



## **A Comparative Study on the Effectiveness of Aadhaar System with the Social Security Number in the United States of America**

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### ABSTRACT :

The Aadhaar is a unique system of identification adopted in India in 2009. It involves the use of certain demographic and biometric information to identify individuals. Over the years, there has been significant discussion and debate concerning the effectiveness of the system as well as its effects on the condition of people's privacy in India. In this paper aims to find gaps in legislation and implementation through a thorough study on the background of the enactment of this system, after which a comparative analysis has been done using the much older American Social Security Number (SSN) system as a template. It has been found that current legislation does not completely provide for all aspects of the operation of Aadhaar, and there does not seem to be a consensus on the number of applications of the Aadhaar number. It is observed that more clearly defined legislation may be able to improve the condition of implementation of the system in India.

Keywords: Aadhaar, Social Security Number, privacy, biometrics, legislation.

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### INTRODUCTION: The Aadhaar System :

Aadhaar, which in many Indian languages means 'foundation' or 'base,' is a unique, twelve - digit identity number assigned to all individuals residing within India. It was first launched in 2009 with the intention to mitigate abuse of social welfare programmes through false identification, by ensuring that the subsidized commodities reached the intended beneficiaries.<sup>1</sup> The biometric data required for setting up a person's unique identification is given voluntarily, that is, residents can opt to be given an Aadhaar number and by extension provide their data for the same. A statutory authority called the Unique Identification Authority of India, or UIDAI, was established under the Ministry of Electronics and Information Technology for the purpose of managing enrolment for the Aadhaar and for collecting and maintaining these data records.<sup>2</sup> A Central Identities Data Repository was also established as a centralized database for storing all biometric and demographic data.<sup>3</sup> The activities of the UIDAI are regulated by the provisions under the Aadhar (Targeted Delivery of Financial and other Subsidies, Benefits and Services) Act, 2016.<sup>4</sup>

Since its inception, the Aadhaar system in India has not been without controversy. Initial setbacks arose due to the sheer scale of its implementation, which affected the general public's access to benefits due to a lack of facilities and proper infrastructure for managing problems that occur during mass registration for the Aadhaar. Secondly, there have also been some contradictory actions by the Government regarding the applicability of the Aadhaar; while the Government declared this system to be voluntary and not a requirement for any resident to have, the Aadhaar has been made mandatory for people to avail many services in India. As a result, it has become extremely difficult for those without an Aadhaar card to access these services, leading critics to point out the excessive imposition of the Aadhaar by the Government. Third and most important, there has been a great deal of controversy surrounding privacy issues pertaining to the data collected for Aadhaar registration. There have been arguments that the system used for maintaining residents' biometric and personal data does not have adequate safeguards. The collection of data in such a manner was thus claimed to be a violation of Article 21 of the Indian Constitution, which guarantees the Fundamental Right to life and personal liberty.<sup>5</sup> This will be explained further in subsequent chapters.

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### RESEARCH PROBLEM

This paper aims to answer the following questions:

1. How effective has the implementation of the Aadhaar system been, and what gaps still exist in this regard?
2. What are the social implications of biometric registration for Aadhaar?

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<sup>1</sup> "Aadhaar – India – Case Study", *OECD*, 10<sup>th</sup> February 2018, [Aadhaar - India - Case Study](#)

<sup>2</sup> The Aadhaar (Targeted Delivery of Financial and other Subsidies, Benefits and Services) Act, 2016, §11

<sup>3</sup> The Aadhaar (Targeted Delivery of Financial and other Subsidies, Benefits and Services) Act, 2016, §2(h)

<sup>4</sup> Government of India, (n.d), "About UIDAI", *Unique Identification Authority of India*, [About UIDAI](#)

<sup>5</sup> India Const., Art. 21

3. Does the Aadhaar system have any privacy concerns, and if yes, then in what ways can they be addressed?

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## RESEARCH METHODOLOGY

The research adopts a doctrinal approach and delves into the background of the implementation of the Aadhaar, its constitutionality, as well as the studies and discussions on the subject done so far in the legal field. It involves a comparative study of the Aadhaar Number system with the national identification systems of other countries, and specifically the system of Social Security Number in the USA. Comparison is done on the basis of method of implementation and regulating laws and bodies in each case, in order to find areas of improvement if any in the Indian system.

