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Survey on 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 & 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 : RFID, Cloud Servers, HMM, Formula Based Authentication, QR Code

I. 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.

II. LITERATURE SURVEY

S. No	Publication Title	Author Name	Advantage	Disadvantage
1	Noise Tolerance Under Risk Minimization, IEEE, 2012.	Naresh Manwani, P. S. Sastry	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.
2	Coordination of a supply chain with a loss-averse retailer under two types of contracts, International Journal of Information and Decision Sciences, Vol. 1, No. 1, 2008	Kuiran Shi, Tiaojun Xiao	It is to design the supply contract that provides a win–win coordination mechanism between the manufacturer and the retailer.	Here one manufacturer and -retailer supply chain facing uncertain demand. The manufacturer sells a perishable product to the retailer.
3	Developing Data Cloud Services in Various Environments, IEEE 2014	**S. Nageswara Rao, B.R.M.Reddy**	we propose to use both cloud computing and IoT as an enabling infrastructure for developing a vehicular data cloud platform	Based on a service-oriented architecture (SOA), this system uses a number of software services (SaaS), to perform different tasks.
4	Application Framework and Data Processing in	Vishakha More, Prof. Raghib	The Internet of Things (IoT) has provided a	Multi-sensors or actuators continuously

	IoT based Email System, IJARCCE Vol. 5, Issue 6, June 2016	Nasri	promising opportunity to build powerful applications by leveraging the growing ubiquity of Radio Frequency Identification (RFID) and wireless sensors devices.	send the information or alert messages. There is need to store, process and analyze the data generated by those things.
5	The Impact Of Security And Scalability Of Cloud Service On Supply Chain Performance, Journal of Electronic Commerce Research, VOL 12, NO 4, 2011	Olatunde A. Durowoju Hing Kai Chan Xiaojun Wang	The Aim is to show that cloud service can only prove beneficial to supply partners under a highly secured, scalable computing Environment and hope to lend credence to the need for system thinking.	There exists a need to examine its impact on business operations and treat it as a strategic tool rather than merely 'the new way of computing'.
6	A Novel Approach of Mining Semantic Context Information for Intelligent Video Surveillance of Traffic Scenes, IJSR, 2012	M.Kameshwara Rao, P. Bhavya Sree	we attempt to mine semantic context information including object-specific context information and scene-specific context information to build an intelligent system	This is an ambitious goal which has attracted an increasing amount of researchers to solve commonly encountered surveillance problems of object detection, classification, tracking, and abnormality.
7	Security threats on cloud computing vulnerabilities, IJCSIT, Volume 5, No 3, June 2013	Te-Shun Chou	Three cloud service models were compared to demonstrate the techniques that hackers used against cloud computing systems.	The security issues associated with cloud computing make us vulnerable to cybercrimes that happen every day.
8	Methods for Anomaly Detection: a Survey, RCDL, 2014	Leonid Kalinichenko, Ivan Shanin, Ilia Taraban	We review different approaches to the anomaly detection problems, their applications and specific features	The data object is "dissimilar" to the other observations in the dataset. It is very important to detect these objects during the data analysis to treat them differently from the other data.
9	Anomaly Based Intrusion Detection-A Review, International Journal on Network	Abhinav S. Raut, Kavita R. Singh	It is aim to detect attacks against information systems in general. Anomaly detection is an active	Anomaly detection is an active problem that has been studied within diverse research area and the application domain.

	Security, Vol. 5, 2014		problem that has been studied within diverse research area and the application domain.	
10	An Approach to Spacecraft Anomaly Detection Problem Using Kernel Feature Space, *KDD'05,* August 21–24, 2005	Ryohei Fujimaki, Takehisa Yairi, Kazuo Machida	It proposes a novel "knowledge-free" anomaly detection method for spacecraft based on Kernel Feature Space and directional distribution,	Development of advanced anomaly detection and failure diagnosis technologies for spacecraft is a quite significant issue in the space industry.
11	On-Line One-Class Support Vector Machines. An Application To Signal Segmentation, IEEE, 2003	Arthur Gretton Fredric Desobry	we describe an efficient algorithm to sequentially update a density support estimate obtained using one-class support vector machines	The solution of the optimization problem leads to a decision function which classifies new points as inliers and outliers.
12	The marginalized likelihood ratio test for Detecting abrupt changes, IEEE, 2001	Fredrik Gustafson	MLR test is introduced for eliminating three shortcomings of GLR, while preserving its applicability and generality.	The problem of detecting abrupt changes in linear system and signals occurs in many applications.
13	"MAD skills: New analysis practices for big data," in Proc. VLDB Endowment, 2009, vol. 2. no. 2, pp. 1481–1492.	J. Cohen, B. Dolan, M. Dunlap, J. M. Hellerstein, and C. Welton,	In this application the transaction is done by entering unique PIN numbers of multiple accounts. For each and every transaction the user has to enter unique PIN number of corresponding account.	The current banking system has several drawbacks which lead to increase in security threats to its transactions. The privacy of customer transaction details in those banks is at risk. Hence it is necessary to discuss those security threats.
14	"Framework of comprehensive defense architecture for power system security and stability," Power Syst. Technol., vol. 36, no. 8, pp. 1–5, 2012	T. Yong	Formula based authentication.	No disadvantages in this method.
15	"Six provocations for big data," Working paper, MIT, Cambridge, MA, USA, 2012.	D. Boyd K. Crawford	The analyses are performed on the basis of the sets of (no dominated) solutions obtained by each algorithm.	Systems reliability is critically important for reducing systems risk of failure

