

Pricing Decision and Cancellation Strategy Selection of "Hotel+Online Platform"

Guosheng Xie, Li Zhang*

School of Business Administration, Guangdong University of Finance and Economics,
Guangzhou, 510320, China

*Corresponding Author

Abstract

Based on the consumer's cancellation behavior, a "Hotel + online platform" dual-channel supply chain model consisting of a single hotel and a single online platform is constructed, based on the theory of consumer utility, this paper constructs the demand for rooms in the supply chain, and analyzes the profit of the hotel side, room pricing and cancellation strategy under the competition-cooperation relationship by using the Stackelberg game model. The research shows that in the hotel's dual-channel supply chain, the selection of unsubscribing strategy for official direct sales channels and online agency platforms and the pricing of rooms are affected by the probability of unsubscribe, the cost of unsubscribing, consumers' preference level for online platforms and commission rates; when both direct sales channels and online platforms adopt non-unsubscribe strategies, the profits and pricing of both parties are independent of the cost of unsubscribing. When the hotel direct sales channel adopts the unsubscribed strategy, then the room price increases with the increase of the cost of unsubscribing; at the same time, when the online platform chooses the unsubscribed strategy, the preferential amount P_o is decreases with the increase of the cost of unsubscribing; on the contrary, it increases with the increase of the cost of unsubscribing. When consumers have a high preference level on the online platform, the NY strategy is the optimal strategy.

Keywords

"Hotel+Online Platform" Supply Chain; Cancellation Behavior; Cancellation Strategy.

1. Introduction

With the rapid recovery of the economy, people's demand for travel and play has skyrocketed. According to the National Bureau of Statistics, in terms of tourism consumption, there have 4.89 billion domestic trips in 2023, which increase of 93.3% over the previous year[1]. With the trip of short-term travelers become more frequent, therefore it is also a peak in cancellations or changes to travel plans, the surge in tourists has created new opportunities and difficulties for the hotel industry. In the face of people's cancellation of trips or changes in plans, many hotel companies and online agency platforms have come up with clever tricks, such as policies such as low prices cannot be cancelled, high prices can be canceled, etc..

For consumers who need to book rooms, in addition to the hotel's environment and geographical location, they pay more attention to the price of rooms and the cancellation services provides by the business, accordingly these two factors determine which channels will be travelers choose to book rooms. For hotels, whether to provide consumers with more favorable prices and cancellation services not only considers the type of consumers, but also considers the competition and cooperation between the direct marketing channels and the agents of online platforms. Therefore, how to make pricing decisions and cancellation strategies

which maximize the total revenue of the hotel in this relationship of competition and cooperation has become the focus and difficulty of most hotel enterprises.

This article proposes a dual channel model of "hotel+online platform" supply chain to address the above-mentioned key challenges, and explore the pricing and cancellation strategies of hotel direct sales channels and online platforms, provide scientific decision-making basis for hotels, and provide effective countermeasures for hotels to deal with consumer cancellation behavior, thereby improving the overall revenue of hotels and providing reference suggestions for the development of the hotel industry.

2. Literature Review

This paper belongs to the literature on the unbooking strategy selection of hotel supply chain, so our research is closely related to three types of literature: (1) dual-channel research on unsubscribe service, (1) hotel supply chain related research, (3) hotel unsubscribe strategy related research. Next, we will describe how our research relates to the literature in these areas.

