

## *Supplementary material*

# DETERMINANTS OF AI ADOPTION INTENTION IN SMES. ROMANIAN CASE STUDY

Constantin-Marius APOSTOAIIE, Teodora ROMAN, Alexandru MAXIM,  
Dumitru-Tudor JIJIE

Journal of Business Economics and Management

<https://doi.org/10.3846/jbem.2025.23650>

### Measurement scales

| Scale (Var.)                       | Item  |
|------------------------------------|---|
| Perceived relative advantage (REA) | AI technologies improve the quality of work   |
|                                    | AI technologies make work more efficient  |
|                                    | AI technologies lower labour costs  |
|                                    | AI technologies lead to improved customer service   |
|                                    | AI technologies generate new sales to new customers   |
|                                    | AI adoption identifies new product/service opportunities  |
|                                    | AI adoption can help the company reposition on an unexplored niche  |
| Perceived complexity (CPX)         | The adoption of AI technologies may be difficult due to the limited availability or quality of the necessary data       |
|                                    | The adoption of AI technologies may be difficult because of concerns regarding violation of data protection and privacy |
|                                    | The adoption of AI technologies may be difficult because of a lack of clarity about the legal consequences              |
|                                    | The adoption of AI technologies may be difficult because of ethical considerations                                      |
|                                    | The adoption of AI technologies may be difficult because of hesitations from personnel or product/service end-users     |
| Perceived high costs (CST)         | The amount of money invested in training employees to use AI technologies would be very high.                           |
|                                    | The cost of adopting AI technologies is unclear and not easily understandable   |
|                                    | Adopting AI technologies will increase hardware costs   |
|                                    | Adopting AI technologies will increase operations and maintenance cost  |
|                                    | The costs involved in the adoption of AI technologies would be far greater than the expected benefits                   |
|                                    | The time to recuperate the investments in AI adoption would be much too long  |
| Top management support (TMS)       | My company has policy frameworks that support the usage of AI technology  |
|                                    | Top management would provide the resources necessary for the adoption of AI technologies                                |
|                                    | Top management would support the use of AI tools  |
|                                    | Top managers would be enthusiastic about adopting AI tools  |
| Organizational readiness (ORG)     | My company has the appropriate innovation capacity to implement AI tools in its workflows                               |
|                                    | My company is capable of learning technological knowledge in order to solve current problems                            |
|                                    | My company has the capital/financial resources to implement AI tools in its workflows                                   |
|                                    | My company has the IT infrastructure needed to implement AI tools in its workflows                                      |

| Scale (Var.)                         | Item  |
|--------------------------------------|---|
| Perceived employee capability (EMP)  | Our employees would be capable of learning how to use an AI tool easily   |
|                                      | Our employees would be capable of using an AI tool to better serve our customers                                    |
|                                      | Our employees would be capable of using an AI tool to accomplish their tasks more efficiently                       |
|                                      | Our employees would be capable of generating innovative ideas using an AI tool                                      |
| Perceived competitive pressure (COM) | There would be adequate technical support for AI technologies provided by vendors                                   |
|                                      | Training for AI tools and technologies would be adequately provided by vendors and other training service providers |
|                                      | Vendors actively market AI technology adoption  |
| Perceived customer pressure (CUS)    | Our competitors have already adopted or are in the process of adopting AI technologies                              |
|                                      | Industry associations demand that our company adopt AI technologies   |
|                                      | Competitive conditions demand our company to adopt AI technologies  |
|                                      | Our partners have already adopted AI technologies, pushing us to adopt them ourselves                               |
| Perceived vendor support (VEN)       | Many of our customers would expect our business to adopt AI technologies  |
|                                      | Our relationship with our major customers would suffer if we did not adopt AI technologies                          |
|                                      | Our customers consider would consider us to be forward-thinking by adopting AI tools and technologies               |
|                                      | My firm believes that we may lose customers if we do not adopt AI technologies                                      |
| AI adoption intention (AI)           | The company is willing to experiment with AI technology   |
|                                      | The company plans to adopt AI technology soon   |
|                                      | The company has adopted AI technology   |
|                                      | The company is expected to adopt AI technology in the future  |