Comparative Study and Analysis of Unique Identification Number and Social Security Number

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Abstract— **As we study the detailed information and use of Unique Identification number provided by Indian Government and Social Security Number provided by U.S., an idea came in our mind to merge the concept of UID and SSN so that these two can be used not only to identify the identity of a person but also for inspecting the account information of the person which may be helpful to know about the black money hold by the person if needed. The use of the Social Security number (SSN) has extended significantly for tracking the earnings details of U.S. workers for Social Security entitlement and which is beneficial to compute the universal identification of the workers. We need a Social Security number to get a job, collect Social Security benefits and get some other government services. But we don't often need to show our Social Security card..Unique Identification Aadhar Card is provided to identify the personal identity of a citizen on the basis of some biometric hand and eye impression with his or her personal address. Today in India to recover the money problem Modiji has started the scheme of renewable the currency running from several years to come in front the black money holders. If we apply the concept of SSN card with Aadhar card then this problem can be resolved very easily. In our paper we have just try to show the details holding through UID and SSN so that one can easily think that how the merging of UID and SSN may be possible.**

Keywords- **Demographic Data, Biometric Data , STQC, Numident, IRS**

I. INTRODUCTION

The concept of Unique Identification Number (UID) was introduced by Government of India with the help of UIDAI which was set up in January as an attached office under a sponsorship of Planning Commission . The UIDAI is authorized to assign a 12-digit unique identification (UID) number (termed as Aadhaar) to all the residents of India. The data collected through UIDAI is centralized at the IMT(Industrial Model Township), Manesar [1].

The Unique Identification Aadhar card is an identification entity to collect the biometric and demographic data of residents which is stored in a centralized database and is issued to each residents with 12- digit unique identity number Aadhaar.To generate a Aadhaar card a residents need to give the details about his/her personal information related to full name, address(current as well as previous address) ,date of birth, marital status and also apart from it biometric identification through finger prints and iris scans. First time UID was issued in September 2010, the main purpose of UIDAI was to target to eliminate the duplicate identity of a resident by providing him the 12 digit unique identification number through Aadhaar card. . Aadhaar neither deliberates citizenship nor assurances rights, benefits, or entitlements. Aadhaar is a random number which never starts with a 0 or 1, and is not encumbered with profiling or intelligence into identity numbers that makes it imperceptive to fraud and theft. The unique ID would also be suitable for as a valid ID while availing various government services, like a to get the subsidy on LPG , kerosene, good like wheat,pulses,sugar etc. from Public Distribution ,for account holder identification, in various government jobs, for getting sim card etc [6].

Figure 1 Sample image of UID

The concept of Social security Number (SSN) was introduced by the Social Security Administration, an independent agency of United States for providing the unique identification to U.S. citizens, permanent residents and working (temporary) residents. The basic purpose of this number is to track out the individuals for social security purposes [2]. Apart from this purpose it has become a national identification number for taxation and other purposes [3].

The SSN number is composed of three parts with the total of 9-digit numbers. The format of SSN is as "AAA-GG-SSSS" [4].

- The first set of three digits is called the Area Number
- The second set of two digits is called the Group Number
- The final set of four digits is the Serial Number

Area Number: The Area Number is assigned by the geographical region. Before 1972, SSN card were only issued in local Social Security offices everywhere in the country and the Area Number represented the State not compulsorily where the applicant lived since a person could apply for their card in any Social Security office. Since 1972, the area number was assigned on the basis of ZIP code given by the person's application form when he applies for original SSN card. It is not necessary that person's mailing address and actual residents' address would be same. It consists of three digits.

Group Number: The middle part of SSN number is 2 digit group number which is in the range 01 to 99.The numbers is not in consecutive order .If SSN is issued for administrative reasons then it consists of odd numbers from 01 to 09 otherwise it consists of even numbers from 10 to 98 within each area number assigned to a state. If the numbers 98 of a specific area has been issued then even number 02 to 08 are utilized following odd groups 11 through 99.

Serial Number: The last part of SSN number consists of 4 digits from 0001 to 9999 in each group, which is just a serial number [5].

Figure 2 Sample Image of SSN

In this paper we have presented the basic details of UID and SSN. On the basis of the uses and characteristics of UID and SSN, we have concluded to mingle the concept of both cards for the convenient of citizen's identification as well as to know about the credit history of them.

Rest of the paper is organized as follows: In section II, the information provided through UID is given. Section III includes the information given through SSN. In Section IV, we have mentioned the areas where UID and SSN may be applicable. In Section V, we have given the short summarization of the related work. Section VI compares the UID and SSN on the basis of some basic features. In Section VII we have proposed some suggestions and recommendations. Section VIII concludes the paper with future scope.