2.1. Research on Unsubscribe Service in Dual Channel Supply Chain

In the study of unsubscribing in dual channel supply chains, Su^[2] and Li^[3] demonstrated that providing a refund guarantee with different amounts can affect the overall performance of the supply chain and important decisions of participating parties. On this basis, Cao^[4] further proved that coordination of dual channel supply chains can be achieved through two-stage pricing contracts. Zhang^[5] found that the profits of supply chain decision-makers are related to pricing models and the probability of return. Song Shi^[6] base on the perspective of whether consumers purchase shipping insurance found that manufacturers who establish refund guarantees generate more sales in distribution channels. Bintong Chen^[7] found that the net residual value of products determines the choice of channel return policies and affects the demand and profits of other channels. Meanwhile, some scholars have analyzed the impact of unsubscribing behavior on supply chain decision-makers from other perspectives, such as cross channel unsubscribing and omni channel unsubscribing. Prasenjit^[8] found that the valuation of products and the goods' probability of return have an impact on the optimal omni channel strategy of retailers by introducing policies for pre purchase experience and cross channel returns after purchase. Liu Ru^[9] explored the impact of providing experiential services based on Prasenjit, with the premise of providing a return guarantee, and found that this service can weaken consumers' willingness to unsubscribe. Zhao^[10] from the perspective of whether consumers exchange for goods when returning, found that when the trouble cost of returns is high, the omni channel return strategy can improve product pricing.

The impact of consumer cancellations and returns on the supply chain is mainly reflected in the probability of cancellations, cancellation costs, and residual value of goods. For supply chain participants, provide the cancellation and return guarantee services is an important strategy to gain a competitive advantage in the supply chain.

2.2. Research on Hotel Dual-channel Supply Chain

In the research on the "hotel+online platform" supply chain, Guo^[11] based on the agency operation model of "hotel+online platform", found that a quantity discount contracts based on revenue sharing can weaken competition between hotels and online platforms, thereby achieve supply chain balance. Fei Ye et al. ^[12] found that hotels and online platforms can have different hotel supply chain equilibrium conditions for different business models. Zeng Xiaoyan et al. ^[13] introduced a wholesale model after analyzing the agency model and found that information symmetry is crucial for hotel's supply chain coordination. Zhang^[14] found that high commission rates on online platforms and high operating costs in hotel direct sales channels may not necessarily bring high profits to online platforms. Regarding the research on hotel supply chain,

most scholars focus on whether hotels cooperate with online platforms, the cooperation models of both parties, and the types of contracts for cooperation, in order to explore the optimal decisions and pricing of supply chain entities.

2.3. Research on Hotel Unsubscribe Strategy

Faced these consumers with constantly changing plans and uncertain itineraries, the main body of the hotel supply chain must consider the factor of cancellation in their decision-making. Regarding the research on hotel supply chain cancellations, Liu^[15] proposed a hotel pricing decision model based on consumer cancellation behavior and booking but not showing up (no show), and analyzed the impact of hotel room capacity on room pricing and profits. Regarding the possibility of consumer cancellation behavior, Fan Yarui^[16] found from the perspective of hotel decision-making that the availability of rooms determines the timing of consumer booking and the pricing decision of the hotel, meanwhile the arrival rate and psychological perceived cost of consumers have a significant impact on hotel cancellation strategies. Lu^[17] found that in the game of cancellation strategy, the sensitivity of customers to room service level affects the channel's choice of cancellation policy.

Although the above scholars provide the influence of unsubscription strategy on the decision maker from the perspective of single channel and dual channel supply chain analysis, they are based on the perspective of perfect competition. With the rapid development and iteration of Internet technology, the relationship between the hotel side and the online platform has gradually transited from a competitive relationship to a coexistence of competition and cooperation. Therefore, it is particularly important to analyze whether to provide cancellation services and room pricing in the context of the "hotel+online platform" supply chain with competitive relationships.

