

# **A Multi-Criteria and Empirical Study for Determining the Influencing Factors of Generative Artificial Intelligence Adoption in Companies**

S. Gomes Soares Alcalá; V.L. de Nicolás de Nicolás; A.J. López López;  
M. Ventosa Rodríguez

## **Abstract-**

**Generative artificial intelligence (GenAI) has emerged as a transformative force across business and society due to its ability to generate new content. This potential to reshape businesses introduces challenges and opportunities, necessitating a deeper understanding of GenAI's impact. Despite its promise, the factors that enable effective GenAI adoption within companies remain underexplored. Based on systems thinking principles, this study proposes a comprehensive approach to determine the most critical and influential factors for effective GenAI adoption in companies. Thirteen factors are identified and validated by experts and then aggregated within a technological, business, organizational and environmental framework. After that, a multicriteria approach is applied to identify critical and influential factors, considering their interrelationships and the judgements of chiefs on technology and information from Spanish companies representing several sectors and sizes. Findings indicate that organizational factors are critical in most cases. This study guides companies and individuals in navigating effective GenAI adoption and supports future research.**

**Index Terms-** adoption ; analytic network process; companies; GenAI; generative artificial intelligence; systems thinking

Due to copyright restriction we cannot distribute this content on the web. However, clicking on the next link, authors will be able to distribute to you the full version of the paper:

[Request full paper to the authors](#)

If your institution has an electronic subscription to Systems Research and Behavioral Science, you can download the paper from the journal website:

[Access to the Journal website](#)

## **Citation:**

*Gomes Soares Alcalá, S.; de Nicolás, V.L.; López López, A.J.; Ventosa, M. "A Multi-Criteria and Empirical Study for Determining the Influencing Factors of Generative Artificial Intelligence Adoption in Companies", Systems Research and Behavioral Science, , .*