

Diminishing Distrust: The Mechanism Linking Satisfaction to the Use of AI Tools in Project Management

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Abstract

The study aims to verify whether the satisfaction derived from the use of AI tools (satisfaction with positive experiences) can build trust or reduce the distrust attributed to AI, and whether it can be a factor that positively influences project managers' decisions to use AI-based tools in their daily practice. To verify the set of established research hypotheses, empirical research was conducted. The analyses were based on statements made by 156 active project managers working for organisations operating in Poland. The research was conducted in the second quarter of 2025. In the process of analysing the results, exploratory factor analysis (EFA) was performed in IBM SPSS Statistics v. 29, followed by reliability analysis of built scales, linear regression analysis and finally a parallel mediation analysis with Process macro for SPSS version 4.2 of Andrew F. Hayes. The research showed that only satisfaction and distrust are statistically significant predictors of the usage of AI tools by project managers ($F(5,149) = 47.401$, $p < 0.001$; $R^2 = 0.642$). The mediation analysis confirmed that only distrust is a partial but significant mediator of the relationship between project managers' satisfaction and the intention to use AI in project management ($F(2,153) = 144.01$, $R^2 = 0.653$), while for trust, the mediation results were statistically non-significant. In this study, trust and distrust are treated as parallel mediating mechanisms influencing the use of AI technology, which brings a new perspective to research on the conditions for implementing and using AI in project management. The results obtained showed that negative attitudes towards AI (distrust) have a greater impact than positive attitudes, pointing to the asymmetry of the influence of user beliefs on the assessment of technology. In the context of implementing AI in project management, it is crucial to reduce distrust rather than just build trust or promote the advantages of technology. The research also has certain limitations. It was carried out only in one research context, in Poland, where AI solutions are still in the development phase and the level of public trust is relatively low. The proposed model may also be sensitive due to the sample size, which is moderate.

Keywords: AI adoption, project management, satisfaction, trust, distrust, intention to use

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