

**INTELIGÊNCIA ARTIFICIAL COMO FERRAMENTA DE GESTÃO EM
MICROEMPRESAS DO SETOR VIDREIRO: DIAGNÓSTICO E ROTEIRO DE
IMPLEMENTAÇÃO NA SERRA GAÚCHA**

Emerson Luis de Vargas, Dr.

Centro Universitário Uniftec
Bento Gonçalves, Rio Grande do Sul-Brasil
ORCID ID: 0009-0000-3211-8781

Maicon Rafael Busnelo

Bento Gonçalves, Rio Grande do Sul-Brasil
ORCID ID: 0000-0003-2772-3981

Diego Luís Bertollo, Dr.

Centro Universitário Uniftec
Bento Gonçalves, Rio Grande do Sul-Brasil
ORCID ID: 0000-0002-4066-9185

Abstract

Artificial intelligence expands the possibilities for automation, data analysis, and decision support, but its adoption by microenterprises remains contingent on digital maturity, the qualifications of managers, and the ability to integrate technology into management practices. This chapter analyzes the use of artificial intelligence in microenterprises in the glass industry of the Serra Gaúcha region and presents a proposal for gradual implementation applied to Designer Vidros Decorativos. The study, which is applied, exploratory, and descriptive in nature, utilized a literature review and a field survey with four managers in the sector. The results show that adoption is still concentrated on operational uses, especially generative artificial intelligence, while structured data analysis and the strategic use of technology are underdeveloped. All managers reported not using data analysis for strategic decisions, and a lack of knowledge was cited by three of the four participants as a barrier to adoption. Based on the diagnosis, an intervention was structured using the 5W2H framework, a six-month roadmap, and monitoring indicators. The discussion was updated with peer-reviewed international literature from 2024 to 2026 on generative AI, AI adoption, digital capabilities, and small and medium-sized enterprises. It can be concluded that, in the context under study, the transition to AI-supported management depends less on the mere availability of tools and more on managerial training, data organization, governance, and the gradual adoption of technology.

Keywords: Artificial Intelligence. Business Management. Microenterprises. Digital Maturity. Decision Making.