3. The Model

This paper considers a dual-channel supply chain consisting of a single hotel(h) and a single online platform(o), in which the hotel, as the main body of room supply, occupies a dominant position in the supply chain, and the online platform acts as a follower. Consumers can order rooms through the hotel's direct sales channels or online platforms. In this dual-channel supply chain, the hotel's direct sales channel sells the room at the price P_h , provides the room for the online platform and pays the corresponding commission, and the online platform provides the preferential amount P_o (such as coupons or platform subsidies, etc.) for consumers, that is, the price of the same room on the online platform is $P_h - P_o$. The cancellation probability of the consumer is $(1 - \theta)$. When the channel party adopts the cancellation strategy, the cancellation of one room will cause the unit cost C . The room demand of the two channels is related to the utility of the rooms they provide to consumers, and only the utility is greater than zero, consumers will choose this channel to book rooms. When consumers need to cancel rooms due to their own reasons, they can only cancel rooms through the original ordering channels. Participants in the supply chain can formulate different unbooking strategies according to their own situations, Y represents the strategy of allowing consumers to cancel, N represents the strategy of not allowing consumers to cancel. There are YY , YN , NY and NN four combinations of unsubscription strategies.

3.1. Parameter Symbols and Related Assumptions

Table 1. Parameter Symbols

Symbol	Connotation
U	The utility of a consumer's booking of a room
P_h	The price of the room through the hotel's direct sales channels
P_o	Preferential amount on the online platform
π	Profit on the channel side
D	The demands of room
V	The consumer's valuation of the room
α	The degree of consumer preference for online platforms
s	Commission rates on online platforms
C	The cost of loss for channel caused consumer's unsubscription behavior
$1 - \theta$	The probability that a consumer will unsubscribe from a room

Hypothesis 1: Consumers value the rooms offered by the hotel's direct sales channel at V , $0 < V < 1$.

Hypothesis 2: The degree of consumer preference for online platforms is α , then consumers' valuations of rooms on online platforms $\alpha * V$, and $0.5 < \alpha < 1$ ^[18-19].

Hypothesis 3: Since the consumer has unsubscribed behavior, assuming that the probability of not unsubscribing is θ , the probability of unsubscribing is $(1 - \theta)$.

Hypothesis 4: The price of the room on the direct sales channel of the hotel is P_h , and the price of the room on the online platform is $P_h - P_o$.

Hypothesis 5: It is assumed that the expected utility of rooms on hotel direct sales channels and online platforms are as follows: $U_h = \theta(V - P_h) - i(1 - \theta)P_h$, $U_o = \theta(\alpha V - P_h + P_o) - i(1 - \theta)(P_h - P_o)$. When the channel selects the non-unsubscribe policy, $i = 1$; when the channel selects an unsubscribe policy, $i = 0$.

Hypothesis 6: The online platform only makes a profit by charging commissions, and the commission rate is s , and $0 < s < 0.3$ ^[20].

Hypothesis 7: According to the consumer expectation utility theory, there are two balancing points under each unsubscribe policy: V' and V'' that makes the utility of consumers to the two channels equal and greater than 0.

Hypothesis 8: Assuming that the total room demand in the market is 1, the room demand for the direct sales channel of the hotel is D_h , and the room demand for the online platform is D_o , and $D_o = V'' - V'$, $D_h = 1 - V''$.

Based on the above assumptions, the profits of hotel direct sales channels and online platforms are π_h and π_o respectively, and their profit functions are as follows:

$$\begin{cases} \pi_h = (P_h - j * C) * D_h + (1 - s)(P_h - P_o - j * C) * D_o \\ \pi_o = s * (P_h - P_o - j * C) * D_o \end{cases}$$

When the channel party adopts the policy of allowing consumers to unsubscribe, $j = 1$; and when the channel party adopts the policy of not allowing consumers to unsubscribe, $j = 0$.

Based on the above assumptions, the consumer utility theory can be used to calculate the expected utility of consumers and the room demand of each channel under different combinations of cancellation strategies of hotel direct sales channels and online platforms, as shown in Table 2:

