Accountability Against Dishonest Big Data Trading

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Abstract- This paper explains about account trade against dishonest consumers. To achieve security in trading environment we designed this paper. Here we investigate buyers and sellers responsibilities in dataset. Then we design account trade for against dishonest consumers. Specifically, a uniqueness index proposed, which is a new measurement of the data uniqueness. Further accountable trading protocols are presented to enable brokers to blame the misbehaving entities when misbehavior is detected. The accountability is formally proved and evaluated by an automatic verification tool as well as extensive simulation with real-world datasets. Account Trade increases at most 10KB storage per file

Keywords- CVD, pesticides/herbicides, agricultural workers

I. INTRODUCTION

Now a day's information security is applied to computers and networks. Measurement of computer security involves data encryption and passwords. Data encryption nothing but translating of data into non recognized manner. A password is a secret word defined by a user or system. This section describes about overview of existing systems related to Account trade.

M.S.Yasmine Fathima & R.Sahila Devi [1] presents Account Trade which assurance correct book-keeping and achieves accountability in the big data trading among dishonest consumers. In data transaction Account Trade blames dishonest consumers if they deviate from their responsibilities. We formally defined two accountability models. We also evaluated the performance and QoS using real-world datasets in our implemented test bed

Guoxiong Su, Wenyuan Yang, Zhengding Luo [2] presented the design of BDTF, a block chain-based decentralized framework for data trading. We formalized BDTF to address this issue. Their solution, block chain to allow data buyers and data sellers conduct transactions directly. And we built a trusted exchange by using Intel SGX to achieve fair data transmission for data trading. Besides, we analyzed the security and performance of the proposed framework, the results demonstrated that our framework can effectively guarantee the fair completion of data tradings.

Taeho Jung [3] presents Account Trade which guarantees correct book-keeping and achieves accountability in the big data trading among dishonest consumers. Account Trade blames dishonest consumers if they deviate from their responsibilities in data transactions. To achieve accountability against dishonest sellers who may resell others' datasets, we presented a novel rigorous quantification of the dataset uniqueness — uniqueness index — which is efficiently computable.

M. Geetha, V. Harini [4] proposed the first efficient secure scheme TPDM for data markets, which simultaneously guarantees data truthfulness and privacy preservation. In TPDM, the data contributors have to truthfully submit their own data, but cannot impersonate others. Besides, the service provider is enforced to truthfully collect and process data. Furthermore, both the personally identifiable information and the sensitive raw data of data contributors are well protected. In addition, they instantiated TPDM with two different data services, and extensively evaluated their performances on two real-world datasets. Evaluation results have demonstrated the scalability of TPDM in the context of large user base, particularly from computation and communication overheads.

Bhagyashree Dhananjay Kadam [5] proposed the first efficient secure scheme Truthfulness and Privacy Preservation in Data Markets (TPDM) for data markets, which simultaneously guarantees data truthfulness and privacy preservation. In TPDM, the data contributors have to truthfully submit their own data, but cannot impersonate others. Besides, the service provider is enforced to truthfully collect and process data. Furthermore, both the personally identifiable information and the sensitive raw data of data contributors are well protected. In addition, we will instantiated TPDM with two different data services, and extensively evaluated their performances on datasets

G.Devisree, T.Saiprasad Reddy [6] proposed Account Trade for big data trading among dishonest consumers. It guarantees correct book-keeping and achieves accountability by blaming dishonest consumers if they did not fulfill responsibilities in the transactions. Notably, to achieve the accountability against dishonest sellers who may re-sell others" datasets, we presented a novel rigorous measurement

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of the dataset uniqueness – uniqueness index – which can be efficiently computable.

Srinivasa Bapiraju Gadiraju, Priyanka Vemulavada [7] proposed productive secure plan TPDM for data markets, which all the while Guarantees data truthfulness and protection safeguarding. In TPDM, the data benefactors need to truthfully present their very own data, however can't mimic others. Furthermore, the service supplier is authorized to truthfully gather and process data. Moreover, both the by and by recognizable data and the delicate raw data of data benefactors are very much ensured. Also, TPDM with two unique data services, and widely assessed their exhibitions on two genuine world datasets. Assessment results have shown the versatility of TPDM with regards to huge client base, particularly from calculation and correspondence overheads. Finally, we have demonstrated the plausibility of presenting the semi-legit registration focus with itemized hypothetical investigation and generous assessments. Additional in data markets

II. PROPOSED SYSTEM DESIGN

In this section we are going to explain designing of proposed system. It involves

- ➤ Input design
- Output design

INPUT DESIGN

Input Design is nothing but converting user's data into computer based data. It is achieved by creating user-friendly to handle large volume of data. The main aim of input design is to maintain easier way to entering data and ii will free for errors. Thus the objective of input design is to create an input layout that is easy to follow

OUTPUT DESIGN

A quality output is nothing but which meets the requirements of the end user and presents the information in clear way. The output form of an information system should accomplish one or more of the following objectives.

