UNIQUE IDENTIFICATION NUMBER AND E-GOVERNANCE SECURITY

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ABSTRACT

Security is seen as a great resource to a company as well as to a government organization. If proper security provisions are made at hardware and software level then customers utilising the resources would

feel proud. There is need of having different security levels for different kinds of task. Financial and confidential information for a company has high level of security as compared to the information about its employees. UID is being implemented in India providing valuable information of citizens. Various facilities are to be provided on the basis of that information to the masses. It will also reveal how it can be used for genuine identity of a person and thus improving security for various e-governance applications. The recent expansion of the World Wide Web has provided attackers unlimited places to play and prey on administrators that are ignorant of basic network security. In this paper idea of UID & its relevant issues for secured e-governance in India has been proposed.

Keywords : E-Governance, UID, WWW, PDS

1.0 INTRODUCTION

In this growing IT arena, there is a need to strengthen its security. The security problem is viewed as a problem to protect information assets; both private and public. In the technology driven the value guarding of information is crucial. Solutions and safeguards are readily available. The problem is to educate user about the risks and the consequences if the information is stolen, compromised or lost. To discuss the role of user in a secure environment and which tools are available. Data protection

regards such diverse issues such as encryption, access rights as well as the corresponding security awareness of the employees handling the data [1]. It also involves the corresponding backup and recovery strategies, as well as the data storage itself. All businesses & Government transactions require a secure environment to work according to their requirements. In case of Government transactions information is to be processed via several departments and each department is equally responsible for any security lapse. While transmitting data between different government agencies, it has to be ensured that data does not travel from one agency to another. This is the case for read accesses (privacy) as well as for write accesses to the data. In case of write access, it is also necessary to guarantee a tamper-proof audit trail that ensures a complete coverage on who changed what and when. Whereas in case of business transactions there is always competition like attitude and no firm would like to explain security measures/ways to protect and transmit its valuable information. Users also become irritated at the heavy security policies that make their work more difficult for no obvious reasons and causing bad politics within the company. A common attitude among users is that if no confidential work is being performed, why bother implementing security. Organizations will need to determine the price they are willing to pay in order to protect their data and other valuable assets. This cost must be weighed against

the costs of losing the information, hardware and disrupting services. The solution is to find the correct balance. If the data needs minimal protection and the loss of that data is not going to cost the company, then the cost of protecting the data will be less. If the data is sensitive and needs maximum protection, then the opposite is normally right. Preventive, Detective and Responsive measures have to be undertaken in order to improve IT Security.

2.0 UID

UID stands for Unique Identification Number and name for the project is 'AADHAAR' means 'support'. UID is expected to provide a link across diverse identities as a citizen, so that once one has it, the Govt. needs nothing more from one because it can find the links on its own. AADHAAR signifies 'foundation' or 'support' and communicates the fundamental role of UID initiative and its impact. AADHAAR assurance of uniqueness and centralized online identity verification would be the basis of building multiple services and applications —

• Facilitating a greater connectivity to markets that would help provide an integrated environment for e-governance.

• It would provide support to many deprived people in making them available their rights .

•   It will provide support in providing proper identification to the individuals and this UID will be linked with a person's Passport Number, Driving License, PAN card, Bank Accounts, Voter ID etc and all this information will be checked through a database.

The logo of AADHAAR shows a part of Thumb impression-a sharp, curving pattern on the fingers. A combination of technologies would be used as the Unique identification Authority of India (UIDAI) [2] rolls out its Unique identity cards. IT solutions, telecom, Internet and other technologies would work simultaneously as the data is used by different Government utilities. A unique identification means savings of huge public resources as it avoids duplication. Also, having a unique ID would make life easier for people as they could use it for different uses like in Public Distribution system (PDS), interaction with[3] The UID project entails collection of basic information such as name, date of birth, gender, father/guardians' name, and address, apart from ten fingerprints, photograph and an iris scan. The Biometric Standards Committee [4] has already prescribed certain standards (ISO 19794 series of standards) and formats with regards to biometric information. In this context, standards

assume importance as interoperability between devices and IT systems have become a growing concern. The Government has also decided to include the data of IRIS [10] for children in the age group of 5-15 years [8]. Creation of a unique number for every Indian citizen would bridge the divide between those with identification proofs (passport, license etc) and those without any. It also seeks to create an online authenticity verification system using mobile networks [5]. By deploying relevant technologies, officials can ascertain the **veracity** of the biometric attributes. UID number will be based on a sophisticated application called Smart Card OS for Transport Applications (SCOSTA) developed by IIT Kanpur , a secured electronic device that's used for keeping data & other info in a way that only authorized persons can view it. It can be used as a voter to ensure that any lacuna in the present system can be removed.

3.0 APPLICATIONS OF UID

- Good initiative to restrict the illegal immigration.

