Integration of Multi-Cloud Deployment with Multi Bank & User Smart Card

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ABSTRACT --- *In the EXISTING SYSTEM, Big data is really opportunity based environment. Big data analytics would definitely lead to valuable knowledge for many organizations. Big data challenges include capturing data, data storage, data analysis, search, sharing, transfer, visualization, querying, updating and information privacy. In the PROPOSED SYSTEM, Integration of Big Data, Business analytical and RFID like technology are supposed to be recent trends in IT. It is most challenge oriented activity. The MODIFICATION, which is our implementation, we are proposing an integrated application for Banking, Hospital, Passport and Ration. RFID is used as User Identification number for all these four applications. In banking application, User can add his / her multiple Bank accounts in a single card. User can also add Multi user accounts also. On multi user accounts transaction, parent user can set the withdrawal Limit. On every transaction OTP will be verified. Formula authentication is verified for withdrawal of money above the limit. User can use that multi card in hospital to get their report. Multi card can also be used in passport to register the travel details. All the data are stored in multiple Cloud Servers.*

KEYWORDS: HMM, FORMULA BASED AUTHENTICATION, QR CODE

1. INTRODUCTION

The main aim of the project is integration of multiple bank accounts to a single user with one smart card and multi user for a single account with user behavior monitoring using HMM & formula verification. User can withdraw the cash as per limited money requirement and time frequency is also monitored & recorded.it is very useful for withdraw amount in without time delay. The MODIFICATION, which is our implementation, we are developing this application for a Banking sector particularly for a Debit/ATM card section. We can use RFID smart card as ATM Card for transaction. User can create account and get the ATM card from the bank. He can integrate all his accounts in other banks can be integrated in this single card with unique PIN numbers accordingly. User can include all his family members' accounts details also in the same card. He can withdraw cash from their accounts after successful authentication of the corresponding PIN numbers. , we are proposing an integrated application for Banking, Hospital, Passport & Ration. RFID is used as User Identification number for all these four applications. In banking application, User can add his / her multiple Bank accounts in a single card. User can also add Multi user accounts also. On multi user accounts transaction, parent user can set the withdrawal Limit. On every transaction OTP will be verified. Formula authentication is verified for withdrawal of money above the limit. User can use that multi card in hospital to get their report. Multi card can also be used in passport to register the travel details. All the data are stored in multiple Cloud Servers. People need not carry all their debit cards. Instead of debit cards they can use Aadhar QRcode. When withdrawing money from ATM, scan the QR code in ATM,

Which give two option 1.With fingerprint 2.without fingerprint. The aadhar holder can use without fingerprint option and withdraw money from their bank account. Without fingerprint option ca also be used by friends of the user. The aadhar holder can share their QR code with their friends. Here they don't want to share permanent PIN to their friends. Instead they can give temporary PIN and temporary QR for each transaction.

FORMULA BASED AUTHENTICATION In this module, a formula is sent to the person who have multi user smart card for authentication. The main purpose of multi user card is all person in a family have to use this card if they don't have sufficient amount in their account. So a parent user is a person who have this smart card with a unique formula. If anyone withdraw amount beyond the limit a message will be send to parent user. And shall give the formula to that person who withdraw the money. After the formula is given by the person the person can withdraw the money.

2. LITERATURE SURVEY

N. Manwani and P. S. Sastry, "Proposed Noise tolerance under risk minimization," [1] In this paper, we present a model to help evaluate the impact of an introduction of item-level radio-frequency identification (RFID) in a retail environment where stock-out-based substitution is common. There are two main thrust areas in this work. First, we examine the impact of RFID in a centralized setting where retailer and manufacturer are one entity. This thrust area is concerned with evaluating the profitability of RFID and exploring which product properties favor an RFID implementation. Second, we examine the impact of RFID in a decentralized setting, where retailer and manufacturer independently maximize their profits. We investigate the problem of sharing the costs of RFID, from both the perspective of tag costs and fixed costs. Our research shows that the presence of substitution at the shelf plays a major role in determining the expected benefits of an RFID implementation, as well as in determining the optimal allocation of these benefits among retailer and manufacturer. It is therefore critically important that decision makers make strong efforts to correctly account for substitution effects when evaluating potential item-level RFID implementations in the retail sector.