Table 2. Consumer utility and channel demand

	YY	YN	NY	NN
U_h	$\theta(V - P_h)$	$\theta(V - P_h)$	$\theta V - P_h$	$\theta V - P_h$
U_o	$\theta(\alpha V - P_h + P_o)$	$\theta\alpha V - P_h + P_o$	$\theta(\alpha V - P_h + P_o)$	$\theta\alpha V - P_h + P_o$
D_h	$1 - \frac{P_d}{1 - \alpha}$	$1 - \frac{P_d - (1 - \theta)P_h}{\theta(1 - \alpha)}$	$1 - \frac{(1 - \theta)P_h + \theta P_o}{\theta(1 - \alpha)}$	$1 - \frac{P_o}{\theta(1 - \alpha)}$
D_o	$\frac{P_o - (1 - \alpha)P_h}{\alpha(1 - \alpha)}$	$\frac{P_o - (1 - \theta)P_h}{\theta(1 - \alpha)} - \frac{P_h - P_o}{\theta\alpha}$	$\frac{(1 - \theta)P_h + \theta P_o}{\theta(1 - \alpha)} - \frac{P_h - P_o}{\alpha}$	$\frac{P_o - (1 - \alpha)P_h}{\theta\alpha(1 - \alpha)}$

3.2. The Solution of the Model

According to the Stackelberg game model that hotel as the leader, the reverse solving method is used to obtain the room pricing of the hotel direct sales channel and the discounted pricing of the online platform, as shown in Table 3:

Table 3. Hotel room pricing and online platform discount pricing

Strategy	P_h	P_o
YY	$\frac{(2 + s - \alpha)C + 2(1 - \alpha)}{4 - (3 - s)\alpha}$	$\frac{(1 - \alpha)(4 + 2sC - 2\alpha - \alpha C)}{8 - 2(3 - s)\alpha}$
YN	$\frac{(2 - \alpha)C + 2(1 - \alpha)}{4 - 2\alpha - (1 - s)\theta\alpha}$	$\frac{(2 - \alpha)C + 2(1 - \alpha)}{4 - 2\alpha - (1 - s)\theta\alpha} * \frac{(2 - \theta\alpha)}{2}$
NY	$\frac{\theta[2\theta(1 - \alpha) + (s + \theta - 1)C]}{2\theta(2 - \alpha) - \alpha(1 - s)}$	$\frac{2(1 - \alpha)(2\theta - \alpha)\theta + C[\alpha(2 - 2s + \theta) - 2\theta(3 - s - \theta)]}{8\theta - 2\alpha(2\theta + 1 - s)}$
NN	$\frac{2\theta(1 - \alpha)}{4 - (3 - s)\alpha}$	$\frac{\theta(1 - \alpha)(2 - \alpha)}{4 - (3 - s)\alpha}$

Proposition 1: In YY strategy, the room sales price of hotel direct sales channels will increase with the increase of cancellation loss costs. The correlation between the discount amount of online platforms and the cost of unsubscribe losses is related to the size of the commission rate s and the degree of consumer preference α for online platforms.

Proof: $\frac{\partial P_h^{YY}}{\partial C} = \frac{(2+s-\alpha)}{4-(3-s)\alpha} > 0$, the room pricing of hotel direct sales channels increases monotonically with respect to C ; $\frac{\partial P_o^{YY}}{\partial C} = \frac{(2s-\alpha)}{8-2(3-s)\alpha}$, When $0.3 > s > \frac{\alpha}{2}$ is present, the discounted price on the online platform increases monotonically with respect to C , and when $s < \frac{\alpha}{2}$ is present, it decreases monotonically with respect to C .

Proposition 2: In YN strategy, the pricing of hotel direct sales channels P_h is increases with the increase of cancellation cost C and non cancellation probability θ ; the discounted price on online platforms P_o is increases with the increase of unsubscribe cost C and decreases with the increase of non unsubscribe probability θ (The proof process is similar to *Proposition 1*).

Proposition 3: In NN strategy, the room pricing of hotel direct sales channels and discounted prices on online platforms are not related to the cost of cancellation losses; but they are all positively correlated with the probability of not unsubscribing θ (the proof process is similar to *Proposition 1*).

Based on the specific values of P_h and P_o , the room demand for each channel under four different unsubscribe combinations can be calculated, as shown in Table 4.