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### National Identification Systems Around the World

A national identification number is a system used by national governments in order to identify citizens and residents of their country, and to track them for the purpose of taxation, healthcare, and other government benefits. It is assigned to every individual upon their birth, arrival in the country for long-term purposes, or on reaching the legal age of majority in that country, and each such number is unique to every individual. Some countries adopt the use of biometrics as a step for registration into the national identification system. The Aadhaar in India is the largest biometric-based identification system in the world by population<sup>6</sup>, but other countries such as Australia, Canada, China, France and the United Kingdom all use biometrics for identification of residents. Another well-known national identification system is the Social Security Number, or SSN, used in the United States of America.

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### Social Security Number in the USA

The Social Security Number, or SSN for short, is a nine-digit numerical identifier issued to citizens of the USA, permanent residents (also known as ‘green card holders’) and working residents.<sup>7</sup> The purpose for which the social security number was originally created was tracking<sup>8</sup>, however, its use has evolved over time to become the *de facto* national identification number with a variety of applications.

For the purpose of this research, comparisons will be drawn between the Aadhaar in India and the social security system in the USA in the chapters subsequent.

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### Issues with the Aadhaar System

Several criticisms have been raised against the Aadhaar system and its implementation since it was first introduced in 2009. This has led to debates on the need for such a system, whether it compromises national security, whether it was necessary to be passed as a money bill, and on the constitutionality of such a system. These concerns can be classified broadly into two categories:

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#### 1. Issues with implementation

The primary issue with the Aadhaar system lies in its implementation. Since its launch, the ambit of the Aadhaar has widened. However, there are not enough institutions to facilitate proper enrolment and maintenance of records. It has become cumbersome especially for people from the lower strata of society to update Aadhaar databases and retrieve Aadhaar number and other personal data.<sup>9</sup>

There is also some discrepancy as to what the Aadhaar can be used for, with Government directives on the matter changing frequently. In a notification issued in 2017, the linking of Aadhaar to bank accounts were made mandatory.<sup>10</sup> Soon after, it was made mandatory to link one’s Aadhaar to their mobile numbers and Permanent Account Number (PAN) for income tax purposes as well. The Supreme Court held that there was no need to link the Aadhaar to bank accounts or phone numbers but exempted the Aadhaar-PAN linking from this directive.<sup>11</sup> However, even since the ruling, the Government has routinely used a method known as the “ultimatum method”, whereby recipients of certain benefits or subsidies lose access to them upon their failure to comply with the notifications from the Government regarding Aadhaar linkage with various documents.<sup>9</sup> These notifications are usually arbitrary and excessive. For instance, a Bill passed by the Parliament in 2021 aimed to link the Aadhaar with the Voter ID, causing concern with regards to disenfranchisement of adults who are not in possession of an Aadhaar card.<sup>12</sup> Despite this and the fact that the Aadhaar was introduced as a method for identification, recently, the Government has issued clarifications that the Aadhaar may not be used as a proof of date of birth.<sup>13</sup>

<sup>6</sup> Shankar, Besta, “Aadhaar Becomes World’s Biggest Biometric ID Programme,” *International Business Times, India Edition*, 27<sup>th</sup> April 2015

<sup>7</sup> Kagan, J., “What Is an SSN? Facts to Know About Social Security Numbers,” *Investopedia*, 15<sup>th</sup> February 2024, [What is SSN?](#)

<sup>8</sup> Pickett, Carolyn, “The Story of the Social Security Number”, *Social Security Bulletin*, Vol. 69, no. 2, United States Social Security Administration, 2009

<sup>9</sup> Drèze, J, Khera, R. “Aadhaar: Six Issues that Must be Addressed”, *IDR*, 21<sup>st</sup> January 2022, [IDR Issues with Aadhaar](#)