Kuiran Shi and Tiaojun Xiao "Proposed Coordination of a supply chain with a loss-averse retailer under two types of contracts",[2] Cloud computing introduces flexibility in the way an organization conducts its business. On the other hand, it is advisable for organizations to select cloud service partners based on how prepared they are owing to the uncertainties present in the cloud. This study is a conceptual research which investigates the impact of some of these uncertainties and flexibilities embellished in the cloud. First, we look at the assessment of security and how it can impact the supply chain operations using entropy as an assessment tool. Based on queuing theory, we look at how scalability can moderate the relationship between cloud service and the purported benefits. We aim to show that cloud service can only prove beneficial to supply partners under a highly secured, highly scalable computing environment and hope to lend credence to the need for system thinking as well as strategic thinking when making cloud service adoption decisions.

S.Nageswara Rao and B.R.M.Reddy, "Proposed Developing Data Cloud Services in Various Environments",[3] In the big data era, systems reliability is critical to effective systems risk management. In this paper, a novel multiobjective approach, with hybridization of a known algorithm called NSGA-II and an adaptive population-based simulated annealing (APBSA) method is developed to solve the systems reliability optimization problems. In the first step, to create a good algorithm, we use a coevolutionary strategy. Since the proposed algorithm is very sensitive to parameter values, the response surface method is employed to estimate the appropriate parameters of the algorithm. Moreover, to examine the performance of our proposed approach, several test problems are generated, and the proposed hybrid algorithm and other commonly known approaches (i.e., MOGA, NRGA, and NSGA-II) are compared with respect to four performance measures: 1) mean ideal distance; 2) diversification metric; 3) percentage of domination; and 4) data envelopment analysis. The computational studies have shown that the proposed algorithm is an effective approach for systems reliability and risk management.

Vishakha More and Prof. Raghib Nasri, "Proposed Application Framework and Data Processing in IoT based Email System",[4] In this paper, we explore noise-tolerant learning of classi- fiers. We formulate the problem as follows. We assume that there is an unobservable training set that is noise free. The actual training set given to the learning algorithm is obtained from this ideal data set by corrupting the class label of each example. The probability that the class label of an example is corrupted is a function of the feature vector of the example. This would account for most kinds of noisy data one encounters in practice. We say that a learning method is noise tolerant if the classifiers learnt with noise-free data and with noisy data, both have the same classification accuracy on the noise-free data. In this paper, we analyze the noise-tolerance properties of risk minimization (under different loss functions). We show that risk minimization under 0–1 loss function has impressive noise-tolerance properties and that under squared error loss is tolerant only to uniform noise; risk minimization under other loss functions is not noise tolerant. We conclude this paper with some discussion on the implications of these theoretical results.

Olatunde A. Durowoju, Hing Kai Chan and Xiaojun Wang, "Proposed The Impact Of Security And Scalability Of Cloud Service On Supply Chain Performance",[5] Many optimization techniques have been proposed over the years to improve the performance of supply chains. Although these approaches have been shown to be effective, most of them were developed without considering uncertainties in supply chains to simplify the analysis. In fact, uncertainties can deteriorate the performance of supply chains, such as increase in total cost, or drop in fill rate, of the whole system. In distributed supply chains, participating members are not under a sole control by a central

authority, the problem is even more stringent due to incomplete information sharing, or so called asymmetrical information sharing. One way to improve the system performance is to achieve coordination among participating parties through establishment of contracts. The objectives of this paper are i) to evaluate the effects of demand uncertainty in a distributed supply chain, which is modelled as an agent-based system; ii) to propose a coordination mechanism with early order completion contract to minimize the negative impacts of demand uncertainty; and iii) to present associated simulation results.

3. EXISTING SYSTEM

Big data is really opportunity based environment. Big data analytics would definitely lead to valuable knowledge for many organizations. People are having ATM card with their account. If they have multiple account in multiple bank like (SBI, Indian, Canara, KVB.,) they should have ATM card for every bank separately. Whenever they need money every time they use their different ATM card to withdraw. So they want to carry all types of ATM card everyday. So they have some inconvenience in that method.

3.1 LIMITATION OF EXISTING SYSTEM

- There is no RFID technology
- Security is less
- Every user having individual card in family

4. PROPOSED SYSTEM

Banking sector particularly for a Debit / ATM \card section. User can use RFID smart card as ATM Card for transaction. User can create account and get the ATM card from the bank. He can integrate all his accounts in other banks can be integrated in this single card with unique PIN numbers accordingly. User can include all his family members' accounts details also in the same card. User can withdraw cash from their accounts after successful authentication of the corresponding PIN numbers In banking application, User can add his / her multiple Bank accounts in a single card. User can also add Multi user accounts also. On multi user accounts transaction, parent user can set the withdrawal Limit. On every transaction OTP will be verified. Formula authentication is verified for withdrawal of money above the limit. User can use that multi card in hospital to get their report. Multi card can also be used in passport to register the travel details. All the data are stored in multiple Cloud Servers.

