

# Research on Pricing Decision of Green Supply Chain Considering Service Level

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## **Abstract**

With the rapid development of the global economy, the development of industrialization has brought a serious impact on the environment, so people pay close attention to the issue of environmental protection. All sectors of society have introduced the concept of green development into the research, and the concept of green supply chain has emerged. Research into green supply chains can reduce costs, increase profits, and protect the environment. The green supply chain of single retail channel, online direct selling channel, online distribution channel and online consignment channel based on service level has been established. The Stackelberg game model is used to analyze the effect of service level of retailers on their pricing in four different channels, and the optimal price of four different retailers is obtained. Finally, Python software is used for example analysis and simulation to verify the correctness of the conclusion, so that the service level has a critical point. If the service level is too high, the profits of the enterprise will decline, so the members of the supply chain need to improve the service level to a certain extent. At the same time, consumers' preferences for different channels will affect the level of service provided by different channels, which will also affect the difference in price.

## **Keywords**

Green Supply Chain, Service, Stackelberg Game Model, Pricing Decisions