

Review on Smart Card Technology

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Abstract – A smart card is basically a plastic card with a chip. Smart card have chip instead of magnetic strip and they are used like Debit card, Credit card, identity card and many more. Smart cards are very much used in the last few years. We present only business case in this paper. We present the use of subscriber identity modules (SIM) in the marketing and network operations of wireless communication operators. In this business case we focused on Sim card's marketing, technical and financial benefits. In this paper we discuss how smart card is useful and we discuss how smart card is important. With the help of smart card what we can do and what we can't do. The smart card is a small size type of card then we can easily access and put this own pocket, purse or anywhere where we comfortable.

Keywords— Smart Card, Card, ATM

I. INTRODUCTION

A smart card is very useful in business. If we compare with market, then more people are beginning to move smart cards than you move the cache. Mostly we have seen that people want to walk with less money in the market. It has become so technical that people make payments with smart cards. If we talk about a trip, mostly people take a smart card on a trip. So we can say that the smart card itself provide a main role.

Example of a Smart Card (First)-

Suppose we walk into any metro station and ask for a metro card at the token counter. You will be issues one after payment of a certain amount.

This fig-1 depicts an example of metro card. We can travel with in Metro by this card. This has helped us not to take the rupee with me everywhere. I can go through this card anywhere via Metro. Let see this Metro Card.(fig-1)



Fig 1: Metro Card Example

This fig-2 depicts an example how the token counter look like at a station.

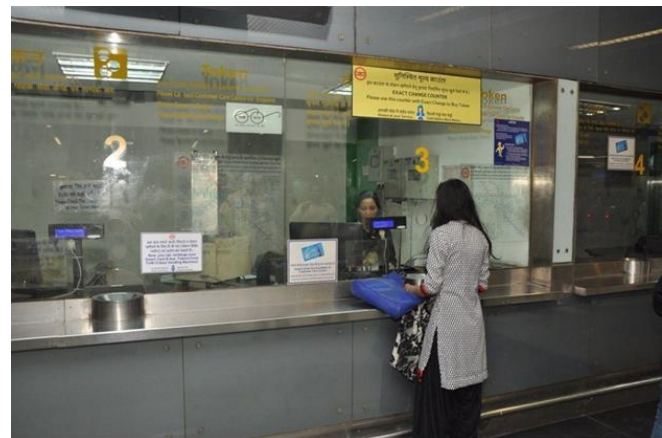


Fig 2: Token counter

Example of a Smart Card (second)-

We can call an Aadhaar Card as a Smart Card. In other words, we can say that Aadhaar Card is used as a Smart card for the identification. There is no need to print your Aadhaar card as Smart Card, there is no such concept original Aadhaar or

duplicate Aadhaar. You can download your Aadhaar card and copy online and print it on a normal paper and use it. Smart Aadhaar cards are normally PVC Aadhaar cards. PVC or plastic Aadhaar card print which is the printed form of Aadhaar details on a plastic sheets that considers same as the original copy of Aadhaar card, which is simple to carry and maintain. It also acts as an identification card. It will show as like your ATM card.

Smart card is nothing but Aadhaar card information printed on plastic card like the PAN card. UIDAI will not be responsible for any data loss caused by these unauthorized centre because for having the Aadhaar card plastic card you need to give them your Aadhaar details which can be misused by them.



Fig 3: Example of a Aadhaar Card.

II. SMART CARD IN BANKING

If we talk about bank, this smart card is the highest use there. We can withdraw our money from the bank without being lined up. We can withdraw our money very quickly. It saves time in the bank's sector. We can access our money anytime or anywhere. Smart cards are mostly used in banks fields.

Some of the great success of smart cards are listed below:-

1. Axis bank "Transit Card": This is actually a bus pass introduced by BMTc and Axis Bank

for easy topping up and reloading. The benefit of this card is you can load money and use it as a Debit card too.



Fig 4 : Axis bank card

III. BENEFITS

We can easily carry and store it in our wallet or pocket like ATM cards. These cards are normally water proof and more secure. These cards are Strong, durable and can remain intact over a long period of time. We can access our money anytime and anywhere with the help of Smart cards. Smart Cards are easy to use. These are small size cards so we can keep it anywhere. Most of people consider it important to take a card instead of Rupee because we can use it instead of money. Suppose that you have gone out and you don't have money you can use a smart card that time. You can use an ATM card where you have to replace any item where you have to make payments for goods. Your rupee will be cut straight from your bank account. It does not require you to take a rupee with you anywhere.

IV. PROBLEMS WITH SMART CARD

There is also a loss from smart card. Nowadays smart cards are very much in use so from which the threat is also increasing. All of our details are in our smart card, which can steal any thief. He can make data public and access that data. We may lose millions of dollars in a few minutes. It is very important to take care of the card. If we are not able

to handle the card, we may have a lot of problem with it and our data may be lost. Always we need to place the card where we can easily find it. You have seen many times that most people. Takes time to become second card once the card is lost. Until then our data is also leaked. This is reason if there are profit from smart card also losses. You should keep your smart card up and down. If you are not able to handle your smart card, you will also lose data.

V. SECURITY

Security is very necessary for every cards like Aadhaar card, PAN card, Bus card, office card, ATM card, and many cards(Smart cards). The personal data or information is in your smart card, then it is necessary to secure your personal card.

According to our research, Biometrics is the best solution for the security purpose of our cards. Many technologies like fingerprints, iris scanning, DNA matching, face recognition, hand-writing recognition, signature recognition are used in biometric security. So, in the future we can secure our smart cards with the help of biometrics.

VI. SMART CARD IN FUTURE

The future of smart is looking so bright and best. In future smart card have high security, high performance, high capability and many things. We can edit this smart card and add biometric feature for secure them. In future, smart cards will have their own storage. You can access various networks and various applications with smart cards. There will be a chip in the future so that if our card is lost we will be able to find it easier. We can locate the location of that card. This will also reduce the fear of losing our card. We can always see our card on which location is this time. In future, the security of the card will be increased. In future, it use will be increased so much that people will just take cards with them out of the house. People will be able to do all the work with smart cards. If we see the current, people do online payments from the card

today and buy things online, do everything online shopping. So, in future it will provide a main role.

CONCLUSION

We can say that smart card provide a main role. There are a lot of benefits that we can get from smart card. In future various technologies and concepts are used in these smart cards. To carry the private information and the bank balanced smart card provide authority and more secured. In this research paper we discuss the smart card security with biometrics because biometrics make it more secure and more attractive and easy to use. Today's generation is very careless. The people lose their money in few seconds then smart card is connected always from the bank so we can access our money anytime. (By ATM card) This will prove to be the best in the future if it is biometrics add-on. Scientist are still doing research to secure this.

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