<sup>10</sup> Financial Express, “Linking Aadhaar number to bank accounts is mandatory, clarifies RBI; read full statement”, 21<sup>st</sup> October 2017, [Financial Express](#)

<sup>11</sup> The Indian Express, “Supreme Court rules Aadhaar not mandatory for bank accounts, mobile numbers, school admissions”, 26<sup>th</sup> September 2018, [Indian Express](#)

<sup>12</sup> Poddar, U, “Centre claims linking of Aadhaar to voter ID is voluntary – but bill in Parliament contradicts it”, *Scroll.in*, 21<sup>st</sup> December 2021, [Aadhaar Link to Voter ID](#)

<sup>13</sup> Deep, A. “Government makes it clear that Aadhaar no proof of citizenship, birth date”, *The Hindu*, 27<sup>th</sup> January 2024, [The Hindu](#)

However, several government bodies such as the Election Commission do accept the Aadhaar as proof of date of birth for enrolment purposes.<sup>13</sup> This is in direct contradiction with the perceived importance placed on the Aadhaar as a one-size-fits-all system for access to many schemes and subsidies. In essence, the Aadhaar has not helped reduce the dependence on other systems of documentation or on the long bureaucratic process of enrolling for them and other schemes; it has only been made a requirement in addition to these documents. This is in contrast to the civil identification systems of many countries such as those in the Arabian Gulf, like Kuwait and Bahrain, where a valid Central Population Register (CPR) Number in Bahrain or civil ID card in Kuwait must be used for identification, many financial transactions and civil applications, and is usually the only Government- issued document required in the list of proofs for such processes.<sup>14</sup>

## 2. Issues with privacy

The second and arguably more prominent issue that the Aadhaar system faces relates to whether it violates privacy or not. A legal definition of privacy is provided by Black's Law Dictionary: "privacy is the right that determines the non-intervention of secret surveillance and the protection of an individual's information."<sup>15</sup> Indian jurisprudence has taken a serious view of privacy as an individual's inalienable right only in recent years. In *Kharak Singh v. State of UP*<sup>16</sup> one of the issues raised was whether the right to privacy falls within the ambit of the Fundamental Right to Life and Personal Liberty as enshrined in Article 21 of the Indian Constitution.<sup>17</sup> In this case, it was held that the right to privacy is not a guaranteed right, and that surveillance on the movements of suspects does not violate the fundamental rights guaranteed under the Indian Constitution.

On the other hand, in *Maneka Gandhi v. Union of India*<sup>18</sup> the ambit of Article 21 was widened by the Supreme Court, which led to many landmark judgements being made by the country's Apex court in future cases. This included *PUCL v. Union of India*<sup>19</sup>, where it was held that tapping of telephone conversations was a violation of privacy, and that Article 21 could be invoked to protect privacy in certain cases depending on their facts and circumstances, and most notably *Justice Puttaswamy v. Union of India*<sup>20</sup>, where the right to privacy was held as intrinsic to Article 21.

As to what can be protected from the intervention of the State under privacy laws, the Universal Declaration of Human Rights (UDHR) provides that "no one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation."<sup>21</sup> India does not have any statutory law that exclusively discusses privacy, however, since the judgement in *Puttaswamy*, the right to privacy has been held as inherent to Right to Life, and hence is seen as a Fundamental Right. Also, Section 43 A of the Information Technology Act, 2000 says that if any corporate body is negligent in the handling of users' personal data, does not use or uses improper security measures, and such negligence results in a loss to the user or the wrongful access of other parties to user data, then the corporate entity shall be held liable to pay damages to the users as compensation.<sup>22</sup>

With the surge in usage of the internet for personal use, a lot of users' personal data end up getting used across multiple platforms. This increases the risk of such data getting exposed in data breaches. Many countries around the world are beginning to adopt data protection laws to monitor and curb such issues. For instance, in the United States of America, there are several laws dealing with the right to keep personally identifiable information (PII) of various kinds private. These include the Privacy Act enacted in 1974 for protection of data collected by computerized databases, the Health Insurance Portability and Accountability (HIPAA) Act for personal health information, Gramm–Leach–Bliley Act (GLBA) for protection of customer data by financial institutions, and the Children's Online Privacy Protection Act (COPPA) for protection of minors' personal data.<sup>23</sup>