4.1 ADVANTAGES IN PROPOSED SYSTEM

- This system really awards multiple ATM card on rotation

- User can withdrawal cash from one single ATM card from their family members account.

- Security is ensured by the implementation of formula based authentication

- Big data is included in the system for analyzing huge volume of data.

5. BLOCK DIAGRAM
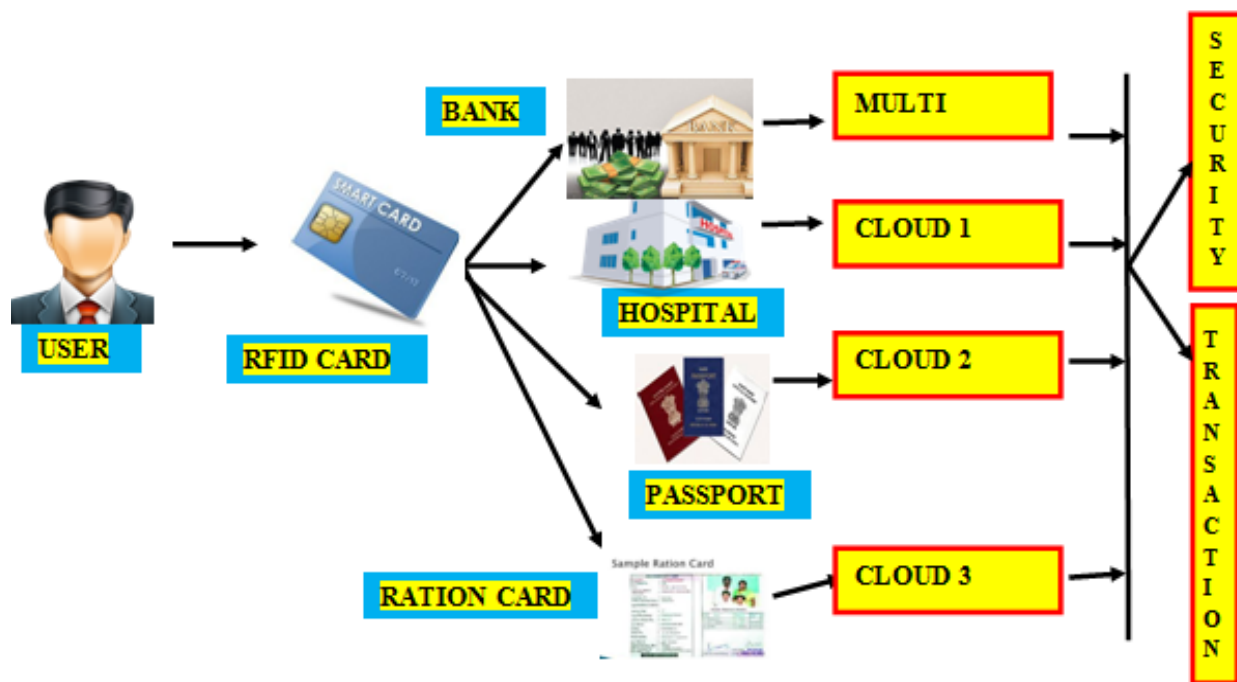
5.1 USER REGISTRATION

In this module user have to register their details in multi user smart card. Initially people have to register bank details ,passport details, ration details, hospital details in that single card. Once they register it will be used for four different places. All details will be stored on cloud. So people will retrieve information from anywhere.

5.2 BANK SERVER

In bank server user details will be maintain. Those who are register their details in smart card those bank details will also be maintained by bank server. Why this bank server maintain these details ? Reason is users are having different bank account and they merge their family members account into a single card. So we have to maintain a separate server for communication. Which will maintain all members account and it will communicate with corresponding bank when any transaction is made.

5.3 MULTI USER / MULTI BANK

Multi user / multi bank is unify multiple person bank account in single card. Usually for Example, Every people are having ATM card and they get money from ATM whenever they need. But here what is the issue is if a person having account in multiple bank they should have to carry all types of bank ATM card. So, we implement a new idea .A single card will contain all bank details and they can merge their family members account also. All members of family can use this card.

