

**INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH
TECHNOLOGY****SURVEY AND DESIGN THE ARCHITECTURE OF STORING MULTIPLE
INFORMATION'S (OFFICIAL AND PERSONAL) OF HUMAN USING SINGLE
MAGNETIC STRIP OR QR CODE****Jignesh Modi*¹&Harsh Lalwani*²**^{*1}Maulana Azad National Institute of Technology, Bhopal (M.P.), India^{*2}Jabalpur Engineering College, Jabalpur (M.P.), India

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ABSTRACT

To carry several cards is a tough task. Multipurpose card can simultaneously be an ID, a credit card, a stored-value cash card, and a repository of personal information. Currently unique smart card implementations can be seen around the world but they are not unified i.e. each developer uses different programming standards, therefore a variety of cards exist in our society. This is a problem that exists today and one that needs to be noted or fixed. Our aim is to create a card system that can handle multiple operations. In this system using single card you can handle number of functions. Here in this paper we are providing the concept of bringing different applications together in Multi purpose card, which will work for different purposes like payment, voting and ticketing and also as a personal ID and will contain all the details related to the person like educational qualification, job experiences, governmentID, medical history, insurances, etc.

KEYWORDS: Unique ID, AADHAAR, Debit and Credit Cards, Multipurpose card, QR code, magnetic strip, chip, linkage, authentication, multipurpose card, PIN.

I. INTRODUCTION

Multipurpose card would be giving all services and making data processing and data transfer more efficient and secure. First application involves at various places where governmental identification is required. The QR code on the card will be used to get the complete details about the person that includes AADHAAR, PAN, Voter ID, Driving License, etc. Second application will be fetching the personal details of the person like Medical History, insurances, achievements, job experiences, etc.

In the progressing world, everyone wants to be fast, do more work with less efforts, carry large amount of things in smaller package, and many more such things. As the world is moving towards abridged gadgets, like computer are now substituted by laptops, laptops by mobile phones. As technology is advancing, the compactness of gadgets and machines is also increasing. Thinking upon these majors, the thought came – Why not merge all the essential cards of living in a single card?

There came the thought of “**Multi purpose card**”. Pandora means “something that contains all” i.e. Multi purpose card is something that will contain all the details of various cards. It will be designed in such a way that it can hold your personal as well as official details.

The Multi purpose card will be having two different ways of working:-

1. QR Code

It will contain the details of the following cards and similar -

- a. Aadhaar Card
- b. Voter ID Card
- c. Passport
- d. Driving License
- e. PAN Card
- f. Police Record

- g. Certificate of Registration (of different Vehicles)
- h. Insurances (Health, Home, Car, Life, Travel, Business, etc.)
- i. Medical History
- j. Educational Qualification
- k. Certifications and Experiences, and many more similar details

2. Magnetic Stripe

It will contain the details of your bank accounts, credit and debit cards and similar -

- a. Details of Multiple Account of the same person
- b. Multiple Debit Cards
- c. Multiple Credit Cards
- d. Tax Details and similar

Whenever the person needs to verify his/her details, anywhere over the globe, all that needs to be done is scan the **QR Code** and that's all. No need to carry all your documents everywhere for getting any of the work done. Just carry the Multipurpose card and all work will be done just by a single swipe.

As India is moving towards complete digitalization, payments are done mostly by credit and debit cards. So why carry a different card for different account and remember PINs for each of the card differently. The Multipurpose card will be able to support payments through different accounts of a person just by swiping it at any of the PoS and can be used to withdraw money at ATMs. This will save time as well as space of carrying so many cards and documents at any place.



Figure 1: Multipurpose card containing all information

II. LITERATURE SURVEY

Too many identity cards can serve up a crisis. And they are, for a multitude of options has made establishing one's identity confusing. Does one flash the Aadhaar card, PAN card, driving license, or the passport? Or, is enrolment in the National Population Register (NPR) the proof of being an Indian? The average Indian grapples with the problem every day. Migrants to the Capital find it difficult to even open bank accounts. Even though



Aadhaar has been made mandatory in 16 states and Union Territories, its penetration is limited - only 30 crore people have been issued the card across the country. The NPR remains a non-starter. For the non-salaried class, getting a PAN card remains a challenge. And not too many Indians have passports. So, how do they establish their identity?

From food rations to marriage certificates, entrance exams to train ticket concessions, mobile phone cards to banking, Indians are now being asked to produce a 12-digit Aadhaar number to access both government and private sector services.

This number is connected to their fingerprint and iris scans that are stored in a centralized database. As of September 2016, this database held the demographic and biometric information of more than 105 crore people – more than 80% of India's population, and three times the population of the United States.

India's Unique Identification project is the world's largest biometrics-based identity programmed. Initially, the project had a limited aim – to stop theft and pilferage from India's social welfare programmers by correctly identifying the beneficiaries using their biometrics. But now, the use of Aadhaar is expanding into newer areas, including business applications.

But still most of the manual information cannot be linked properly with Aadhaar card. People cannot register themselves online. It only provides you the personal information of the user. The Aadhaar card till that only connected with the gas agencies and mobile Sims but it cannot be linked with the School or colleges, how much amount peoples are earning and how much tax they are paying yearly or not. Still the Fake Aadhaar card is also available in the market which cannot come under the act of cyber law. Most of the information of a person on Aadhaar card is illegal or wrong but still they are using them in Government and private sectors.

What Aadhaar Card can do?