In India, the Digital Personal Data Protection Act was passed by both Houses of Parliament in 2023 and will apply to all digitally processed data. Section 2 clause (h) defines data as "the representation of information, facts, concepts, opinions or instructions in a manner suitable for communication, interpretation or processing by human beings or by automated means."<sup>24</sup> However, there is no clear provision regulating harm from data processing.<sup>25</sup> Originally, the Personal Data Protection Bill, 2019, had a definition of harm that covered mental injury, identity theft, financial loss, reputational loss, discriminatory treatment, and observation or surveillance that is not reasonably expected by the data principal i.e. the person whose personal data is being processed.<sup>26</sup> However, this bill was withdrawn by the Lok Sabha, after which the 2023 Act was introduced without this provision. The Act also provides for various exemptions in data processing and protection to government agencies in the interest of national security and integrity and maintenance of public order. This may contravene the proportionality test put forth by the Supreme Court in *Puttaswamy*<sup>20</sup> whereby the infringement of the right to privacy may be measured by its proportionality to the goal the State seeks to achieve through such interference.<sup>27</sup> It is yet to be seen if the benefits reaped through this law outweigh the risks associated with the State's interference of the right to privacy.

It is therefore now necessary to assess the privacy concerns surrounding the Aadhaar in light of the aforementioned stance taken by the State through various judgements and statutes.

<sup>14</sup> "List of National Identity Card Policies by Country", *Wikipedia*, Updated 11<sup>th</sup> April 2024, [National ID Cards](#)

<sup>15</sup> Black's Law Dictionary, 2<sup>nd</sup> Ed.

<sup>16</sup> *Kharak Singh v. State of Uttar Pradesh and Ors.*, 1962 AIR 1295

<sup>17</sup> India Const., Art 21

<sup>18</sup> *Maneka Gandhi v. Union of India*, 1978 AIR 597

<sup>19</sup> *People's Union for Civil Liberties (PUCL) v. Union of India*, AIR 1997 SC 568

<sup>20</sup> *Justice K.S. Puttaswamy (Retd.) and Anr. v. Union of India and Ors.*, AIR 2017 SC 4161

<sup>21</sup> Universal Declaration of Human Rights, G.A. Res. 217 (III) A, U.N. Doc. A/RES/217 (III) (Dec. 10, 1948), Art. 12

<sup>22</sup> The Information Technology Act, 2000, § 43 A

<sup>23</sup> Welekwe, A., "A Guide to the Federal and State Data Privacy Laws in the U.S.", *Comparitech*, 19<sup>th</sup> October 2022, [Data Privacy Laws in the US](#)

<sup>24</sup> The Digital Personal Data Protection Act, 2023, §2(h)

<sup>25</sup> "The Digital Personal Data Protection Bill, 2023", *PRS Legislative Research*, Site Accessed on 9th April 2024, [DPDP Bill 2023](#)

<sup>26</sup> The Personal Data Protection Bill, Lok Sabha Bill No. 373, §3(20), 2019

<sup>27</sup> A K Aditya, "Proportionality Test for Aadhaar: The Supreme Court's two approaches", *Bar and Bench*, 26<sup>th</sup> September 2018, [Proportionality Test](#)

