

MSBR 70200 Case: Shared Social Responsibility

Ruthie Montella, Faith Sullivan, Johannes Machinya, Lakshmi Krishnamurthy, and Abby Oliver

This case explores a field experiment at an amusement park that tested four different pricing strategies for selling ride photos. By examining how incorporating charity donations affects customer purchasing behavior, overall revenue, and profitability, our goal is to identify and recommend the most effective pricing approach.

The experiment considered four distinct pricing models: a Flat Rate (FR) of \$12.95 per photo, a Flat Rate with Charity (FR Charity) where 50% of the revenue was donated to charity, a Name Your Own Price (NYOP) option allowing customers to choose their price, and an NYOP with Charity (NYOP Charity) where customers chose their price with the understanding that 50% of their payment would be donated to charity. The inclusion of charity in some models sought to assess its influence on customer purchase behavior and willingness to pay.

When analyzing the impact of charity on purchase behavior, results showed a contrast between flat-rate and NYOP conditions. People were more likely to purchase photographs in the NYOP condition than the FR condition. Within the Flat Rate category, there was no significant difference in the proportion of riders purchasing photos in the FR and FR Charity conditions. This suggests that adding a charity component to the flat-rate model did not influence customer behavior, people purchased photos at a similar rate regardless of the charity aspect. However, a different outcome was observed in the NYOP vs. NYOP with Charity comparison. When allowed to choose their own price, customers were less likely to make a purchase if they knew that part of their payment was going to charity. The freedom to choose a price made the photographs affordable for riders, motivating them to purchase the photographs. Although, when the charity aspect was involved, they may have felt obligated to pay more and hence, chose not to purchase photographs altogether.

The direct profitability of each strategy was assessed by considering the average daily profit, excluding merchandise revenues. Assuming the unit cost of printing a photo was \$1.20, NYOP Charity generated the highest revenue for the park, because it motivated more customers to purchase photographs and pay more to contribute to the charity. Even if we look at the net profit after contributing to charity, NYOP Charity is more profitable than the other options.

When societal profits are considered (which takes into account both the park's revenue and charitable contributions), the NYOP with Charity model still emerged as the top performer because the park donated 3x the amount to charity in the case of NYOP charity than in the FR Charity case- meaning it is also the most socially beneficial to the community as a whole. Therefore, the NYOP Charity is the best option for the amusement park both in terms of profitability and societal profits.

A significant finding was that while the NYOP Charity condition produced a higher average unit price, five times higher than the standard NYOP condition, the purchase rate was only 4%, compared to 8% for NYOP without charity. This suggests that despite the lower purchase rate in NYOP Charity affecting revenue, the higher willingness to pay for charitable causes allowed NYOP with the charity to outperform in terms of revenue. The analysis supports adopting the NYOP strategy with a charitable component to align park profitability with a meaningful contribution to the community, achieving shared social responsibility.

The final consideration in the revenue discussion was analyzing whether merchandise revenues play any major role when formulating our final conclusion. Surprisingly we found that once again the NOYP charity option generates the greatest average merchandise revenue, so this consideration does not raise concern.

While we are confident that NYOP Charity is the best option at hand, an alternative approach would be to develop a more effective pricing strategy for the park that still allows them to make significant contributions to charity. For instance, the company could consider donating a certain percentage from profits rather than from revenue. This would ensure the company doesn't run into losses because of their charity commitments. Additional analyses could further optimize this strategy. For instance, providing transparent information about the impact of the charity may increase customers' willingness to pay under the NYOP with Charity condition.

Although the Flat Rate model maximizes direct profit for the amusement park, NYOP with Charity offers a balanced approach that sustains park profitability while enhancing societal contributions through charitable donations. Furthermore, considerations of other factors do not detract from this suggestion but only emphasize it further as the most well-rounded pricing strategy of those provided.