Practice Article

From yield management to price optimization: Lessons learned

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ABSTRACT As the disciplines of yield management, revenue management and price optimization gain greater acceptance across industries, mistakes and misunderstandings continue to occur within small and large firms. Frequently, the mistakes are quite basic. This brief article contains seven strategic considerations, 'lessons learned' if you will, that are important to keep in mind when designing, developing and implementing a price optimization effort. Although not always easy to apply, they have proven critical for maximizing the financial success of price optimization programs in a wide range of industries.

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INTRODUCTION

Having built my career (or at least the past 25 years of whatever it is that I do) around yield management, revenue management and price optimization, it's quite exciting for me to see that these disciplines have gained greater acceptance across industries. Although skepticism among industry executives continues to exist, there is less and less of it as more and more companies successfully increase their revenues and profits by taking systematic and more scientific approaches in these areas.

Yet, despite all we have learned, mistakes and misunderstandings continue to occur within small and large firms. And frequently, the mistakes are quite basic.

This brief article contains seven 'lessons learned' and recommendations for critical things to keep in mind when designing, developing and implementing a price optimization effort. Even as the focus of price optimization has evolved from inventory control (the primary theme of most yield and revenue management efforts through the late 1990s) to estimating optimal prices, many of the keys to success have not changed. As you might expect, many of the concepts presented below are interrelated.

In some ways, this article can be considered the sequel to an article I wrote 20 years ago (Lieberman, 1991). I hope it was worth waiting for!

OFFER CUSTOMERS OPTIONS

If I had to choose the single most important lesson learned, this would be it. Offer customers options. Let them decide when, how and under what terms to purchase your product. Give them alternative ways to do so. Successful price optimization should not be based on a desire to 'force' customers to purchasing your product in a certain way, at a certain time, or under certain conditions. Provide options at different prices that are aligned with differing customer valuations. Let them choose.

The secret to success, of course, is designing and providing them with the options that will enable you to maximize revenues and profits while letting your customers purchase your product in the manner that best meets their needs. Although that may be easier said than done, getting this right lies at the very foundation of successful revenue management and price optimization.

As you read and consider many of the other recommendations in this article, the criticality and overarching importance of this principle will be evident. Many of the other principles are connected to this core concept.

WHAT CUSTOMERS WILL PAY VARIES: CAPITALIZE ON THAT!

One of the keys to succeeding in Lesson One is to design purchase options that cater to and expand the customer segments to which you sell. 'There's gold in them thar hills' was never more true; successful application of this concept has led to extraordinary increases in incremental *profits*, even though incremental revenues may only be marginally increased, especially for those industries where the variable cost of an additional sale is relatively low.

Although the purchase fences created by airlines might be the most widely recognized and understood (and sometimes misunderstood) example of expanding the reach of a product in a financially productive way, companies in other industries have also fared well with their pricing innovations. By adopting a differentiated pricing structure based on ocean currents and the effort required to sail between islands, a yacht charter company increased the utilization of its boats, increased its revenues and decreased the costs it incurred to reposition boats (Bermudez *et al*, 2004). A medical center in the United States expanded its ability to serve the local community and increased its revenues when it implemented a program allowing part-time and seasonal workers without health insurance to obtain health care at reduced rates, so long as appointments were made for underutilized days of the week and times of the day (Lieberman, 2004). More and more sports teams have begun to vary their ticket prices based on variations in demand owing to the opponent being played. There are countless examples, some well known, others not.

ALLOW CUSTOMERS TO PURCHASE YOUR PRODUCT WHEN THEY WANT TO DO SO, BUT CAPTURE THE VALUE OF YOUR INVENTORY

For a variety of reasons, customers may not be able to purchase your product when you want them to. That's OK. Do not fight it. Rather, ensure that the terms, conditions and structure under which you sell your product reflects both customer purchasing needs, as well as provides you with revenue enhancement opportunities. Companies that provide 'first-come, first-serve' access to the most desired inventory, without capturing the value associated with that inventory, are squandering opportunities to increase revenues.

Executives at some firms have been shocked to find out that by incorporating the first three concepts into a redesign of their pricing structure, customer satisfaction also undergoes a dramatic increase. This is because when implemented together, the first three principles empower customers to a great degree.

BALANCE FINANCIAL AND STRATEGIC GOALS

The pricing actions you take to ensure long-term success may not be the same as those that maximize short-term gains. The decision to maximize short-term profitability may be associated with greater risk for long-term success. Firms can choose to balance financial and strategic goals in different ways. To balance your financial and strategic goals, however, qualitative assessments of the risks and implications of your pricing decisions are not sufficient. Quantitative estimates are also critical to make an informed decision.

It is not always in a firm's long-term interests to charge as much as it can for a product just because sufficient short-term demand exists. The decision on what to charge should be informed by supply and demand considerations, competitor prices, financial implications and the level of risk a firm is willing to take.

THINGS CHANGE: ADAPT!

Customer behavior, preferences, valuations, competitor actions and other factors change over time. A well-designed pricing system is better able to adapt to these changes.

Although analysis of historical transaction data is certainly useful and helps identify and quantify these changes, remember that company staff live and breathe the sales experience every day. Trust, but verify. Listen to what they say, but validate their observations in the data or through talking with your customers (either directly or via a third party when anonymity is needed). Staff will frequently receive information that conditions are changing. Better pricing structures allow a firm to adapt to these changes.

PLAN FOR THE FUTURE

Clearly, the information needed to implement an effective pricing structure must be available to the company. Your firm must have the systems infrastructure needed to support and implement your pricing decisions. Over time, however, new opportunities will emerge to make the pricing structure more effective and produce greater profits. Undertake periodic reviews of how pricing decisions might be improved if modifications were made to data collection efforts or to your systems infrastructure.

Do not be caught by surprise. Effective systems planning can truly make a big difference in terms of increasing the effectiveness of your pricing decisions.

A SYSTEMATIC AND TRANSPARENT APPROACH WINS EVERY TIME

A systematic, orderly and *transparent* pricing process is greatly valued and appreciated by customers. Similarly, when companies take a systematic approach to pricing, profits virtually always improve. Auditing the pricing process provides an efficient way to identify sources of revenue leakage and take corrective actions.

Transparency is key. Several well-known companies, including the well-publicized case of Amazon.com, have suffered significantly from customer backlash when it was suspected and communicated that prices were set in ways that were not fully visible to customers. Conversely, when cruise lines adopted a more systematic and easily understood pricing structure in the early 1990s, demand surged and customers, no longer anticipating price reductions nearer to sailing date, began to book earlier, reversing a problem that had begun to emerge as an issue for many cruise lines.

CONCLUSION

These seven strategic considerations, although not always easy to apply, have proven critical for maximizing the financial success of price optimization programs in a wide range of industries.

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