In order to enrol for the Aadhaar, an individual must submit his or her personal data including date of birth and address, known as “demographic information”<sup>28</sup>, as well as his or her fingerprints and iris scans, also known as his or her “core biometric information”<sup>29</sup> to the UIDAI for verification. The UIDAI has taken several steps to protect both sets of data. This includes minimal data collection that does not include financial or property-related information, encryption of biometric data at the collection point, and a secure authentication process using one-time passwords (OTPs).<sup>30</sup> However, there is no sufficient regulation of third-party platforms that process personal data through authorization from UIDAI. The system has been allegedly compromised through apparent data breaches in 2017 and 2023. In 2017, there was a breach of data belonging to users of Reliance Jio SIM cards, some of which included the Aadhaar related information of some users.<sup>31</sup> Similarly, in 2023, there was an alleged breach of data, which exposed 81 crore Indians’ personal data on the dark web.<sup>32</sup> The unauthorized release of data for unsupervised use may cause issues for citizens in terms of their individual privacy as well as their ethnic or religious identities, especially for people in minority communities, as such data can be used as tools for targeted attacks. Also noteworthy is that criticisms pertaining to the Aadhaar had been met with derision by the UIDAI. The Aadhaar (Targeted Delivery of Financial and other Subsidies, Benefits and Services) Act, 2016, was passed to create legal backing to the Aadhaar seven years after its launch, as the number of cases against the scheme had steadily risen until 2015, eventually culminating in the *Puttaswamy* judgement.<sup>20</sup><sup>33</sup> Moreover, many of the makers behind the design and security measures of the Aadhaar are now involved in the private sector, meaning that such technologies could be used for profit and private vested interest.<sup>34</sup>

Thus, it is apparent that there are plenty of concerns relating to issues with privacy in the use of the Aadhaar. This must now be evaluated with respect to the general standing on identity systems around the world, and especially in the United States, which is the other major democratic nation in the world in terms of size and population.

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## Comparison of the Aadhaar with the Social Security Number

In earlier chapters, the issues surrounding the Aadhaar were observed from various angles. Now, a comparison can be made with the SSN system used in the United States of America in order to assess these classifications of issues.

### 1. Purpose

The Aadhaar was implemented in 2009 for the express purpose of establishing and tracing identity and is therefore a fairly recent system of identification. It is also used in the authentication of Aadhaar numbers by the Government of India and other private entities for multiple purposes, especially for subsidies rolled out by the Government.

The Social Security Number, on the other hand, traces its origins to the Great Depression, and was developed as a system to track earnings and provide social benefits.<sup>7</sup> This system was implemented during the presidency of Franklin D Roosevelt, whose tenure was centred on providing social and economic stability to the elderly, disabled, and those in need of medical assistance.<sup>35</sup> Originally meant as a method to track social security accounts for the purpose of providing benefits, the SSN eventually started being used as a method of identification in the United States.

### 2. Laws and Regulations

The Aadhaar is governed by the Aadhaar (Targeted Delivery of Financial and other Subsidies, Benefits and Services) Act, 2016, implemented seven years after the launch of the Aadhaar. The law was created with the intention to provide legal backing to the Aadhaar system and is therefore also retrospective in nature.<sup>36</sup> The Supreme Court has upheld this retrospective aspect of the law in *Puttaswamy*.<sup>20</sup> The UIDAI has issued regulations regarding the data management and security protocols by third parties in the handling of Aadhaar data<sup>37</sup>, of enrolment<sup>38</sup> and of the sharing of information<sup>39</sup> which are regularly updated<sup>40</sup> but other than these regulations, there are no other laws governing the use of the Aadhaar or individuals’ privacy at large.

In the United States, on the other hand, the Social Security Number is governed by the Social Security Act of 1935.<sup>41</sup> As stated earlier, there are also a number of legislations governing privacy in the US. In response to growing fears regarding the misuse of SSNs, the Privacy Act of 1974 was passed to

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<sup>28</sup> The Aadhaar (Targeted Delivery of Financial and other Subsidies, Benefits and Services) Act, 2016, §2(k)

<sup>29</sup> The Aadhaar (Targeted Delivery of Financial and other Subsidies, Benefits and Services) Act, 2016, §2(j)

<sup>30</sup> Government of India (n.d), “Aadhaar Myth Busters”, *Unique Identification Authority of India*, [Aadhaar Myth Busters](#)

<sup>31</sup> “Reliance Jio data breach: Here’s why it is a big deal, what it means for users and more”, *The Indian Express*, 11<sup>th</sup> July 2017, [Jio Data Breach](#)

<sup>32</sup> “Aadhaar data leak: Massive data breach exposes about 81 crore Indians’ personal information on dark web. Details here”, *Livemint*, 31<sup>st</sup> October 2023, [Aadhaar Data Breach](#)