5.4 FORMULA BASED AUTHENTICATION

In this module, a formula is set to the person who have multi user smart card for authentication. Because , the main purpose of multi user card is all person in a family have to use this card if they don't have sufficient amount in their account. So a parent user that is a person who have this smart card he had a formula. If anyone withdraw amount beyond the limit , a message will be send to parent user. And he will give the formula to that person who withdraw

the money. Finally , after the formula is given by the person he can withdraw the money. In formula , only plus and minus symbol should be used for simple calculation.
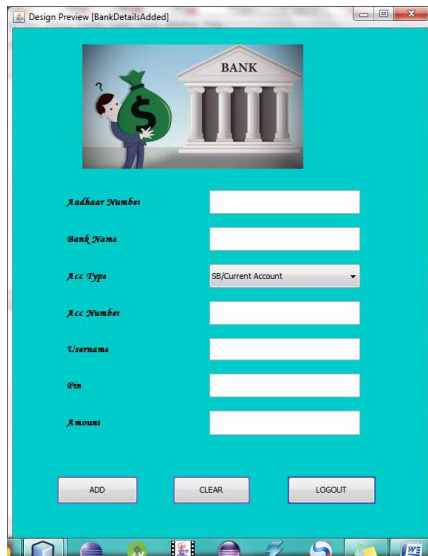
5.5 CLOUD INTEGRATION

In hospital server user's hospital details is maintained. By using this card user can attach their hospital details. Those details will be stored in different cloud. In this server user's ration details will be maintained. Here the things bought from ration will be stored in different cloud.

5.6 QR CODE ATM

People don't want to carry their all debit cards with self. Instead of all debit cards they have been used Aadhar QR code. When I want to withdraw money from ATM, show the QR code in ATM, it give two option with fingerprint another one is without fingerprint. The aadhar holder can use with fingerprint option and withdraw money from their bank account. Without fingerprint option for friends user. The aadhar holder can share their QR code with their friends also. Here they don't want to share permanent PIN to their friends. They can give temporary PIN and temporary QR for each transaction.

6.   RESULTS AND CONCLUSION
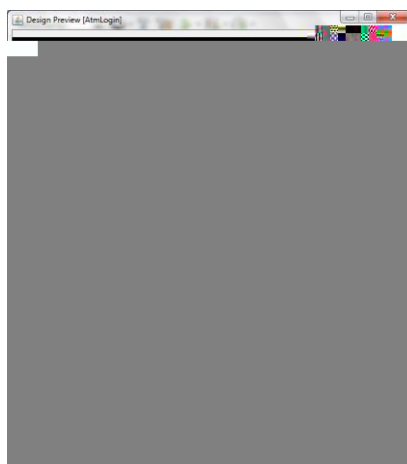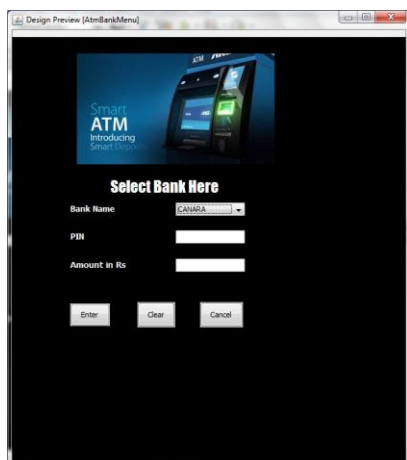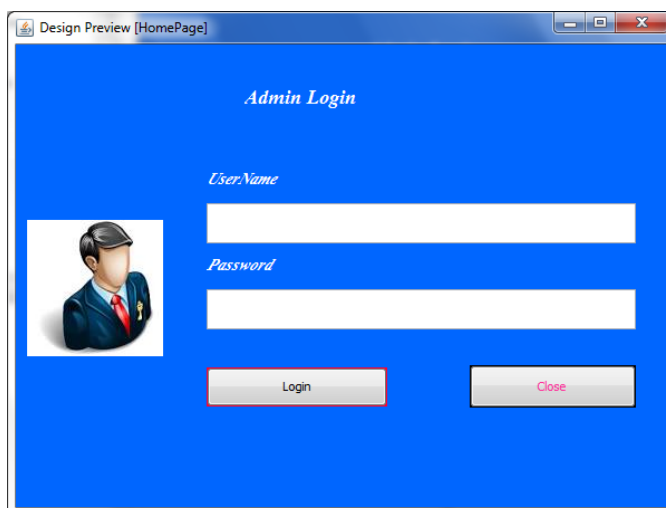
7. CONCLUSION

Thus the project conclude that a single card will used for multipurpose. For every public sector there is an separate card for a family. But this card will used for passport verification , ration card , bank so that in future if we implement this card publically there is no need for any separate card .

8. REFERENCES

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