Table 4. The demand of room on each channels

Strategy	D_h	D_o
YY	$\frac{4(1-\alpha) - 2sC + (2s+C)\alpha}{8 - 2(3-s)\alpha}$	$\frac{(2+C)\alpha - 4C}{2\alpha[4 - (3-s)\alpha]}$
YN	$1 - \frac{(2-\alpha)[(2-\alpha)C + 2(1-\alpha)]}{2(1-\alpha)[4 - 2\alpha - (1-s)\theta\alpha]}$	$\frac{(2-\alpha)C + 2(1-\alpha)}{2(1-\alpha)[4 - 2\alpha - (1-s)\theta\alpha]}$
NY	$\frac{2(\alpha-C)(1-s)(1-\alpha) - \theta(2-\alpha)(2+C-2\alpha)}{2(1-\alpha)[\alpha(1+2\theta-s) - 4\theta]}$	$\frac{\theta[C(4-3\alpha) - 2\alpha(1-\alpha)]}{2\alpha(1-\alpha)[\alpha(1+2\theta-s) - 4\theta]}$
NN	$\frac{2(1-\alpha) + s\alpha}{4 - (3-s)\alpha}$	$\frac{1}{4 - (3-s)\alpha}$

Proposition 4: The cost of unsubscribing C needs to be kept within the range $(\frac{2\alpha(1-\alpha)}{4-3\alpha}, \frac{2\alpha}{4-\alpha})$. In the dual channel supply chain of "hotel+online platform", if hotels want to expand their distribution channels, they must ensure that both distribution channels and direct sales channels have orders. Therefore, it is necessary to ensure that the online platform room demand under all cancellation strategy combinations is greater than 0.

Based on the specific values of P_h , P_o , D_h , and D_o , the profits of hotels and online platforms in different combinations of cancellation strategies can be calculated. The results are shown in Table 5.

Table 5. The profits to each parties

Strategy	π_h	π_o
YY	$\frac{(1-\alpha)[4\alpha(1+sC) - 8C + (4-4s+\alpha)C^2]}{4\alpha[4 - (3-s)\alpha]}$	$\frac{s(1-\alpha)[(2+C)\alpha - 4C]^2}{4\alpha[4 - (3-s)\alpha]^2}$
YN	$\frac{[(2-\alpha)C + 2(1-\alpha)]^2 + 4C(1-s)(1-\alpha)\theta\alpha}{4(1-\alpha)[4 - 2\alpha - (1-s)\theta\alpha]}$	$\frac{s\theta\alpha[2(1-\alpha) + C(2-\alpha)]^2}{4(1-\alpha)[4 - 2\alpha - (1-s)\theta\alpha]^2}$
NY	$\frac{\theta[4C(1-s)(1-\alpha)(\alpha-C) - \theta\alpha(2+C-2\alpha)^2]}{4\alpha(1-\alpha)[\alpha(1+2\theta-s) - 4\theta]}$	$\frac{s\theta^2[C(4-3\alpha) - 2\alpha(1-\alpha)]^2}{4\alpha(1-\alpha)[\alpha(1+2\theta-s) - 4\theta]^2}$
NN	$\frac{\theta(1-\alpha)}{4 - (3-s)\alpha}$	$\frac{s\theta\alpha(1-\alpha)}{[4 - (3-s)\alpha]^2}$

4. Analysis of Unsubscribe Strategies on C

Considering the complexity of the model, based on the combination of the four unsubscribe strategies mentioned above, numerical analysis is conducted to further explore the properties of the hotel's profit function. The parameter values set in this article are within a reasonable range to ensure the practical significance of the analysis. Through MATLAB numerical simulation, this study explores the impact of cancellation loss costs on the selection of cancellation strategies for hotel direct sales channels and the optimal pricing of both channels. Analyzing the profit of hotel direct sales channels under different cancellation strategies, with the cost of unsubscribing C as the influencing factor, and exploring the selection of hotel cancellation strategies. Select two sets of data: consumers' preference for online platform channels $\alpha = 0.8$, online platform commission rate $s = 0.1$, consumers' probability of not unsubscribing $\theta = 0.5(0.9)$, and the cost of unsubscribing $C \in (0.2, 0.5)$. The optimal unsubscribing strategy for hotel direct sales channels is shown in Figure 1.