<sup>33</sup> Chaturvedi, A, “Overview of the Legal Issues around Aadhaar”, *PRS Legislative Research*, 10<sup>th</sup> June 2017, [Legal Issues Around Aadhaar](#)

<sup>34</sup> Thaker, A, “The New Oil: India’s mixing of public risk and private profit”, *The Caravan*, 1<sup>st</sup> May 2018, [The New Oil](#)

<sup>35</sup> “Social Security: Chronology,” Special Collections, *United States Social Security Administration* (n.d)

<sup>36</sup> The Aadhaar (Targeted Delivery of Financial and other Subsidies, Benefits and Services) Act, 2016, §59

<sup>37</sup> The Aadhaar (Data Security) Regulations, 2016, Updated 23<sup>rd</sup> October 2023

<sup>38</sup> The Aadhaar (Enrolment and Update) Second Amendment Regulations, 2024

<sup>39</sup> The Aadhaar (Sharing of Information) Amendment Regulations, 2024

<sup>40</sup> Government of India (n.d), “Regulations”, *Unique Identification Authority of India*, [Regulations](#)

<sup>41</sup> 42 U.S.C Ch. 7 - Social Security, §405 (c) (2)

regulate their use, and the Computer Matching and Privacy Protection Act of 1988 helped tighten regulation around digitally processed data pertaining to SSNs.<sup>42</sup>

### 3. Governing Bodies

In India, the regulatory authority responsible for the maintenance of the Aadhaar database and security protocol is the UIDAI. Aadhaar (Targeted Delivery of Financial and other Subsidies, Benefits and Services) Act, 2016 grants the UIDAI significant powers in the management of the Aadhaar. The UIDAI has self-regulatory authority, and the Act grants legislative recognition and greater powers to the UIDAI rather than the Government, which reduces UIDAI's accountability to any other authority including the Government.<sup>43</sup> The UIDAI is also exempt from providing information in response to Right to Information (RTI) requests, following the provisions of the RTI Act.<sup>44</sup> This leads to a vacuum where information regarding the technology being used by the Authority to maintain its databases should be available.

In contrast, the activities of the Social Security Administration in the USA, which issues SSNs and maintains its database, have been heavily scrutinized over the years. Any changes in their procedure are examined through extensive on-the-record hearings by the judiciary, legislative committees and presidential commissions.<sup>45</sup> The Social Security Administration is also held accountable by the Government and must answer to its calls for regulations and protection of residents' rights. Unlike the UIDAI which links databases, the Social Security Administration uses a centralized database for the storage of data.<sup>42</sup> Thus, the laws governing the use of SSNs are made strict to protect the privacy of the people.

### 4. Enrolment Procedure

As detailed earlier, to enrol for the Aadhaar, it is necessary to submit both one's demographic data as well as one's biometric data. The use of biometrics is said to enable detection and mitigation of potential fraud. The size of the Aadhaar project and the database generated as a result has led to many studies being conducted, and it has been noted that the Aadhaar may be used both as a means of promoting social welfare and as a tool for mass surveillance.<sup>45</sup>

Enrolment may be done in State-appointed Aadhaar Seva Kendras<sup>46</sup> or through third party enrolment agencies hired at the state level by specially authorized Registrars.<sup>47</sup> The enrolment agencies have to abide by the rules put forth by the UIDAI, use software provided by the UIDAI for enrolment, and may be selected by the Authority after verification as to their organizational profile, technical and financial status. The procedure for verification of such agencies by the UIDAI is not known beyond this. The enrolment agencies must collect certain information of applicants as a part of the "Know Your Resident" rules set by the UIDAI, with these agencies also being incentivized to collect additional data such as marital status, information related to housing and residence, voter ID information etc.<sup>43</sup> However, this information cannot be transferred between government agencies; this essentially means that the Aadhaar cannot be used as the sole identification for registration to multiple subsidies, and each one must be applied for separately, with its own set of document requirements.

