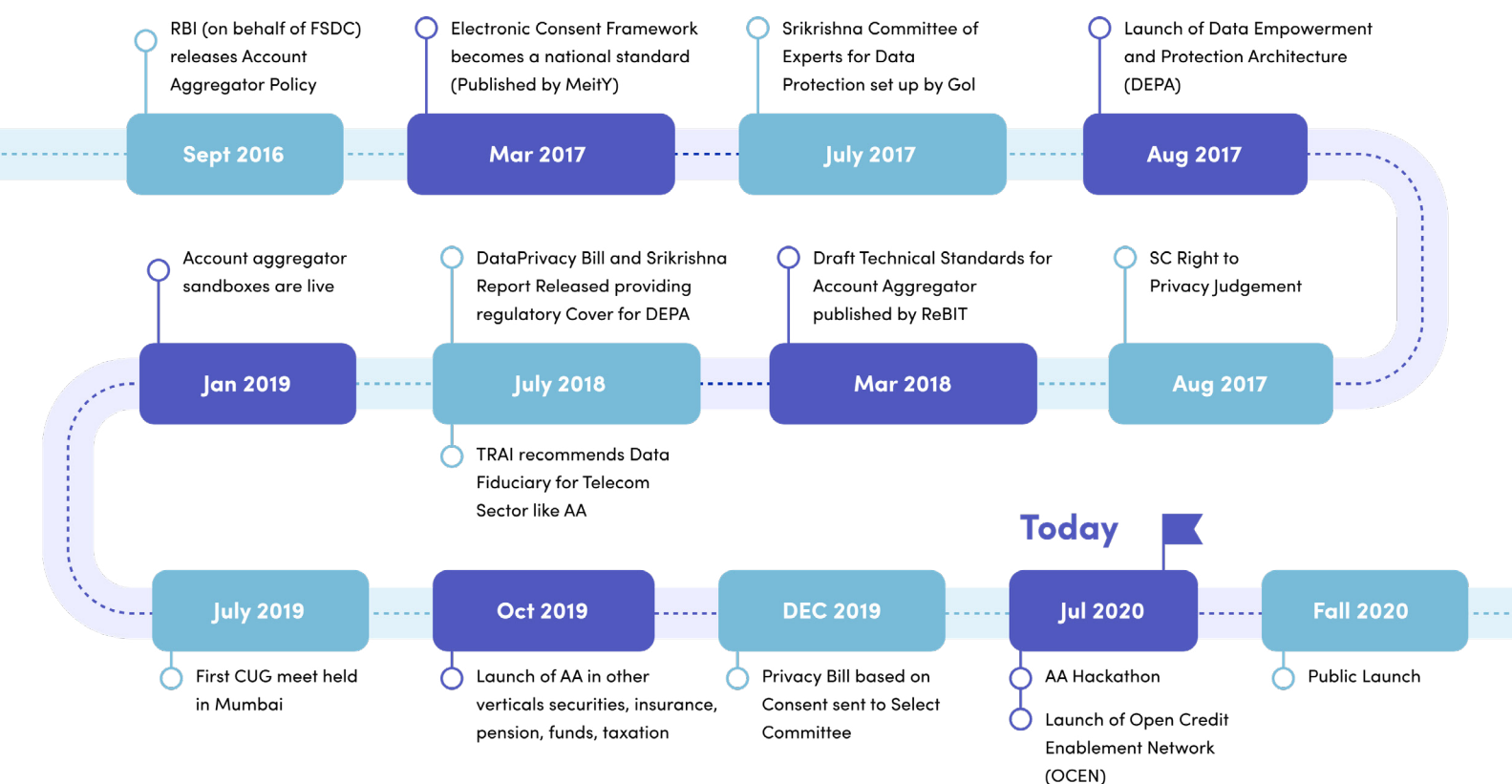
Even pre-COVID, only about 8% of the total MSMEs in the country had access to formal finance; the other 92% are likely taking loans at onerous terms from ad-hoc sources, and are regularly facing **working capital shortages**. These small businesses are increasingly transacting digitally. If portability and control of data could allow an MSME owner to digitally share proof of the business' regular historic tax (GST) payments or receivables invoices easily, a bank could design and offer regular small ticket working capital loans based on demonstrated ability to repay (known as Flow based lending) rather than only offering bank loans backed by assets or collateral. Flow based lending is the norm for individuals providing proof of salary to access home and car loans, yet these types of products are yet to take off at scale for MSMEs, partly due to frictions in accessing required data. The Account Aggregator framework could transform access to much-needed working capital credit for micro enterprises, particularly when bundled with **OCEN APIs** for Lending. Similarly, DEPA could also enable better personal financial management services, wealth management, robo advisory, or different types of lending, insurance, and investment use cases and products that we may not be able to foresee today.



14

# Roadmap

DEPA roll-out has already begun in the financial sector, with a closed user group (CUG) launch by major banks in July 2019 and a public launch expected in Fall 2020. This will be followed by launches in healthcare and telecom.



