

# Strategic Model for University Performance Evaluation Using AHP and Fuzzy Logic

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## *Extended Abstract*

*Purpose:* This article aims to propose an innovative and structured management model for evaluating university performance by employing the Analytic Hierarchy Process (AHP) and fuzzy inference systems. The model is designed to provide tools that guide strategic actions and strengthen key indicators, ensuring sustainable and competitive institutional performance.

*Methodology:* The methodology combines the use of AHP to identify and prioritize criteria and dimensions associated with university performance with a fuzzy inference system that consolidates this information into a single indicator. This approach ensures a comprehensive, adaptable, and quantifiable analysis of the most relevant factors for institutional performance evaluation.

*Findings:* The study highlights that many universities focus their efforts on strengthening certain indicators through economic investments and management improvements. However, these actions do not always result in significant improvements in their positioning in international rankings. Additionally, the lack of a unified performance measurement system, particularly in Latin American universities, limits both the comparison between institutions and the precise identification of critical areas for improvement.

*Originality and Value:* This article presents a flexible and practical model that not only evaluates multiple indicators but also integrates them into a single, meaningful metric. This enables institutions to accurately identify the criteria that impact performance, make data-driven decisions, and design effective strategies to promote continuous and sustained improvement.

*Keywords:* University performance evaluation, Analytic Hierarchy Process (AHP), Fuzzy inference systems, Strategic educational management, Data-driven decision-making

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