

# Review of: "Exploring machine learning techniques to develop predictive models to address unemployment rates in the implementation of Industry 4.0"

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Potential competing interests: No potential competing interests to declare.

The objective of this article is interesting, both on a practical and theoretical level. Knowing what factors and how they influence unemployment in developing countries through machine learning techniques makes it possible to predict unemployment rates and, consequently, develop effective strategies for promoting job creation and reducing unemployment in developing countries.

The ethical considerations that need to be taken into account when developing predictive models for unemployment rates is particularly valuable, although some reference should be included in this part.

It is well written and organised. Although sometimes the same ideas are repeated throughout the article.

I recommend that the following comments be taken into account in improving the work:

- In the section "The most accurate and reliable algorithms (techniques) for predicting unemployment rates in developing countries", add a summary table with each of the algorithms, the data used, the country under study and the accuracy of the algorithm used.
- The steps for developing a conceptual framework for the predictive model are generic as well as Figure 1, and should be specified for predictive models of unemployment rates in developing countries.
- It is not clear whether the article aims to conduct a literature review or rather to develop a model as stated in the abstract "A model that predicts outcomes was suggested using techniques of machine learning like regression analysis and neural networks as a result of considering these factors. The study's findings demonstrated the effectiveness of the proposed predictive model in accurately predicting fluctuations in unemployment rates within developing nations".
- The results obtained or the materials used are not clear in the article. They should be shown more clearly.
- In the same vein, it would be interesting for the author to implement the conceptual framework to a case study in a given developing country, choosing an ML algorithm, a dataset that includes identified factors and try to validate the results of other previous studies.
- Having achieved the results, it would be useful to discuss them in comparison with the wider literature considered.
- In implications it should be highlighted how the work overcomes the gap detected in the literature,
- In terms of references, it would be useful to add the doi.