An RBI Master Directive first created AAs as an NBFC in Sept. 2016, and the RBI MSME Committee recommended implementing AA to facilitate Cash Flow Lending in June 2019. DEPA's CUG launch in July 2019 saw the first demo of consented financial data flows, a commitment of CEOs of major banks & NBFCs to the technical standards, and the introduction of the non-profit Sahamati as a facilitator of adoption. Since the Nov. 2019 publication of AA technical standards, seven AAs received in-principle approval from RBI, and 10 major banks and NBFCs are in different stages of integration working towards a public launch in Fall 2020. Finally, adoption of the DEPA approach is also being planned by other sectors – for instance in **healthcare**, **telecom**, and **skills** data. In health, COVID-19 has re-emphasised the urgency of creating digital infrastructure to share medical data. The National Health Authority is tasked with implementing the National Digital Health Blueprint (including piloting the DEPA architecture for electronic health records) later this year.

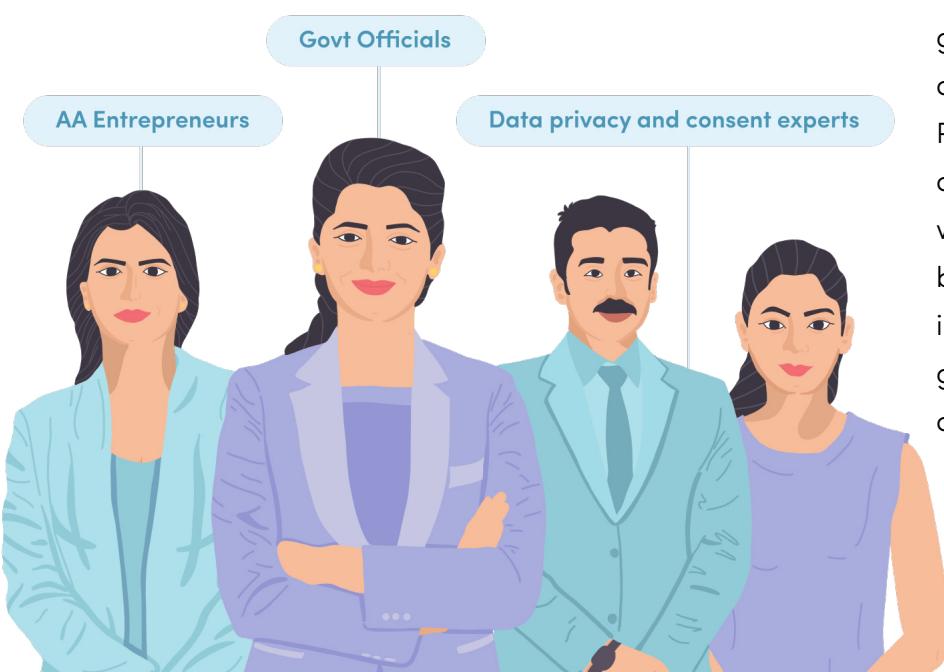
## 15

## Co Creation

Now that the DEPA platform is available as a public good, tremendous entrepreneurial energy has been building in market participants who are leveraging the opportunity to innovate across the various new roles in the ecosystem.

Many different market players can co-create and innovate on this public good: Financial institutions can continue to adopt the public APIs and become financial information providers and users (the new nonprofit Collective of AAs called **Sahamati** is helping with this transition); entrepreneurs and fintechs can start up Account Aggregators catering to diverse users and/or innovate on new modes of gathering informed consent and protecting data rights; banks, NBFCs, and fintechs across the ecosystem can build innovative products and services to serve previously difficult to access populations (such as cash flow-based lending for micro businesses, improved personal financial decision management apps, etc.), which leverage the new data sharing possibilities. All players in the ecosystem could work to build awareness around informed consent, and continue to contribute to the evolving technology framework for better data protection and empowerment. Moreover, innovation is not restricted to market players: within the government, a Data Protection Authority to enforce data protection legislation can be created as per the Srikrishna Bill recommendations that strives to ensure data is secure and protected. Regulators and other government ministries can consider operationalising consent managers in their respective sectors to empower users with access to data in telecom,


education, or jobs data. Finally, government departments could adopt a 'Government Information Provider' technology module that allows secure sharing of data with consent of individuals or small businesses; this could significantly improve the ease of accessing government services and the ease of doing business.





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## An “India way” for the World on Data

A large, diverse crowd of people, representing various ethnicities and ages, is arranged to form the geographical shape of India. The crowd is dense and fills the outline of the country, symbolizing a large, inclusive population.

We are confident DEPA will be a transformative platform that shows a new India model on data protection, sharing, consent and privacy quite distinct from other models around the world.

The India model of data governance is one that is inclusive, sensitive to the needs of the poor, technologically innovative and robust, and continues to drive and stimulate economic and business value. DEPA adoption in any sector is likely to nudge the market forward towards higher quality services: simple access or control of user data will no longer be a source of competitive advantage; institutions will have to create value through better analysis and more sophisticated

predictions based on data, as well as improve accessibility for users. Finally, because the standards underpinning DEPA are open, the architecture can be applied to other countries – an institutional framework can be designed to globalise this standard and apply it to other markets facing similar challenges.