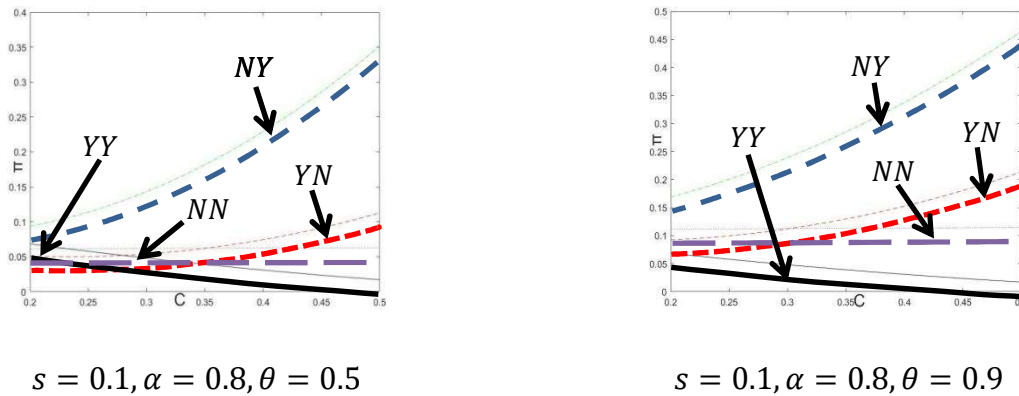


Figure 1. The choice of strategy

As shown in Figure 1, when consumers have a high preference for online platforms and the commission rate is 10%, regardless of whether the probability of consumers canceling is high or low, the hotel direct sales channel has the highest profit in the *NY* strategy.

5. Conclusion

In order to cope with consumer unsubscribe behavior, explore distribution channels to obtain higher profits, and coordinate the relationship between competition and cooperation in the dual channel supply chain, hotel decision-makers must formulate corresponding policies. This study constructs a supply chain with a dual channel competitive relationship between a single hotel and a single online platform, and analyzes the impact of consumer cancellation behavior on the room pricing and cancellation strategy choices of the dominant hotel in the supply chain. The results show that: (1) When the hotel's direct sales channel adopts a unsubscribe strategy, the room price of the direct sales channel is increases with the increase of the cost of unsubscribe losses; meanwhile, when online platforms also choose the unsubscribe strategy, the discount amount P_o of the channel will decreases with the increase of unsubscribing loss costs, while on the contrary, it increases with the increase of unsubscribing loss costs. (2) In *NN* strategy, the pricing decisions and profits of the supply chain participants are not related to the cost of cancellation losses, and the lower the probability of consumers canceling, the higher the profit of the decision-making subject. (3) When consumers have a high preference level for online platforms, *NY* is the best unsubscribe strategy. Although the hotel direct sales channel adopts a non-cancelable strategy, which leads to a reduction in room orders, hotels can also obtain higher profits in the process of cooperating with online platforms by virtue of the popularity of online platforms.

Acknowledgments

The study is supported by National Natural Science Foundation of China (72001047), Natural Science Foundation of Guangdong Province (2020A1515010697).

References

- [1] National Bureau of Statistics: Total travel spending of domestic tourists increased by 140.3% in 2023(ChinaTravelNews). <https://m.traveldaily.cn/article/180262>.
- [2] Xuanming Su. Consumer Returns Policies and Supply Chain Performance[J]. Manufacturing & Service Operations Management, 2009, 11(4): 595-612.

