

Centralized Bank Monitoring of Fraudulent Tax Payment using Placard System

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ABSTRACT

A bank is a financial organization that accepts deposits from the general public and creates credit. Due to their importance within the financial stability of a rustic, banks are extremely regulated in most countries. Operating and auditing several banks has raised problems for financial gain Tax Department (ITD) to observe deceitful tax payment placard system. There is lot of mislead bank operations. The objective of the project is to avoid multiple bank accounts for the account holders and find the non-tax payers only 1 account is permissible to 1 citizen. By using that account he/she will build account operation from any one of bank branches. Monitoring all banks operations at any time while not informing to the various banks and its branches will be done.

KEY WORDS: Placard system, Account holders.

1. INTRODUCTION

A bank is an institution that accepts deposits from the general public and creates credit. Lending activities will be performed either directly or indirectly through capital markets. Most nations have institutionalized a system known as fragmental reserve banking beneath the banks hold quick assets capable solely some of their current liabilities. Operating several banks has raised watching problems for financial gain Tax Department (ITD) to watching dishonorable tax payment placard system. Auditing the banks is tougher for the ITD. There is lot of mislead bank operations. The many banks approach isn't while not its drawbacks. In proposed sort of arrangement visibility over money balances could suffer and it's going to not be attainable to maximize the potency of the Banks money by sweeping balances to ITD. Citizens adopting a multi-bank accounts structure can have variable wants and can be at totally different stages of uses. Many bank accounts lead to access un accounted money by mistreatment several accounts by a national. Many of folks are becoming escape by not giving right record for paying revenue enhancement. The government faces additional difficulties to levy more taxes over the tax payers. To determine the tax collectible account dealing ITD ought to formalize the checking account activities. The proposed system adopts new bank watching system by implementing new software system to monitor the bank transactions. In the software, the ITD is the admin, banks are the second level admin, bank branches are the next level users, and finally the citizens area unit the smallest amount level users. Only one account is permissible to at least one national. By using that account he will create account operation from any one of bank branches. By using our software system the ITD will monitor all banks operations at any time by while not informing to the various banks and its branches

Architecture:

Centralized Bank and Monitoring: We are providing a website for RBI/ITD to centralize multiple banks. In this website, the ITD is the admin, banks are the second level admin, bank branches are the next level users, and account holders are least level users. Only one account is permitted to one citizen. By using that account he/she can make account operation from any one of bank branches. By using our software the ITD can monitor all banks operations at any time by without informing to the respective banks and its branches.

Tax Fraud Detection: To illustrate our approach we take the problem of identifying reciprocal payers (formally called a clique), which is a group of bank clients that issue payments A new bank monitoring system is proposed by implementing new software to monitor the bank transactions. Our website facilitates the income tax offices and Enforcement department to monitor the cash transactions by the account holders. The ITD can monitor all banks operations at any time by without informing to the respective banks and its branches.

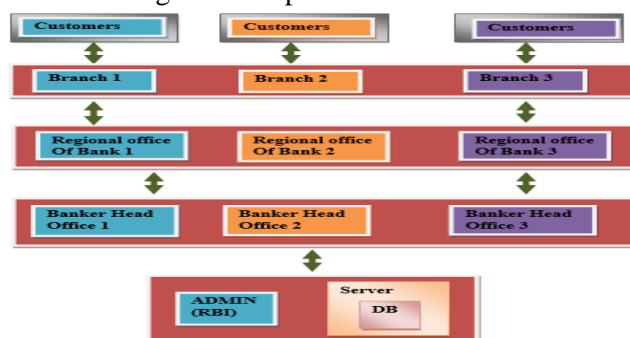


Figure.1. System architecture

2. MATERIALS AND METHODS

Algorithm: Here we have a tendency to in short introduce AC associated its applications victimization TSP as an example. In the TSP, a given set of n cities has got to be visited specifically once and therefore the tour ends within the initial town. we have a tendency to denote the sting between town i and j as (i, j) and its distance as d_{ij} ($i, j \in [1, n]$). Let $\tau_{ij}(t)$ be the intensity of secretion on (i, j) at time t , and use $\tau_{ij}(t)$ to simulate the secretion of real ants. Suppose m is that the total variety of ants, at time t the k th hymenopter selects from its current town i to town j in keeping with the subsequent chance distribution

$$p_{ij}^k(t) = \begin{cases} \frac{\tau_{ij}^\alpha(t) \eta_{ij}^\beta(t)}{\sum_{r \in allowed_k} \tau_{ir}^\alpha(t) \eta_{ir}^\beta(t)} & j \in allowed_k \\ 0 & otherwise \end{cases} \quad (1)$$

The intensity of pheromone is updated by

$$\tau_{ij}(t+1) = \rho \tau_{ij}(t) + \Delta \tau_{ij} \quad (2)$$

Where $0 < \rho < 1$ represents the evaporation of $\tau_{ij}(t)$ between time t and $t+1$, $\Delta \tau_{ij}$ is the increment of the pheromone on (i, j) in step t , and $\Delta \tau_{ij}^k$ is the pheromone laid by the k th ant on it, it takes different formula depending on the model used.

$$\Delta \tau_{ij} = \sum_{k=1}^m \Delta \tau_{ij}^k \quad (3)$$

In the most popularly used model called "ant circle system",

$$\Delta \tau_{ij}^k(t) = \begin{cases} Q/L_k & \text{if the } k \text{ th ant passes } (i, j) \text{ in current tour} \\ 0 & otherwise \end{cases} \quad (4)$$

Where Q is a constant, L_k is the total length of current tour travelled by the k th ant.

3. RESULTS AND DISCUSSION

In this paper we tend to offer proof that it's doable to characterize and notice those potential users of false invoices in a very given year, betting on the data in their tax payment, their historical performance and characteristics, victimization differing types of information mining techniques. First, cluster algorithms like Kyrgyzstani monetary unit and neural gas area unit wont to establish teams of comparable behavior within the universe of taxpayers. Then call trees, neural networks and theorem networks area unit wont to establish those variables that area unit associated with conduct of fraud and/or no fraud, notice patterns of associated behavior and establishing to what extent cases of fraud and/or no fraud will be detected with the on the market info. This can facilitate establish patterns of fraud and generate information which will be utilized in the audit work performed by the Tax Administration of Chile to notice this kind of tax crime.

4. CONCLUSION

Intelligent systems entitled tax fraud detection systems, identify fraud among the available tax data with less error coefficient, which depends on the tax department chosen by the user, can report the list of frauds committed in that department to the related specialists. Because of the large volume of tax data, running the program in serial mode was time consuming. So in this study we tried to rely on new parallelism technology and apply it on Parts of procedure to reduce the running time of the program. This system can be applied to the structure of tax system.

Conflict of interest: The author declares having no competing interests.

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