

# The Role of Delivery Service Quality in Value Co-Creation on Chinese EC Platforms

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**Abstract**— *The delivery service industry plays a crucial role in the rapidly growing EC market in China, where value co-creation is prioritized among sellers, buyers, logistics providers, and EC websites. However, challenges related to delivery service quality pose obstacles to achieving effective value co-creation, particularly in the collaboration between logistics providers and retail sellers. As a result, reduced participation willingness among sellers on EC platforms becomes a pressing concern. This study aims to investigate the impact of delivery service quality, provided by logistics providers, on the participation willingness of online retail sellers affiliated with Ali Group's Tmall.*

**Index Terms**— *Value co-creation, Delivery service quality, Participation willingness.*

## I. BACKGROUND

The EC market in China has experienced rapid growth and is internationally recognized for its top-tier scale. Within EC platforms, value co-creation is emphasized through collaboration among sellers, buyers, logistics providers, and EC websites. However, the cooperation between logistics providers and retail sellers may encounter challenges related to the quality of delivery services, potentially impeding the realization of value co-creation. Consequently, there is an increased likelihood of reduced participation willingness among sellers on EC platforms. Therefore, it is crucial to elucidate the relationship between the participation willingness of retail businesses and the quality of delivery services. This study aims to investigate the impact of delivery service quality provided by logistics providers on the participation willingness of online retail sellers affiliated with Ali Group's T-mall.

## II. RESEARCH QUESTIONS

### A. Question1

What are the current state and challenges faced by the delivery service industry within the Chinese EC platform?

### B. Question1

How do logistics providers and online retailers contribute to value co-creation, and what are their respective impacts on participation willingness?

### C. Question1

Specifically, what are the effects of delivery service quality dimensions (process, outcome, and corporate image) on online retailers' willingness to participate in value co-creation activities?

With a specific focus on business development strategies of distribution providers in the Chinese EC platform, this study aims to provide valuable insights to inform and

enhance value co-creation endeavors.

## III. MATH

### Step 1: Literature Review

The first step involves a comprehensive literature review, examining existing studies and government agency data, to focus on "value co-creation" and "service quality" concepts within the Chinese EC market. This provided insights into the current state, challenges, and development status of the delivery service industry, as well as delivery service types, characteristics, and content. Additionally, it explored collaborative systems and issues between online retailers and logistics providers.

### Step 2: Questionnaire Survey

#### 1) Questionnaire Development:

Building upon prior research, an original framework was constructed, and hypotheses (H1-H5) were formulated. The questionnaire items were designed using a five-point Likert scale. The specific items are as follows:

- a) Delivery Service Quality: The measurement of delivery service quality was based on the INDSERV scale and SERVQUAL model, assessing the dimensions of process quality, outcome quality, and corporate image.
- b) Participation Willingness of Online Retailers in Value Co-creation: Measurement was conducted using scales proposed by Yi and Gong (2013) and Ranjan and Read (2016). The following hypotheses were tested:
  - H1: Process quality of delivery service positively influences the participation willingness of online retailers in value co-creation.
  - H2: Outcome quality of delivery service positively influences the participation willingness of online retailers in value co-creation.
  - H3: Corporate image positively influences the participation willingness of online retailers in value

co-creation.

#### 2) Online Survey Implementation:

The survey was conducted online, targeting a provisional sample size of 200 participants (100 males, 100 females). An online platform, such as Question Star, was utilized as the survey administration tool.

#### Step 3: Data Analysis

The collected data was analyzed using SPSS.27 to perform statistical analyses on the variables and test the formulated hypotheses.

### IV. CONCLUSION

This study contributes to the research on participants' motivation in inter-firm value co-creation within the Chinese EC platform by investigating the willingness of online retailers to engage in value co-creation and the delivery service quality provided by logistics providers. The findings offer theoretical insights and practical implications for the business development of distribution companies operating in this context.

The study reveals several key findings:

- 1) Firstly, the willingness of online retailers to participate in value co-creation is positively influenced by the dimensions of delivery service quality, namely process quality, outcome quality, and corporate image. Online retailers need to prioritize providing high-quality delivery services and maintaining a positive corporate image to actively engage in value co-creation.
- 2) Secondly, the quality of delivery services provided by logistics providers directly affects the willingness of online retailers to participate in value co-creation. Improvements in process and outcome quality of delivery services serve as motivating factors for online retailers to strengthen their cooperative relationships and engage in more effective value co-creation activities.
- 3) Lastly, the study offers strategic implications for the business development of distribution companies in the Chinese EC platform. They can leverage the study's findings to enhance their competitive advantage and foster sustainable growth by improving collaborative systems with logistics providers and elevating the quality of delivery services.

By providing a comprehensive understanding of the factors influencing participants' motivation and offering strategic guidance for business operations, this study contributes to the advancement of knowledge in value co-creation within the Chinese EC market. Further research could delve into additional factors influencing value co-creation and explore the long-term impact of such collaborative efforts on business performance.

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