- [3] LI Yongjian,XU Lei,YANG Xiaoli. Product pre-sale, return strategy and consumer defect-free return behavior[J]. Nankai Management Review,2012,15(05):105-113.
- [4] Cao Xiyu. Dual-channel supply chain model and coordination with correlation between demand and return price[J].Journal of Central China Normal University(Natural Science Edition),2015,49(03): 470-476.
- [5] Xuelong Zhang,Doudou Wu,Junjin Wang, Jiaguo Liu,Yichun Zhang. Research on pricing decision making of manufacturer's dual-channel supply chain considering return risk[J].China Management Science,2018,26(03):59-70.
- [6] Shi Song,Liu Guilin,Shi Ping. Choice and Influence of Return Policy and Remanufacture in a Dual-Channel Supply Chain[J].Discrete Dynamics in Nature and Society,2022.
- [7] Bintong Chen,Jing Chen. When to introduce an online channel, and offer money back guarantees and personalized pricing?[[J]]. European Journal of Operational Research,2017,257(2):614-624.
- [8] Mandal Prasenjit,Basu Preetam,Saha Kushal. Forays into omnichannel: An online retailer's strategies for managing product returns[J]. European Journal of Operational Research,2020,292(2): 633-651.
- [9] Ru Liu,Jian Peng,Yongsheng Cheng,Zhenghua Deng,Xing Qiao. Research on the experience channel strategy of online retailers based on money-back guarantee[J]. China Management Science,2024,32 (02):178-187.
- [10] Zhao Ju,SUN Weiwei,HE Xin,HE Yong. Omni-channel retailer return strategy considering consumer redemption behavior[J]. Journal of Hefei University of Technology(Natural Science Edition),2024, 47(01):118-125.
- [11] Xiaolong Guo,Xiabing Zheng,Liuyi Ling,Chenchen Yang. Online coopetition between hotels and online travel agencies: From the perspective of cash back after stay[J]. Tourism Management Perspectives,2014,12104-112.
- [12] Fei Ye,Li Zhang,Yina Li.Strategic Choice of Sales Channel and Business Model for the Hotel Supply Chain[J].Journal of Retailing,2018,94(1):33-44.
- [13] Fan Yarui. Research on hotel cancellation strategy based on consumer behavior[D]. Central China Normal University,2021.
- [14] Zhang Qiaoke,Chen Hongzhuan,Wan Liangqi. Optimization analysis of distribution channel strategy of hotel direct sales and online travel agency[J]. China Management Science,2023,31(02):235-244.
- [15] Liu Shuqin,Wang Shouyang. Hotel Room Pricing Decisions Considering Guest Cancellations and No-show[J]. Management Review,2010,22(08):52-56.
- [16] Zeng Xiaoyan, Ji Kai, Zhou Yongwu, Zhong Yuanguang. Research on the cooperation and coordination between hotels and OTAs under the 'wholesale + commission' model[J]. Journal of Management Engineering,2018,32(03):214-225.
- [17] Lu Xinyuan,Fan Yarui,Qin Zejia,Fang Wenqi. Research on the evolutionary game of hotel cancellation policy selection considering reservation cancellation rate[J]. Operations Research and Management,2022,31(05):37-42+100.
- [18] Xiong Hao,Chen Jinyi,Yan Huili,Guo Haoying. Pricing and Coordination of Dual-channel Supply Chain of Live Streaming Considering the Characteristics of Anchors[J].Journal of Management Engineering, 2023,37(04):188-195.
- [19] Liang Xi,Liang Lunhai. Pricing Decision of Mixed Channel Supply Chain under Dual-channel Sales of Online Retailers[J]. Chinese Journal of Systems Engineering,2021,36(01):30-44.
- [20] Wang Yao. Quantitative analysis of hotel OTA cooperation: the benefits outweigh the disadvantages, and the profitability of small hotels is more significant(China Travel News). <https://www.traveldaily.cn/article/146267>.