- Convey information about past activities, current status or projections of the
- Future.
- Signal important events, opportunities, problems, or warnings.
- Trigger an action.
- Confirm an action.

SYSTEM ARCHITECTURE

It mainly describes how the process of selling and buying will be involved. Each block will be explained in Implementation part.

UML DIAGRAMS

Full form of UML is Unified Modeling Language. UML is a General-purpose modeling language in the field of object-oriented software engineering.

USE CASE DIAGRAM

Use Case Diagram is a behavioral diagram used for creating use case analysis. Its purpose is to create a graphical representation of actions of the system Fig.1 shows that_Use Case Diagram for Proposed system.

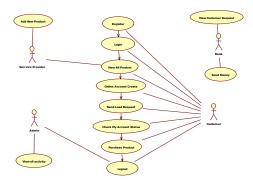


Fig.1_Use Case Diagram for Proposed system

III. IMPLEMENTATION

In this section we implemented our proposed system using different modules. .

MODULES:

- Broker
- Seller
- Buyer
- Malicious users

Broker:

In our proposed system we developed broker model which can maintain all data relavent to selling and buying. And also they define what type of transactions is considered for selling

Seller:

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In this module, we designed Seller functionality module to sell their own products only. They are not allowed to resell others product. Also, they should maintain records correctly

Buyer:

In this module, we develop the Buyer functionality module. Buyers should not disturb brokers' book-keeping. Furthermore, we let sellers set the prices, but more sophisticated pricing mechanism may be considered. The accountability we study for data trading is independent from them.

Malicious users:

Malicious user nothing but they may deviate above users for not performing their responsibilities such as selling, buying, book keeping etc

IV. SYSTEM TESTING

Testing is performed to maintain errorless systems. Different types of testing methods are there. Those are

- Unit testing
- ➤ Integration testing
- > Functional test
- System Test
- ➤ White Box Testing
- Black Box Testing
- Unit Testing:

Test strategy and approach

Field testing will be performed manually and functional tests will be written in detail.

Test objectives

- All field entries must work properly.
- Pages must be activated from the identified link.
- The entry screen, messages and responses must not be delayed.

Features to be tested

- Verify that the entries are of the correct format
- No duplicate entries should be allowed
- All links should take the user to the correct page

V. RESULTS AND DISCUSSIONS

Accountability against Dishonest Buyers and Sellers successfully implemented the below results shows the process of implementation explained in above sections, Fig.2 Account Trade: Accountability against Dishonest Big Data Buyers and Sellers window. It contains different options like Home, Buyers, Brokers, Sellers. If u are a buyer means first we must login to buy the things. If you are the new user means you should register by entering the details like name, profile photo, date of birth etc.shown below Figures.



Fig.2 Account Trade: Accountability against Dishonest Big Data Buyers and Sellers

If user is a broker means click on Broker option so that Broker get login details as shown in Fig.3



Fig.3 Broker login window

If user is a buyer means click on Buyer option so that Buyer get login details as shown in Fig.4

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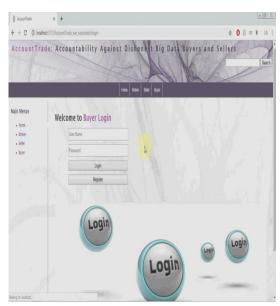


Fig.4 Buyer login window

If buyer is a new user means first buyer should register for his action. For registration u should Enter Name, Mobile Number, Date of Birth, Mail ID, Password as shown in Fig.5

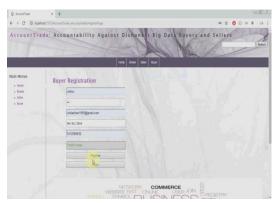


Fig.5 Buyer Registration Process

After successful registration Buyer can directly go for login option as shown in Fig.6



Fig.6 Buyer login option after registration

If Seller is a new user means first Seller should register for his action. For registration u should Enter Name, Mobile Number, Date of Birth, Mail ID, Password as shown in Fig.7

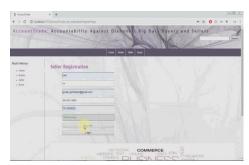


Fig.7 Seller Registration Process

After Successful Registration it is shown that Process is done as in Fig.8

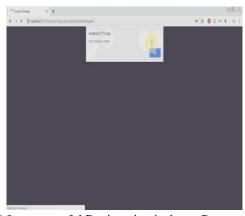


Fig.8 After successful Registration it shows Process is done

After successful login as a seller it shows the profile of the seller contains details like name, mail id etc shown in below Fig.9



Fig.9 Seller Details

If seller wants to sell a thing he should upload the details regarding selling item which is shown in the below Fig.10

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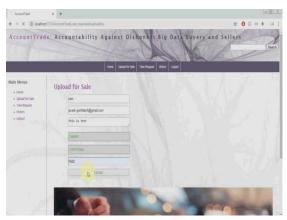


Fig.10 Uploading Process for selling an item

The Below Fig.11 and Fig.12 Shows that details from database regarding users



Fig.11 Users details in /database



Fig.12 User Clear Detail in Database

By using this Proposed system we can determine the users trying to upload same files or trying to download the same files as shown in below Fig.13 in Graphical Representation

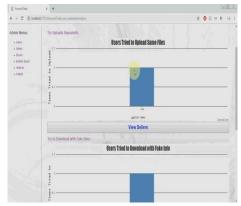


Fig.13 Fake users Details in Graphical Representation

VI. CONCLUSION

This paper presents Account Trade which guarantees correct book-keeping and achieves accountability in the big data trading among dishonest consumers. Account Trade blames dishonest consumers if they deviate from their responsibilities in data transactions. To achieve accountability against dishonest sellers who may resell others' datasets, we presented a novel rigorous quantification of the dataset uniqueness — uniqueness index — which is efficiently computable. We formally defined two accountability models and proved them with Pre-verify and theoretic analysis, and we also evaluated the performance and QoS using real-world datasets in our implemented tested.

REFERENCES

- [1] M.S.Yasmine Fathima & R.Sahila Devi, "ACCOUNTABILITY AGAINST DISHONEST BIG DATA BUYERS AND SELLERS", INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH TECHNOLOGY, ISSN: 2277-9655, March, 2019]
- [2] Guoxiong Su, Wenyuan Yang, Zhengding Luo, Yinghong Zhang, Zhiqiang Bai, Yuesheng Zhu, "BDTF: A Blockchain-Based Data Trading Framework with Trusted Execution Environment", arXiv:2007.06813v1 [cs.CR] 14 Jul 2020
- [3] Taeho Jung , *Member, IEEE*, Xiang-Yang Li , *Fellow, IEEE*, Wenchao Huang , Zhongying Qiao, Jianwei Qian , Linlin Chen, Junze Han , and Jiahui Hou, "AccountTrade: Accountability Against Dishonest Big Data Buyers and Sellers", IEEE TRANSACTIONS ON INFORMATION FORENSICS AND SECURITY, VOL. 14, NO. 1, JANUARY 2019
- [4] M. Geetha, V. Harini, S. Sherin Benita, A. Supriya," Raw Data Truthfulness and Privacy Preservation In a Practical Data Market", International Journal for Research in Applied Science & Engineering Technology (IJRASET),

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- ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 6.887 Volume 7 Issue III, Mar 2019-
- [5] Bhagyashree Dhananjay Kadam, Dr. Mrs. Gayatri M. Bhandari, "MAINTAINING CONFIDENTIALITY OF USER INFORMATION AND TRUTHFULNESS OF USER REVIEWS USING MACHINE LEARNING AND AES" Journal of Analysis and Computation (JAC) (An International Peer Reviewed Journal), www.ijaconline.com, ISSN 0973-2861 ICASETMP-2019
- [6] G.Devisree, T.Saiprasad Reddy MD.Sumaiyah Banu, SK.Shahin, T.venu Koushik (U.G. Scholars), "Providing Accountability Against Dishonest Big Data Buyers and Sellers" International Journal of Research in Engineering, IT and Social Science, ISSN 2250-0588, Impact Factor: 6.565, Volume 09, Special Issue 4, May 2019.
- [7] Srinivasa Bapiraju Gadiraju, Priyanka Vemulavada, Naga Mallik Atcha, Sree Vidya Dandu, Devi Priya Gottumukkala, "Accomplishing Data Integrity and Confidentiality in Data Markets", International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-11, September 2019

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