

Organisational AI Maturity and the Phased Adoption of Artificial Intelligence in Slovak Enterprises

Matej Černý¹

Abstract

Artificial intelligence is gradually becoming part of corporate digitalisation, yet companies are not at the same stage of its adoption. Whilst some companies do not currently use AI and have no plans to do so, others are considering it, preparing for its implementation, or already using it in specific business processes. This article aims to empirically analyse how organisational AI maturity relates to the transition from non-adoption to planned and current adoption of AI in Slovak enterprises. The analysis is based on a questionnaire survey of Slovak companies and utilises a final analytical dataset of 816 unique organisational records. We operationalise the AI adoption stage as a three-level ordinal variable distinguishing between non-adopters, planners, and current adopters of AI. We measure organisational AI maturity using a composite index comprising seven dimensions: culture, strategy, organisation, technology, data, ethics, and data protection. To test the relationship between AI maturity and AI adoption stage, we use descriptive comparisons, non-parametric testing and an ordinal logistic regression model with selected organisational controls. The results suggest that higher organisational AI maturity is associated with a more advanced stage of AI adoption. The article thus contributes to the understanding of AI adoption as a gradual organisational process that cannot be reduced solely to a technological decision.

Keywords: artificial intelligence adoption, organisational AI maturity, staged adoption, Slovak enterprises

Doi: <https://doi.org/10.66414/mlabs.9673>

¹ Ing., PhD., Bratislava University of Economics and Business, Slovakia. ORCID: 0009-0000-0127-0852