

Fault Detection in E-banking based on Customer Profile

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Abstract Fraud means the acquisition of property or goods or services in an immoral and unlawful way that is spreading around the world today. Misuses that occur in financial transactions not only lead to a loss of financial resources, but also lead to lower customer confidence in the use of modern banking systems, thereby reducing the effectiveness of these systems in managing transaction optimization. Fraud has long been associated with human beings and today it is considered as a very high income source worldwide, and its financial volume is increasing day by day. In recent years, the development of new technologies has opened many ways for fraudsters and criminals to commit fraud. Creating a new information system, in addition to all its benefits and benefits, may offer more opportunities for perpetrators to commit fraud. The methods used to detect fraud, in addition to identifying and analyzing fraud and fraud in an organization, have somehow been trying to predict their future behavior by recognizing the behavior of users or customers, and Reduces the risk of fraud. Nowadays, the use of new technologies in the management of banking transactions has grown dramatically. Banks and financial and credit institutions are bound to switch traditional banking to modern and online banking for efficient services. However, the use of these systems has led to better management of financial processes and increased efficiency and speed of service to the clients of these institutions, but also has brought about problems and risks. Fraud and financial mismanagement are one of the problems these organizations have been trying to prevent and mitigate. In this paper, using customer bank profile data, a model is introduced using machine learning methods that can be used to identify fraud in e-banking. The proposed method uses bank transaction data and teaches an artificial neural network to predict the authenticity of a transaction to increase the accuracy of fraud detection in e-banking. The results of this study showed that fraud detection models in bank cards, whose performance in the classification seems relatively reasonable. The main model of this study was the multilayer perceptron neural

network, which, due to its high ability to recognize the pattern, has been able to meet a relatively large amount of research goal. This reliability allows the model to be easily commercialized and, by connecting to the electronic banking system, online or offline, detects fraudulent practices in banking transactions.

Keywords : e-banking, fraud detection, data mining, artificial neural network.

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