In the US, no biometrics are used in the registration of users for the SSN. While this could cause issues with identity verification, the predicament of potentially violating privacy of users is significantly reduced as there is lesser personal data being transferred across databases. The registration procedure is also managed entirely by the government with no involvement of any third parties. The local counties and states coordinate amongst themselves to record SSNs assigned at birth, known as Enumeration at Birth (EAB).<sup>43</sup> Also, the SSN can be used in enrolling for separate schemes by the users themselves, an example being the opportunity given to people renewing their drivers' license to also register to vote. If individuals choose this route, the data from the registration process for the licence will be transferred to the government agency that manages the voters' list.<sup>43</sup>

### 5. Extent of Use

Over the years since its launch up until the *Puttaswamy* judgement, where the Supreme Court gave directions to limit the use of the Aadhaar to certain subsidies only and to restrict third parties' use of the Aadhaar for registration to their services,<sup>20</sup> the applications of the Aadhaar had been greatly expanded upon by the UIDAI. Even today, an applicant's Aadhaar card may be used as part of the "Know Your Customer" (KYC) procedure for registering for many third-party financial services. Such procedures also often include an authentication process by which such service platforms may send requests for verification to the UIDAI. Given the simplicity of the verification process, the Aadhaar system mostly leans towards a trend of expansion of extent of its use.

However, in the US, the general trend in the extent of use of the SSN has been to limit its applications, favouring individual privacy over the purported ease of third-party authentication procedures. SSN numbers are stored by the State and can be shared with private entities only with the consent of the SSN holder.<sup>42</sup> No authentication system similar to the one in India exists, due to the restrictive nature of privacy laws in the US on the use of SSNs.

<sup>42</sup> "Aadhaar and Social Security Number – How are They Different?", *The Quint*, 6<sup>th</sup> January 2018, [The Quint](#)

<sup>43</sup> Young, K, "Key Differences Between the U.S. Social Security System and India's Aadhaar System", *New America*, [Key Differences Between the U.S. Social Security System and India's Aadhaar System](#)

<sup>44</sup> Government of India (n.d), "RTI", *Unique Identification Authority of India*, [RTI](#)

<sup>45</sup> Jacobsen, E. KU, "Unique Identification: Inclusion and Surveillance in the Indian Biometric Assemblage", 2012, *Security Dialogue* 43(5):457–74

<sup>46</sup> Government of India (n.d), "Aadhaar Seva Kendras", *Unique Identification Authority of India*, [Aadhaar Seva Kendra](#)

<sup>47</sup> Government of India (n.d), "Enrolment Agencies", *Unique Identification Authority of India*, [Enrolment Agencies](#)



## Observations and Conclusion

From this thorough study and comparative analysis of the Aadhaar and SSN, a few observations become noteworthy:

1. The use of biometrics in the enrolment for Aadhaar is an effective method for reducing instances of identity theft, as it is difficult to impersonate another person with such a system. On the other hand, the risk of data loss through breaches is higher due to the sensitive nature of the data collected. Security systems that are in place for the protection of this data may be compromised through the transfer of information on its working to other private entities. Thus, a robust system must be in place to protect this information.
2. Existing legislation governing the Aadhaar does not appear to be sufficient in protecting Aadhaar holders from the violation of their rights, especially their privacy. Although there is abundant judicial commentary on the protection of the rights of Aadhaar card holders, the legislation is yet to reflect this. Therefore the creation of additional laws that clearly define privacy and the various forms in which it may discernible, place a system of checks and balances on the activities of entities overseeing the creation and storage of Aadhaar data, and explicitly provide for the rights and protections of Aadhaar holders, is the need of the hour.
3. Given the wide-ranging applications of the Aadhaar, its implementation has been confusing. The result of this has been the use of the Aadhaar as an additional requirement for many state-funded services to the point of its redundancy. Therefore a streamlining of the use of the Aadhaar must be done along with the various other Government-issued documents that are currently in place, such as PAN, voter ID etc.

In conclusion, the Aadhaar system is an incredibly ambitious project that has been successful in many arenas, especially with respect to the handling of large data sets. However, there are improvements to be made with respect to its governing legislation and implementation, which can then take this grand and sophisticated endeavour to impressive heights.

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