- UID can serve as tool to overcome the red tapism in the government offices.

- It can substitute all other identification issues including illegal migration, in banking and financial transactions, fraud, health related matters, in

education sector, welfare sector, in the election process, monitoring efficient law and order.

• As per recommendation of the Second Administrative Reforms Commission [10], which would enable citizens to avail of subsidies on food, energy, education, etc. can change the face of the country--by bringing about higher efficiencies and transparency, and reducing corruption (the biggest evil gripping Indian society today). This project can help reduce poverty by targeting schemes and subsidies toward those who really need it.

• The UID project will provide a huge database for planners to launch new schemes that can tackle several problems facing the country.

• UID can also bolster the country's security issues and curb terrorism and other threats to national security.

• After its implementation one wouldn't have to stand in long queues, bribe officials and pay touts to get work done which is one of the major goals of e-governance.

4.0 RISKS AND CHALLENGES IN IMPLEMENTATION OF UID

The most important challenge of UID is to make it tamper proof [4]. On the other hand it is to provide accurate and specific record of each citizen of this nation. One of the unique challenges in executing the UID project is its

scale. Due to the size of India's population, the UIDAI is undertaking the largest governance-related exercise in the world. One must ensure that all aspects of the project – enrolment, reduplication, and authentication – function effectively even as the number of records approaches a billion [5]. Another most important challenge is security. Individual's personal information will be stored in one database where the possibility of corruption and exploitation of data is far greater than when having the information disbursed. Several foreign citizens of Indian origin are living in India as Indians. They act as Indians such that they can easily open bank accounts, get phone connections, Driving license, PAN card etc. Such people may be in trouble when UID is implemented. Risks that arise from this centralisation include possible errors in the collection of information, recording of inaccurate data, corruption of data from anonymous sources, and unauthorised access to or disclosure of personal information. Other countries with national identification systems have confronted numerous problems with similar risks such as trading and selling of information, and India, which has no generally established data protection laws such as the U.S. Federal Privacy Statute or the European Directive on Data Protection, is ill-equipped to deal with such problems [6]. The centralised nature of data collection also heightens the risk of misuse of personal information and therefore potentially violates privacy rights. In

consideration of the risks involved in the creation of a centralized database of personal information, it is imperative that such a programme not be established without the proper mechanisms to ensure the security of each individual's privacy rights. Unfortunately, India lacks in such matters as there is no provision for judicial review at the present time. UIDAI has identified 10 villages and two urban centres in Medak and Krishna districts of Andhra Pradesh for implementation of UID project. The reason for selecting Andhra Pradesh for the initiative is because of the State's experience in implementing the country's largest biometric programme. The State had issued IRIS-based biometrics cards for 4.2 crore citizens through its Civil Supplies Department [7].

A major problem [21] in AADHAAR is that more than 600 million Indians who work in agriculture, construction and other manual works have worn out fingers due to life time of hard labour. Though two other metrics iris scan and a photograph will be used, still fingerprint will be used for authentication. It means in cases where check is made via fingerprint analysis(like Passport) then software will say the person is lying while the person is saying the truth.

5.0 UID & E-GOVERNANCE

Proper Implementation of UID will certainly bring revolution in the functioning of e-governance projects. The main problem in various e-governance projects is   proper identification. This problem will be rectified using UID. The exact manner in which UID would be used by the service providers is to be determined by them. For example, an applicant to the (National Rural Guarantee Employment Scheme) NREGS would be asked to quote his UID number in his application. The NREGS will provide the service and tag it against the UID so that a second application against the same UID is not possible. Obviously, NREGS may have to check the UID with the person who claims it. For this purpose, it needs to have access to the parameters associated with the UID. This means that it has to have access to the UID data base. There one will only check the biometric parameter and import all other data from database. Biometric technologies involve techniques that recognize the face, finger prints, iris, etc of a person, which are unique to every individual. Method of biometrics is also a means to end the duplication [16]. Hence process of dead or non-existent people drawing pensions and even salaries gets eliminated and you also get an assurance that facilities are being used by the real persons and not by the fake or dead. The UID project aims to as- sign a number to all Indians, expected to particularly benefit those who cannot access a slew of services due to lack of identification papers. All the

enrolling agencies will probably have to make the UID number a primary field of their databases. This will enable them to leverage the power of this number to improve their systems and processes [18].

CONCLUSION

UID would help in identification of real beneficiaries for various schemes of Indian government. If one identifies a person or an activity with foolproof medium then problem of frauds & security can be minimized and needed people would get their shares in Government schemes. UID can assist in the positive identification of unique individuals and families. There are several benefits that will accrue to   the UID program. It will include PDS (Public Distribution System) facility as well. The major problem associated is collection of proper data and its analysis. In one of the largest population like India, the correct analysis is a cumbersome job.

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