

# Research on the formation mechanism of user resistance to artificial intelligence implementation in Chinese manufacturing enterprises: Affect-based conceptual models

*Research-in-Progress*

Gao Luan, Jia Chunmei, Chen Wei

## **Abstract**

*The deep integration of artificial intelligence (AI) and manufacturing industry is an inevitable trend for manufacturing enterprises. But user resistance is a major obstacle to promote AI implementation. Traditional enterprise systems replace manual operations and cause different operation habits, while AI replaces employees and needs more talents. However, the existing literature on user resistance is proposed in the context of traditional enterprise system implementation, and is mainly based on theories of implementation equity and status quo bias. The changes caused by AI implementation will limit the generalization of existing theories. Therefore, this study, following the concept of emotional episode, firstly proposes the classification model of user response behaviors to AI implementation. This study then based on the emotion cognitive appraisal theory, proposes a concept model to explain the formation mechanism of user resistance. At last, this study is concluded by providing some suggestions on future research directions and implications.*

**Keywords:** User resistance, User emotion, Emotional episode, Formation mechanism