

Review of: "Application of Data Mining Combined with K-means Clustering Algorithm in Enterprises' Risk Audit"

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Potential competing interests: No potential competing interests to declare.

Reviewer observations:

1. This article focuses on the audit problem of e-commerce transactions and proposes an RF LightGBM e-commerce enterprise risk audit model that combines the K-means clustering algorithm with the random forest algorithm. This paper studies the payment process in the transaction process of e-commerce enterprises, which includes operational processes such as data preparation, data preprocessing, model construction, model application, and evaluation. The RF LightGBM model includes the generation of training sets, the construction of decision trees, and the formation and implementation of algorithms.
2. To enhance the article, I suggest the following improvements:
 - a. The abstract should explicitly emphasize the motivation behind the research.
 - b. The analysis of results should stress why the proposed methodology outperforms other investigated methodologies.
 - c. Additionally, to maintain consistency with other figures, the legend in Figure 6 should be positioned below the figure rather than above.
 - d. Provide a brief explanation of the challenges faced by e-commerce enterprises in managing financial risk and the importance of implementing effective risk audit mechanisms.
 - e. Although the high classification accuracy achieved by the model's algorithm is mentioned, there is a lack of sufficient interpretation and discussion of the results. A deeper analysis of the findings would strengthen the conclusion. Highlight the significance of the achieved **95.46% classification accuracy** and its implications for risk management in e-commerce enterprises.
 - f. It is important for the author to highlight the novelty of their research and how it contributes to the existing body of knowledge. It should be clarified which specific aspects of the study represent novel contributions to the field of enterprise risk auditing and data mining.
 - g. Discuss potential limitations of the study and areas for future research.

Incorporating these suggestions can elevate the paper, potentially making it a valuable contribution to the field of enterprise risk auditing.

