

Feature Importance Analysis of Organizational Citizenship Behaviors in Driving Product Innovation Performance via XGBoost Models

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1. Round 1

1.1. Reviewer 1

Reviewer:

The concept of “product innovation performance” is repeatedly described as multidimensional; however, an explicit operational definition is not provided at this early stage. Please clarify its dimensions conceptually before moving into methodological detail.

The claim that contemporary innovation systems are nonlinear would be strengthened by briefly explaining how linear models fail to capture this complexity and why a nonlinear learning approach is theoretically appropriate.

While the aim is clearly stated, the manuscript would benefit from the inclusion of at least one explicit research question or hypothesis to formally structure the empirical inquiry.

Please report the random seed used for dataset partitioning and cross-validation to ensure exact replication.

Consider reporting distribution characteristics such as skewness and kurtosis to support later model assumptions and interpretation.

Model performance is reported only for the test set. Please also report training performance to demonstrate the absence of overfitting.

Authors revised the manuscript and uploaded the new document.

1.2. *Reviewer 2*

Reviewer:

The phrase “multi-stage sampling strategy” is used, yet the description aligns more closely with purposive organizational selection followed by employee recruitment. Please revise the terminology for methodological precision.

The sample is described broadly as consisting of manufacturing and technology-oriented service firms. Please report the sectoral distribution of respondents to strengthen contextual transparency.

Although Cronbach’s alpha values are reported as exceeding 0.80, the exact coefficients for each construct are not provided. These should be explicitly reported.

The sentence “confirmatory factor analysis confirmed convergent and discriminant validity” should be accompanied by full reporting of model fit indices and validity statistics.

The choice of k-nearest neighbor imputation requires justification, particularly given the low proportion of missing data. Please explain why this method was selected over simpler alternatives.

Authors revised the manuscript and uploaded the new document.

2. Revised

Editor’s decision after revisions: Accepted.

Editor in Chief’s decision: Accepted.