

# Criteria for Developing Cancellation Policies

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## Introduction

The design of return and cancellation policies directly affects customer behavior and expectations, and also has a significant impact on corporate revenue. Economic research has shown that such policies can have complex effects on revenue. In this paper, we organize the main issues in managerial decision-making regarding the multifaceted effects of cancellation policies on revenue, based on economic insights. Items 1 to 3 describe the positive effects of low cancellation fees (i.e., high refund amounts) on seller revenue, while items 4 and 5 describe negative effects.

## 1. Cancellation Fees as Price Commitment

Generally, when consumers anticipate future price reductions, they delay purchases (“purchase withholding”), forcing sellers into a “price collapse” situation where they have no choice but to lower prices. This phenomenon, where expectations come true, is known as the “Coase conjecture.” To prevent this, sellers must give consumers confidence that they will not lower prices in the future.

One method of doing this is to set low cancellation fees (return/cancellation charges).

If cancellation fees are low or zero, and the seller lowers prices in the future, consumers who have already purchased will rationally cancel, receive a refund, and repurchase at the lower price. As a result, price reductions directly cause losses for the seller. If the cancellation fee is zero, lowering the price effectively amounts to refunding the difference to previous customers.

This structure gives sellers a strong incentive to avoid lowering prices, thereby establishing a commitment “not to lower prices in the future.” By conveying this with credibility to consumers, purchase withholding can be prevented and price collapse avoided.

Zhang, Lim, Cui, and Wang (2021) showed that lowering cancellation fees has this kind of positive effect for sellers. If consumers are delaying purchases in anticipation of future discounts, deliberately lowering cancellation fees can be effective for maintaining prices.

## 2. Cancellation Fees as Insurance and Quality Signaling

For many products, consumers can only confirm their quality after purchase. In such cases, setting low cancellation fees (return/cancellation charges) serves as an effective signal of high quality.

If a seller offers low-quality products, low cancellation fees will lead to frequent returns, and the associated processing costs will weigh heavily on the seller. Therefore, it is irrational for a low-quality seller to set low cancellation fees.

On the other hand, for high-quality products, the likelihood of returns is low, so processing costs are limited, and setting low cancellation fees keeps losses small.

Therefore, in situations where return processing involves costs for the seller, deliberately setting low cancellation fees can credibly convey to consumers that the seller does not sell low-quality products—in other words, that the products are of high quality. Moorthy and Srinivasan (1995) showed that low cancellation fees have a quality signaling function.

At the same time, low cancellation fees function as insurance for consumers who have doubts about the quality or value to them personally, lowering barriers to purchase and expanding the customer base.

For products with information asymmetry—where quality or value cannot be known until after purchase—low cancellation fees may be effective.

## 3. Cancellation Fees as a Means of Price Discrimination

Consider airline ticket sales, assuming there are two types of customers. One type is leisure travelers, who often plan ahead and have low demand uncertainty. The other is business travelers, whose plans are often decided at the last minute and have high demand uncertainty. When business travelers need airline tickets, their willingness to pay is higher than that of leisure travelers because their trips are urgent and work-related.

In such cases, structuring cancellation fees can serve as a means of price discrimination.

### Method 1

Offer two sales options: one is a high-priced refundable (cancellable) ticket, and the other is a low-priced non-refundable ticket. Leisure travelers tend to choose the non-refundable option to save money, while business travelers choose the more expensive, flexible ticket in case plans change. This allows segmentation of customer types and can increase revenue.

### Method 2

By taking advantage of the fact that business travelers finalize their schedules later, another effective sales method is to differentiate prices based on when tickets can still be cancelled. High-priced tickets can be cancelled up until just before departure, while low-priced tickets have cancellation deadlines set well before the flight. Leisure travelers tend to choose the latter, while business travelers choose the former, enabling effective price discrimination. Akan, Ata, and Dana (2015) showed that this strategy increases profits.

#### **4. Cancellation Fees and Seat Blocking**

In services such as express buses, problems arise when low last-minute cancellation fees are exploited. That is, if the policy refunds most of the amount even when a customer cancels just before departure, the following behavior may occur.

To keep the adjacent seat empty and sit comfortably, a customer books two adjacent seats and cancels one just before departure. The customer effectively secures the space of two seats for the price of one. The bus company loses revenue due to large refunds and empty seats. Since this problem arises from low last-minute cancellation fees, deterrence requires raising last-minute cancellation fees (i.e., reducing refund amounts).

This is one of the negative effects of lowering cancellation fees.

When setting cancellation fees or refund amounts, it is necessary to determine whether consumers might be purchasing with the intention of cancelling or returning from the outset. If such a possibility exists, low cancellation fees harm the company's revenue.

#### **5. Cancellation Fees and Opportunistic Customer Behavior**

If cancellation fees are set low, or refund amounts are set high for returns, some customers may purchase with the intention of returning from the start. For example, in the United States, it has been noted that some people buy large televisions during Super Bowl week and return them after the game. In such cases, reselling these items usually requires lowering the price, causing losses for the seller.

Smith and Brown (2001) cite partial refunds as an effective way to reduce such opportunistic behavior. By not offering a full refund, customers can be discouraged from purchasing goods solely for short-term use.

This is also one of the negative effects of lowering cancellation fees or increasing refund amounts.

When setting refund amounts, it is important to determine whether consumers might be purchasing for short-term use with the intention of returning from the outset. If such a possibility exists, low cancellation fees can adversely affect the company's revenue.

## 6. Summary

We have organized the multifaceted effects of return and cancellation policies on customer behavior and corporate revenue, and presented issues for managerial decision-making. While setting low cancellation fees can lead to negative effects such as last-minute seat blocking and opportunistic returns, it can also produce positive effects such as commitment to avoid price reductions and signaling high quality. In cases such as airline ticket sales, varying cancellation conditions enables price discrimination, allowing optimal revenue capture by customer segment. Appropriate policy design requires comprehensively considering both positive and negative effects and balancing customer satisfaction with revenue maximization.

## References

- Akan, M., Ata, B., & Dana, J. D., Jr. (2015). Revenue management by sequential screening. *Journal of Economic Theory*, 159(PB), 728–774. <https://doi.org/10.1016/j.jet.2015.07.004>
- Escobari, D., & Jindapon, P. (2014). Price discrimination through refund contracts in airlines. *International Journal of Industrial Organization*, 34(C), 1–8. <https://doi.org/10.1016/j.ijindorg.2014.01.002>
- Moorthy, S., & Srinivasan, K. (1995). Signaling quality with a money-back guarantee: The role of transaction costs. *Marketing Science*, 14(4), 442–466. <https://doi.org/10.1287/mksc.14.4.442>
- Smith, J., & Brown, L. (2001). Managing dissatisfaction: How to decrease customer opportunism by partial refunds. *Journal of Service Research*, 1(2), 140–155. <https://doi.org/10.1177/109467050121002>
- Zhang, Z., Lim, W., Cui, H., & Wang, Z. (2021). Partial refunds as a strategic price commitment device in advance selling in a service industry. *European Journal of Operational Research*, 293(1), 317–330. <https://doi.org/10.1016/j.ejor.2020.12.030>