

# A game theory analysis of intelligent transformation and sales mode choice of the logistics service provider

Cao, G.M.<sup>a,b</sup>, Zhao, X.X.<sup>c</sup>, Gao, H.H.<sup>d,\*</sup>, Tang, M.C.<sup>e</sup>

<sup>a</sup>College of Business Administration, Henan Finance University, Henan Province, P.R. China

<sup>b</sup>School of Economics and Management, Beijing Jiaotong University, Beijing, P.R. China

<sup>c</sup>Shijiazhuang Posts and Telecommunications Technical College, Hebei Province, P.R. China

<sup>d</sup>School of Management Engineering, Zhengzhou University of Aeronautics, Henan Province, P.R. China

<sup>e</sup>International Center for Informatics Research, Beijing Jiaotong University, Beijing, P.R. China

## ABSTRACT

In order to study whether the logistics service provider (LSP) should carry out intelligent transformation strategy of logistics services, this paper constructs a logistics service supply chain consisting of one LSP and one logistics service integrator (LSI), and discusses whether the LSP is independent or participate in LSI. The paper shows that choosing the intelligent transformation of logistics services under any mode can improve the profits of the LSP and the LSI. The joint transformation of logistics services to improve the profit of the LSI is not affected by the choice of mode, while the profit of LSP under the resale mode remains unchanged when she chooses joint intelligent transformation. When the intelligent transformation level is high, the LSI tends to choose the resale model; otherwise, the LSI tends to choose the platform model. When the LSP chooses intelligent transformation by herself, if the share ratio is low, the LSI tends to choose the resale model. If the share ratio is high and the level of intelligent transformation of logistics services is not high, the LSI more inclines to choose the platform model.

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### \*Corresponding author:

wangji946@163.com  
(Gao, H.H.)

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