III. CONCLUSION

Thus the project concludes that a single card will used for multipurpose fields like banking, passport, hospitals, rations etc. That is a single user can handle multiple bank accounts with a single smart card instead of using multiple ATM cards. User can also use a single account for family banking services such as multiple users of the same bank account. For every public sector there is a separate card for a family. This card will also be used for passport verification, ration card, Hospital personal details and bank so that in future if we implement this card publically there is no need for any separate card. All the necessary things needed for daily life is integrated to that particular single smart card.

IV. FUTURE WORK

Formula values will be generated in mobile OTP. User can easily change the formula frequently. Beneficiary user can also deposit the original user account. Beneficiary user can also check the original user account, so easily can withdraw amount. Mobile banking sector used for withdraw and deposit. Online transaction sector can be integrated and withdraw amount. Future work involves integrating QR code and finger print authorization to the bank accounts, hospitals, rations, passport etc., instead of the smart card. ATM machine scans the QR code which contains all the accounts and details integrated together and Finger print for authorization.

V. REFERENCES

[1]. N. Manwani and P. S. Sastry, "Noise tolerance under risk minimization," IEEE Trans. Cybern., vol. 43, no. 3, pp. 1146–1151, Jun. 2013.

[2]. Kuiran Shi and Tiaojun Xiao "Coordination of a supply chain with a loss-averse retailer under two types of contracts", International Journal of Information and Decision Sciences, Vol. 1, No. 1, 2008

[3]. S.Nageswara Rao and B.R.M.Reddy, "Developing Data Cloud Services in Various Environments", IEEE 2014

[4]. Vishakha More and Prof. Raghib Nasri, "Application Framework and Data Processing in IoT based Email System", IJARCCE Vol. 5, Issue 6, June 2016

[5]. Olatunde A. Durowoju, Hing Kai Chan and Xiaojun Wang, "The Impact Of Security And Scalability Of Cloud Service On Supply Chain Performance", Journal of Electronic Commerce Research, VOL 12, NO 4, 2011

[6]. M.Kameshwara Rao and P. Bhavya Sree, "A Novel Approach of Mining Semantic Context Information for Intelligent Video Surveillance of Traffic Scenes", IJSR, 2012

[7]. Te-Shun Chou, "Security threats on cloud computing vulnerabilities", IJCSIT, Volume 5, No 3, June 2013.

[8]. Leonid Kalinichenko, Ivan Shanin and Ilia Taraban, "Methods for Anomaly Detection: a Survey", RCDL, 2014

[9]. Abhinav S. Raut and Kavita R. Singh, "Anomaly Based Intrusion Detection-A Review", International Journal on Network Security, Vol. 5, 2014

[10]. Ryohei Fujimaki, Takehisa Yairi and Kazuo Machida, "An Approach to Spacecraft Anomaly Detection Problem Using Kernel Feature Space", KDD'05, August 21–24, 2005

[11]. Arthur Gretto and Fredric Desobry, "On-Line One-Class Support Vector Machines. An Application To Signal Segmentation", IEEE, 2003

[12]. Fredrik Gustafson, "The marginalized likelihood ratio test for Detecting abrupt changes", IEEE, 2001

[13]. J. Cohen, B. Dolan, M. Dunlap, J. M. Hellerstein, and C. Welton, "MAD skills: New analysis practices for big data," in Proc. VLDB Endowment, 2009, vol. 2. no. 2, pp. 1481–1492.

[14]. T. Yong, "Framework of comprehensive defense architecture for power system security and stability," Power Syst. Technol., vol. 36, no. 8, pp. 1–5, 2012

[15]. D. Boyd and K. Crawford, "Six provocations for big data," Working paper, MIT, Cambridge, MA, USA, 2012.