ABSTRACT

To design and implement a proactive real time fraud detection system tool for banks, it is key to consider the use of a multi agents system in order to achieve this. In this paper after having a chance to meet several system users, bank auditors and experts in charge of diverse risk management activities inside several commercial and community banks, I will introduce a multi agent based system which integrates the knowledge and the opinions collected during the meetings, to designed a prototype of pure reactive agents intended to detect fraud using rules set to determine suspicious activities and transactions in the banking system. The prototype is intended for the management of fraud detection situations where system users and auditors are collaborating according to a three-phase detection process. In the first phase users and auditors, respectively, an effective environment to explicit their knowledge, select the most likely fraud attack components. In the second phase, the components are structured into rules that act as thresholds used for monitoring each account that is transacted into in the core system. In the third phase an alarm is raised for each threshold reached .The success to a solution of this kind depends to a large extent on a proper definition of rules that determine a suspicious event.