1. It authenticates a person
2. It captures the biometric information of a person
3. It links itself with databases.
4. You can show your identity while travelling with bus or train using Aadhaar card.

What are the problems associated with Aadhaar card?

1. It functions without a legal framework. I.e. Aadhaar card is not developed by law.
2. It does not have privacy safeguard.
3. It does not have medical history of a person
4. It does not having how many credit and debit card a person is having.
5. It does not maintain the person is having mediclaim or not.
6. It does not contain the information of students of school and colleges.
7. It does not link with RTO.

III. METHODOLOGY

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The proposed methodology is having so many advantages and it overcomes all the drawbacks of the Aadhaar card.

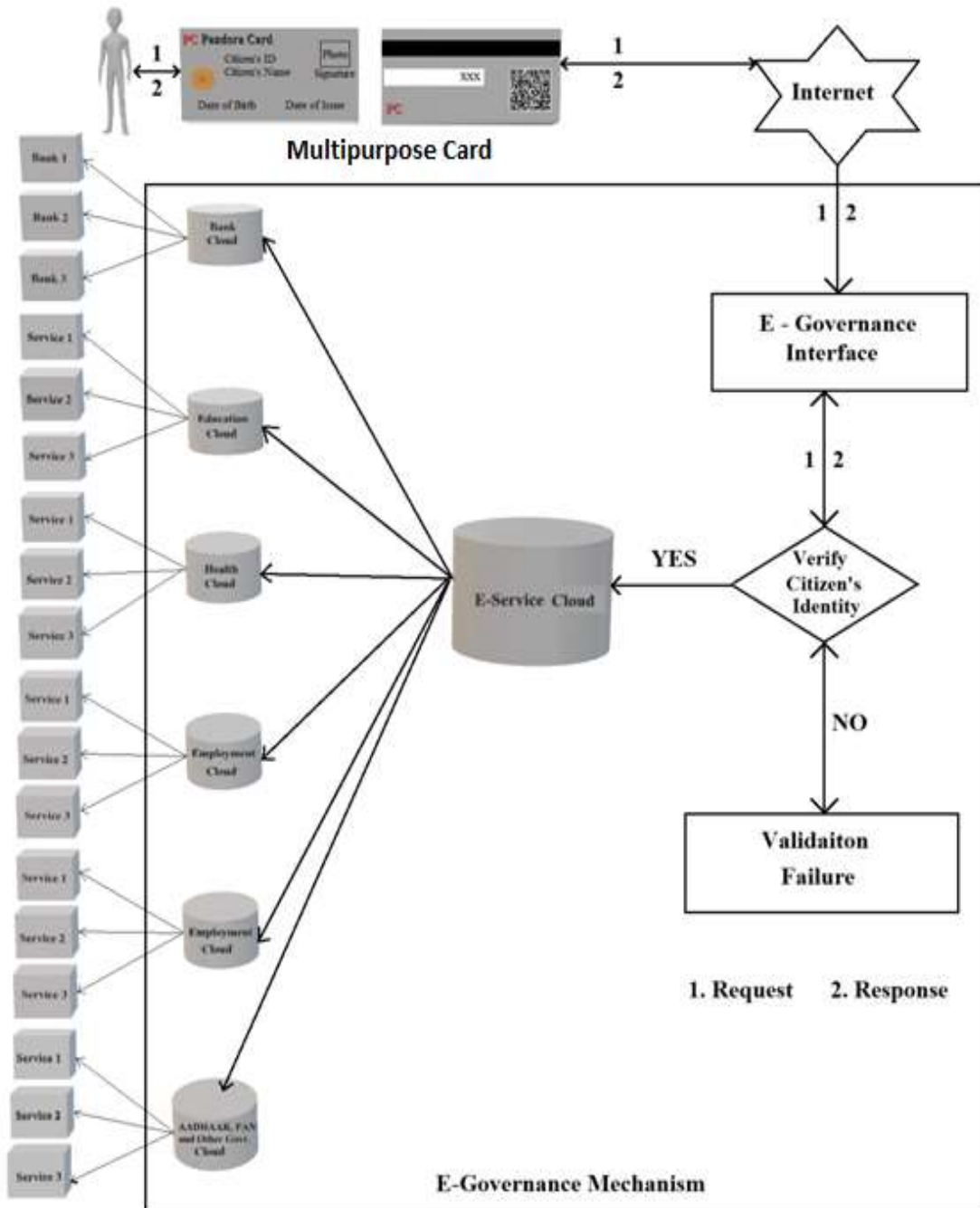


Figure 2: Architecture of Multipurpose card

IV. CONCLUSION

Too many identity cards can serve up a crisis. And they are, for a multitude of options has made establishing one's identity confusing. Does one flash the Aadhaar card, PAN card, driving license, or the passport? Or, is enrolment in the National Population Register (NPR) the proof of being an Indian? The average Indian grapples with the problem every day. Migrants to the Capital find it difficult to even open bank accounts. Even though Aadhaar has been made mandatory in 16 states and Union Territories, its penetration is limited - only 30 crore people have been issued the card across the country. The NPR remains a non-starter. For the non-salaried class, getting a PAN card remains a challenge.

It is very difficult for the human to maintain and store different cards in the pocket or manually. We live in the world of digitalization where single card or magnetic strip or chip is able to use for multiple purposes. We provided architecture in this paper which is able to use for multiple purposes. The card need a machine based on machine learning techniques so that it can be used efficiently

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