PRICING CASE STUDY: ANALYZING THE IMPACT OF DYNAMIC PRICING VS. TRADITIONAL STEP-UP PROGRAMS

October 2018

Authors: Matthew Lulay, Senior Director and Hamsika Ramani, Senior Consultant

With the media industry facing lean times, many organizations have implemented some form of pricing strategy to help mitigate rising costs and declining circulation volumes. Some companies execute a "Step Up" strategy, where customers are tiered to a predefined higher rate. At Mather Economics, we have seen success with dynamic Market Based Pricing (MBP), which incorporates individual subscriber characteristics, such as tenure, autopay status and demographics to determine optimal pricing strategies. Using advanced statistical retention modeling, our algorithm assigns customers a tailored price based on individual willingness to pay.

> Mather has seen success with dynamic Market Based Pricing (MBP), which incorporates individual subscriber characteristics, such as tenure, autopay status and demographics to determine optimal pricing strategies.

With dynamic MBP, organizations have managed to optimize subscriber revenue while minimizing churn more effectively than traditional step up pricing. Recently, in a major metropolitan market, both a step up pricing strategy and a dynamic strategy were applied during the course of the year. When the dynamic strategy was implemented, customers exhibited a lower responsiveness to price than during the step up strategy. The following case study details the methodology and results of both approaches.

APPROACHES

COST-PLUS PRICING	Set markup over cost applied equally to all units
COMPETITIVE PRICING	Match competitors' prices
CUSTOMER- DRIVEN PRICING	Focus on what customer indicate they are willing to pay
MARKET-BASED PRICING	Focus on the values customers place on the product (which can change over time)

Market-Based Pricing in a Metro Market

The goal of MBP is to maximize home delivery revenue while minimizing pricing-related volume loss. To achieve this, Mather Economics leverages historical transaction information for each specific market to create a tailored retention model. Combined with subscriber characteristics and demographic information, our model produces an optimal rate for each subscriber in the market. In economic terms, we are trying to tailor pricing to a market's demand curve. In addition to recommending prices, Mather Economics conducts A/B testing to evaluate the true impact of our MBP program. Using this methodology, we have managed to help our clients increase subscriber revenue significantly over the course of the program while minimizing churn.

This methodology was implemented in a large media market during the first half of 2017. Based on the retention model, the market increased their customers' weekly prices by an average of 25%, with each subscriber's price tailored

mather:

mather: insights

dynamically according to their individual characteristics. A percentage of customers exhibiting the same characteristics as the customers who are targeted for a price increase are held out from pricing as controls to allow us to track their behavior. When comparing stop percentages across targets and controls, after 52 weeks of pricing in this market, the incremental stop percentage was 1.3%. For customers paying less than a \$1.50 weekly rate, the average increase was tailored, by client request, to be around 90%. For these customers, the incremental stop percentage was approximately 3.8%. On the other end of the spectrum, subscribers who were paying more than \$10 were given an average of a 20% increase and had an incremental stop rate of less than 1%. Thus, when given dynamic increases, customers paying higher rates exhibited a lower responsiveness to price, allowing the publisher to achieve a higher yield on the pricing initiative.

Application of the Step-Up Strategy

During the second half of the year, this market decided to implement a more traditional step up pricing strategy. Customers were segmented into \$0.50 increments by weekly rate. After the segments were defined, the increases were applied to reach the desired target weekly price. For subscribers paying less than \$1.50, the average increase was approximately 250%, with the increase percentage decreasing as the price of the segments increased. The highest paying customers who were paying more than \$10 a week were given an 11% increase. To approximate the effect of the price increase, similar to the MBP process, accounts in each segment were held at their original rate as controls. In total, during the second half of the year, 290,000 subscribers were given an average increase of 50% across all segments. After accounts were given a chance to accept or reject the increase, performance metrics were compared across the segments, with a focus on stop percentages.

On average, the incremental stop percentage in the market was 2.4%. For subscribers paying less than \$2.50 per week, this rate was significantly higher at 7.5%. This is also true when looking at the other end of the spectrum. For customers paying greater than \$10 a week, the incremental stop percentage was double the market average. This signals that for this type of flat price increase, subscribers across the rate spectrum responded less favorably compared to dynamic increases.

When comparing the results of both pricing programs, we can see that there is a stark difference in the price elasticities of subscribers between a step-up price increase and a dynamic increase. The effect is most prominent on high-end

There is a stark difference in the price elasticities of subscribers between a step-up price increase and a dynamic increase.



TYPE OF PROGRAM	PRICE ELASTICITY
Step-Up	0.14
MBP	0.05

subscribers. During the MBP program, customers paying \$10 and up were given a 20% increase, resulting in an incremental stop percentage of only 1%. However, during the step up program, while this same segment of customers was given an increase of only 11%, the incremental stop rate was quadruple that of the MBP program at 4.2%. Blended across all rate ranges, the MBP program was three times more effective at reducing volume loss per unit of increase compared to the step-up program.

So what insights can be gained from this case?

While there are pros and cons to all pricing strategies, if the goal of a pricing program is to maximize revenue while minimizing volume loss, market based pricing has proven to be a more effective solution when compared to more traditional step-up approaches. With dynamic increases, a customer is priced according to their demand for the product; therefore, the churn risk is minimized. By taking a more dynamic approach, markets can significantly improve the yield on their pricing programs.

For more information about our pricing services, visit www.mathereconomics.com This signals that for this type of flat price increase, subscribers across the rate spectrum responded less favorably compared to dynamic increases.

Matthew Lulay is Senior Director of Consulting and oversees the operations of the firm, including the ongoing pricing management of over 500 newspapers. Matthew has extensive experience in microeconomics and its application to the media industry, where his analysis has helped drive revenue and mitigate volume loss in several dozen markets across the United States and abroad. Matthew holds a Bachelor of Arts in Economics, magna cum laude, from the University of Minnesota Duluth and a Master of Science in Economics from Florida Atlantic University.

Hamsika Ramani is a Senior Consultant at Mather Econmics and has extensive experience in economics and its application in various industries, where her analysis has helped drive revenue and mitigate volume loss in several markets across the United States. Recently, her work has been centered on restructuring pricing models for information service companies, based in Europe. Hamsika holds a Bachelor of Science in Economics and International Affairs, cum laude, as well as Masters of Science in Economics from the Georgia Institute of Technology.

mather: