

## ANALYZING HUMAN BEHAVIOR FOR FINANCIAL FRAUD

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### ABSTRACT

Fraud typically means that wrongful or criminal deception meant to result in monetary or personal gain. Financial fraud can be done by any persons ranging from senior managers to payroll employee that involves money. There are many techniques that are developed to identify, analyze and prevent financial fraud behavior. The most popularly known technique is the fraud triangle theory which is associated with classic financial audit model. We proposed a knowledge framework that identifies and outlines a group of individuals in financial organizations like banking where there are chances of committing fraud. Fraud Find approach works in a continuous audit that will be in charge of collecting information of agents installed in user's equipment. It is based on semantic techniques applied through the collection of phrases taken from the users under study for later being transferred to a repository for later analysis. This system contributes for the field of cyber security, for the reduction of financial fraud. The proposed technique works with an organization that comes under banking sector which will be our data to study. An agent is an application installed in the terminals of the users in order to obtain the data that they generate from the different sources of information that reside on their equipment. We wish to form different patterns like classifications, taxonomies, or typologies that represent the data. The various categories of data under fraud triangle are pressure, opportunity and justification.

### INTRODUCTION

Fraud is a civil law violation and is also a crime. In recent year financial fraud, including credit card fraud, bank fraud, insurance fraud, financial statement fraud, corporate fraud, security fraud, money

laundering has attracted a great deal of concern and attention. Fraud is that a wrongful or criminal deception meant to result in monetary or personal gain. Financial fraud is becoming a serious problem in the economic society. It makes a horrific threat to the economic condition of

an organization or even the government. There are several other cases which cost a huge amount of damage to the economy. For example, investment bank Lehman, with \$600 billion in assets, failed in late 2008. Investment bankruptcy is the largest bankruptcy in the past history that gave a spark to the worldwide financial crisis. A large number of research paper has been published on credit card fraud, insurance fraud, financial statement fraud due to their relatively large impact on world economy. Traditional approaches for detecting frauds became inefficient due to introducing of new methods of committing fraud by fraudsters. Data mining can be applied to this problem because techniques used in data mining-based approaches can detect small deviation in large datasets. An efficient approach to finding the solution of financial fraud problem is to apply the data mining techniques for classifying suspicious transaction, which are further investigated for unfitting transaction category or fraud.

**TYPES OF FINANCIAL FRAUD** There are different types of financial frauds that occur in our day to day life. According to the impact of these frauds on the economy, they are categorized namely as credit card

fraud, financial fraud, money laundering, insurance fraud etc....

**CREDIT CARD FRAUD** Credit card fraud generally falls under bank fraud category. Credit card fraud is defined as illegal access and unauthorized use of the credit card of a person without his involvement or his permission. There are two different types of credit card frauds. The first one is counterfeit fraud where the fraud is done by fraudsters or a group of fraudsters. This kind of credit card fraud will have a huge impact on thousands of card holders. The second type of credit card fraud is that it involves the use of lost or stolen cards. This kind of credit card fraud will not influence immense number of cardholders. Fraudsters basically use phishing attacks in which he himself will act as if he is the original financial officer in order to acquire the card details.

**FINANCIAL FRAUD** Financial fraud involves the collection of financial statements reported by an organization about its financial control flow, financial results, their loans, debts, expenses, income, profits, losses in addition with the expected future business activities. Financial statements play a key role in smooth running or failure of

the organization. Financial statements fraud involves the reshaping of the original organizational structure in order to make the company more bankable.

**INSURANCE FRAUD** Insurance fraud is the act of wrongful intension of fraudulent payback committed with the insurance company. Insurance fraud can be done by fraudsters at any stage of insurance process. The insurance process includes claims, eligibility, billing, application, rating, etc....Insurance fraud occurs in various organizations like crop insurance, healthcare insurance, automobile insurance etc....The automobile fraud can be done by the fraudsters by showing a fraud injury. Health care insurance fraud can be done by using duplicate claims, unnecessary medical services. In crop insurance fraud the customers increase the losses occurred due to natural calamities, disasters or by a reduction in prices.

**MONEY LAUNDERING** Money laundering is defined as a financial fraud in which the fraudsters make the use of dirty or illegal money called black money and make them into lawful and useful money. Money laundering is where fraudsters engage deliberately in monetary transactions.

## **PROPOSED FRAMEWORK**

The proposed framework operates in a continuous approach to discover financial fraud within an organization. The proposed framework operates in the continuous auditing approach to discover financial fraud within an organization belonging to the banking sector which will be our main study environment and focused on the fraud triangle theory with the human factor considered as an essential element. Fraud Find is proposed with the objective of analyzing large amounts of data from different sources of information for later processing and registration. The agent is an application installed in the workstations of the users (endpoints), in order to extract the data that they generate from the different sources of information that reside on their equipment. the architecture of the proposed system. The proposed system also focused on fraud triangle theory with human factor considered as an essential element. Fraud find is proposed with the objective of analysing large amounts of data for processing. K-Means clustering is meant to partition n different objects into k different clusters.

## **ADVANTAGES:**

Identifies the actual fraud

- ♣ Use of algorithm
- ♣ Continuous monitoring

## CONCLUSION

The present work proposes Fraud Find, a conceptual framework to detect financial fraud supported by the fraud triangle factors which, compared to the classic audit analysis, makes a significant contribution to the early detection of fraud within an organization. Considering human behavior factors, it is possible to detect unusual transactions that would have not been considered using traditional audit methods. The collected data is examined using data mining techniques to obtain patterns of suspicious behavior evidencing possible fraudulent behavior. Nevertheless, the legal framework and the different regulations that are applied in public and private institutions of a region represent a high risk for the non-implementation of this architecture as an alternative solution. Future work will have as its main objective the implementation and evaluation of the framework as a tool for continuous auditing within an organization.

## REFERENCES

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