II.   DETAILS PROVIDED THROUGH UID[6]

Demographic information:
- full Name
- address
- picture
- What are all crimes you did
- Marital status
- Your previous address

Biometric information :

- Some biological attributes of the individual.
- Collection of information pertaining to race, religion, caste, language, income or health is specifically prohibited.

III. DETAILS PROVIDED THROUGH SSN

- Name to be shown on the card
- Full name at birth, if different
- Other names used
- Mailing address
- Citizenship or alien status
- Sex
- Race/ethnic description (SSA does not receive this
- information under EAB)
- Date of birth
- Place of birth
- Mother's name at birth
- Mother's SSN (SSA collects this information for the Internal Revenue Service (IRS) on an original application for a child under age 18.SSA does not retain these data.)
- Fathers' name
- Father's SSN (SSA collects   this information for IRS on an original application for a child under age 18. SSA does not   retain these data.)
- Whether applicant ever filed for an SSN before
- Prior SSNs assigned

- Name on most recent Social Security card
- Different date of birth if used on an earlier SSN application.
- Date application completed
- Phone number
- Signature
- Applicant's relationship to the number holder

IV. APPLICATIONS OF UID AND SSN[7]

The UID will be applicable in the following areas.
- Banks
- Schools and colleges
- Real estate
- Driver license
- Voter ID
- Ration card
- telephone and mobile connections
- employments
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The SSN will be applicable where we need the record of
- Employee,
- patient,
- student,
- credit

V. RELATED WORK

- Carolyn Puckett, in his article "The Story of the Social Security Number" has given the significant use of Social Security Number (SSN) and how this SSN is being used to keep track of the earnings history of U.S. workers for Social Security entitlement.

- Swati Chauhan , Chetanshi Sharma and rest authors has concluded in their paper" Survey Paper on UID System Management " that Unique Identification System is very beneficial to the citizens because it is a unique number which holds basic information of every person and after having it there is no need to carry driving license, voter cards, pan card, etc for any govt. or private work[8].

- James E. Duggan Robert Gillingham John S. Greenlees, in their paper "Distributional Effects of Social Security: The Notch Issue Revisited" has provided the first empirical estimates of the effects of the Social Security benefit notch on lifetime benefits based on actual Social Security records, the 1988 Continuous Work History Sample[9].

- Shraddha Thorat and Vikrant Bhilare have given the conclusion through their paper "Comparative Study of Indian UID Aadhar and other Biometric Identification Techniques in Different Countries" that countries those have not used biometrics for identification should use it. Further they should use multiple Biometrics that has a combination of behavioral and Physical characteristics for robustness [10].

VI. COMPARISON BETWEEN UNIQUE IDENTIFICATION NUMBER AND SOCIAL SECURITY NUMBER

Table 1 : COMPARISON BETWEEN UID AND SSN [11]

Features	UID	SSN
Digits in ID	12 digit	9 digit
Picture	Available	Not Available
Marital history	display	Not display
Appearance	It's a smart card	It's an envelope size paper
Credit history	Not mentioned	Mentioned
Purpose	Aadhaar was created as a biometric based authenticator and a single unique proof of identity	SSN was created as a number record keeping scheme for government services
Governing Body	Aadhaar was constituted under the Planning Commission	SSN is governed by Federal legislation
Applicability	Aadhaar is for residents	SSN is for citizens and non-citizens authorized to work
Storage, Access, and Disclosure	Aadhaar and data generated at multiple sources is stored in the CIDR(Central ID Repository) and processed in the data warehouse	SSN and applications are stored in the Numident (Numerical Identification).
Verification	The SSN can be verified only in certain circumstances	The SSN can be verified only in certain circumstances.

VII. SUGGESTIONS AND RECOMMENDATION

From Table 1, it is clear that UID is fully based on biometric identification and may be applied in every government sector when needed. Today in government examination, UID plays a very important role for the identification of the fraud student giving the exam. But when there is need to know the person's financial detail so that one can find out the black money holding by him, it is not very advantageous to use UID. In such case, in spite of using UID, SSN may be used. Hence we recommend that if there may a new technique to combine the features of UID and SSN, one can generate a new Unique Identification card.

VIII. CONCLUSION AND FUTURE SCOPE

As we analyzed the Unique Identification number and Social Security number we come to the conclusion that
Both cards are very helpful to figure it out the details of any individual or company but when it comes to bring out financial transactions details, personal history etc., We will face a little bit trouble to fetch the both information together with the help of these two identification cards. In that case it may be very propitious if we try to mingle the concept of UID and SSN at the same time through a new smart card for all over the world. In future this concept may create a drastic change in our life for the unique identification and also we may be secure from deceitful money holders.

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