

# The influence of artificial intelligence technology judicial decision reasoning on contract performance in manufacturing supply chain: A simulation analysis using Evolutionary Game approach

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## ABSTRACT

Today's world revolves around technology, which has a total impact not only on human life but also on manufacturing companies. Many companies have embraced artificial intelligence (AI) in the form of powerful computers, applications, or software that can screen job applicants, alert when a machine is about to break down, and read legal contracts. However, the rapid expansion of AI and its use in legal settings, such as contract performance, in a company is a major challenge on the judicial side. This article, thus, establishes an evolutionary game model of whether manufacturing suppliers are performing contracts or not when the court chooses to use artificial intelligence (AI) technology. Considering the complexity of choosing manufacturers' AI strategy, the method constructs a simulation analysis model of manufacturers' contract enforcement behaviour with the participation of several subjects. We can simulate the influence of the factors selected on the strategy chosen by both parties (manufacturers and court) by changing the different influence factors and studying the evolutionary law of different court guidance and regulation strategies on the production behaviour of green products. The results show that the choice of the court and manufacturers to use the AI technology strategy or not is based on the rate of error reduction, through the computational implementation of multi-subject modelling.

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