




# Design of a Fuzzy Expert System for Organizational Performance and Innovation Evaluation Based on the Role of Knowledge Management and Intellectual Capital

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## Editor

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## Reviewers

**Reviewer 1:** Ali Sargolzaie<sup>id</sup>  
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## 1. Round 1

### 1.1. Reviewer 1

Reviewer:

The introduction references Du Plessis (2007) in discussing the importance of innovation but does not provide a direct connection to the specific focus of your study. Consider elaborating on how this reference ties into the role of knowledge management and intellectual capital in innovation.

The description of the Delphi technique (paragraph starting with "For screening and ensuring the importance of identified indicators") could be more detailed. How were the expert panelists selected? What were the criteria for considering a consensus reached?

The section on the Fuzzy Analytic Hierarchy Process (FAHP) (starting with "To determine the priority of the identified indicators...") would be clearer if you provided a brief explanation of how the geometric mean was calculated and why this method was chosen for aggregating expert opinions.

In Table 3 and the corresponding text discussing the defuzzified weights of the criteria, the implications of these priorities are not fully explored. How do these findings impact the practical application of the expert system in organizations?

You mention that the inconsistency rate was less than 0.1, indicating reliability (paragraph starting with "The inconsistency rate was 0.014..."). It would be helpful to briefly discuss what would happen if the inconsistency rate exceeded this threshold. How would this affect your results?

Authors revised the manuscripts.

## 1.2. Reviewer 2

Reviewer:

The sentence "Knowledge as a major source for organizational innovation and productivity is of immense importance (Darroch 2005)" could be expanded to discuss how the study specifically builds on this foundation. What unique contribution does your research make in this context?

You mention, "Intellectual capital encompasses all employees' organizational knowledge and its capabilities to create added value," but the concept of "added value" is not clearly defined. Please clarify what you mean by "added value" in this context.

In the methodology section, the explanation of grounded theory (paragraph starting with "Through constant comparison of the data") would benefit from a more detailed description of how grounded theory was applied. Specifically, what were the steps taken to ensure the reliability and validity of the coding process?

The explanation of sub-criteria weighting, particularly in Table 4 (Social Causal Factors, Human Resources Strategies, and Organizational Outcomes), lacks a discussion on how these weights were validated. Did you compare them with existing models or benchmarks?

The paragraph beginning with "MATLAB software was used to implement the fuzzy inference system" should include more details about the software's role. Were there any specific challenges in using MATLAB for this purpose, and how were they addressed?

Figures 2 through 6, which show the Fuzzy Expert System Models, are central to your findings. However, the text does not sufficiently explain these figures. Consider providing a more detailed walkthrough of one figure as an example to enhance reader comprehension.

The discussion mentions that "Knowledge management also enhances communication and collaboration between departments and individuals." However, this statement could benefit from a citation or an example from the data to support this claim.

The discussion on intellectual capital (paragraph beginning with "Intellectual capital includes intangible assets...") would be stronger if it included more specific examples of how these intangible assets were measured or observed in the study.

Authors revised the manuscripts.

## 2. Revised

Editor's decision: Accepted.

Editor in Chief's decision: Accepted.