Making Yield Management Work for You: Ten Steps to Enhanced Revenues

by Warren H. Lieberman

In virtually all industries, firms are facing increasing pressure to boost their revenues to maintain, if not improve, their profitability levels. Yet greater competitive pressures are making it more difficult to generate these additional revenues. This is especially true in industries where inventory or sales opportunities "evaporate" at the end of the day. As a result, more travel (and other) companies are turning to yield management—also known as *revenue management* or *revenue enhancement*—a systematic approach to applying pricing and inventory controls to the sale of a perishable asset to maximize net revenue. Perishable assets (i.e., those whose use is, or can be, limited by specific time frames) include a wide variety of goods and services—including rental cars, theme park admittance, seats at sporting or theatrical events, cruise berths, radio or television advertising time, airline seats, hospital resources, utilities, freight shipments, and hotel rooms.

Yield management is gaining wide acceptance as a key marketing and pricing strategy in many firms. The phenomenal revenue gains attributed to yield management—typically in the range of 3 to 7 percent, virtually all of which drop to the bottom line—have prompted executives to investigate the potential applicability of yield management to their companies. These executives, taking notice of how the airline industry has used yield management principles to its gain, are beginning to apply the same principles to generate millions of dollars in extra profits.

Many of these companies, whether they manage cruise ships, broadcasting stations, caterers, or hotels, have decided that the potential gains of yield management programs warrant an active approach, yet the actual steps taken by these firms to launch or enhance their yield management capabilities differ.

Some firms have achieved much greater success than they anticipated. Not only have revenues increased beyond their initial expectations, executives have been pleasantly surprised that effective yield management has also led to improved customer service. Other companies have received only a small percentage of the possible gains. In a few cases, the yield management systems even reduced corporate profitability. How can we explain such dramatic differences in yield management performance?

Our experience indicates poor performance is not caused by an ill-advised use of yield management concepts. Rather, it results from poor implementation, whether in the system design or in the actual application of yield management tools. After reviewing many successful and unsuccessful experiences, we have developed ten guidelines that greatly increase the likelihood of implementing a successful yield management program.

Making Yield Management Work for You: Ten Steps to Enhanced Revenues

1. Take It Seriously, or Don't Do It
2. Don't Bite Off More Than You Can Chew, and Chew Slowly
3. Solve Your Problem, Not Theirs
4. Make Sure You Can Implement Your Pricing Strategy
5. Reward Properly Measured Performance
6. Don't Let Your Dreams Become Nightmares
7. Do It to Them Before They Do It to You
8. Don't Negotiate in the Dark
9. Communicate, Communicate, Communicate
10. Never Be Satisfied

1. Take It Seriously, or Don't Do It

Effective yield management requires a significant commitment within the company. Senior managers must demonstrate their support for yield management concepts and allocate the necessary resources for developing, enhancing, and implementing yield management capabilities. In addition—both in time and money—senior management should participate in regular progress reviews to help prevent efforts from going astray. Such senior management involvement can be instrumental in maintaining project focus and achieving timely completion of major enhancements.

Whether yield management responsibility is placed within a marketing or operations department matters less than ensuring that the department's top priority is yield management decision-making. We saw a failure to do so occur in a major passenger transportation company. The personnel responsible for making operational decisions about locating and assigning equipment to departures were also responsible for yield management decisions. Because it was more evident when equipment was not in the right location than when inappropriate itinerary controls were implemented or overbooking levels were incorrectly set, the time and effort spent on yield management were inadequate. After a yield management audit revealed this problem, the company separated these disparate functions and increased its emphasis on yield management decisions. As a result, revenues increased.

Few companies have the internal resources to develop yield management programs on their own. Although organizations should strive to develop as much in-house yield management expertise as possible, many benefit from working with external yield management experts. Whenever a company engages an outside expert, such help should include a transfer of knowledge that will allow the company to assume greater responsibility for maintaining and enhancing its program after the expert is gone. Yield management is too important for a company to rely solely on external staff.

2. Don't Bite Off More Than You Can Chew, and Chew Slowly

The scope of yield management programs is so broad that attempting to implement everything at once can overwhelm a company. Therefore, yield management must be introduced gradually, following the wisdom of an ancient proverb, "A journey of 1,000 miles begins with a single step." While a yield management program may ultimately involve sophisticated computer programs, companies can achieve initial revenue gains and customer service improvements without investing in high-technology approaches. Often, changes in a firm's policies, procedures, or performance measures are sufficient to lead to these benefits. And the magnitude of these benefits can be substantial.

If a system is not implemented gradually, it can be easily be three to five years before the company obtains any benefits. An evolutionary approach allows incremental gains to be achieved, and our philosophy is that it is better to be approximately right than precisely wrong.

An all-at-once development approach also increases the risk of encountering obstacles that jeopardize the entire project. System development efforts should be highly focused, allowing for short-term victories. This also keeps the development staff and senior management motivated—and convinces skeptical staff of the benefits of yield management.

Staff members must agree to accept an imperfect system, albeit only temporarily, and trust that improvements over time will occur. The decision as to what constitutes an acceptable imperfect system and what constitutes a system that is *too* inaccurate, even temporarily, is not easy, but it must be made.

3. Solve Your Problem, Not Theirs

While yield management is not merely a technical tool, system designers must identify and use the right technical approach. The best yield management optimization algorithms differ among industries. For example, an algorithm that increases the profits for an airline may lose money for a railroad because of their differing network structures. A typical passenger's railroad trip includes many stops, while most airline passengers make no more than two stops en route. However, any company can begin by using simple techniques that push it in the right direction toward more advanced techniques at a later date.

Decision criteria should be based on the total expected profitability of a sale. If sufficient data to estimate the profitability of a sale are not initially available, decisions can be based on expected revenue. However, if expected revenue is used in place of profitability, it must be sufficiently correlated to profitability to suggest appropriate actions. For example, one casino-hotel property used a yield management system designed for free-standing hotels. The system controlled reservation inventory on the basis of room availability and room rate. Ancillary revenues were ignored. However, since the bulk of the profits stemmed from gaming revenue, room rate was a poor proxy for reservation profit. The system was doomed to provide wrong inventory-control recommendations and fell into disuse. As a result, the staff believed that yield management could not be used to increase the profits of a hotel with a casino. However, the real problem was that the yield management system being used was not suited to the particular application.

4. Make Sure You Can Implement Your Pricing Strategy

In the travel industry, product availability is controlled through the reservations system. Other industries have different mechanisms to control product availability. A firm's inventory control capability must be consistent with its strategic yield management decisions. For example, effective management of multiple prices requires mechanisms that control the availability of each price, or of similar prices. One passenger railroad made a variety of discount fares available through only two inventory classes. All fares within each inventory class were either available or not. This prevented selective control of discount fare availability. Modifications were made to the reservation system, which increased the number of fare classes, allowing yield managers to selectively close discount fares. The result: a wide variety of discounted fares were sold to passengers, and revenues increased.

5. Reward Properly Measured Performance

Performance measures are needed that:

- Reflect the impact of decisions on profitability
- Allow personnel to learn from past actions
- Encourage personnel to make the best decisions
- Provide information across the organization

Inappropriate performance measures have caused yield management personnel to make decisions that rewarded their individual performance but reduced their firm's profits. One airline with an advanced and sophisticated yield management system had multiple monthly performance goals. Some of these goals conflicted; improving the company's performance vis-a-vis one goal worsened its performance with another. The department's performance on each of the goals was monitored. As the end of a month approached, yield management analysts would receive directives from senior management that ensured the department could achieve all its monthly goals. Since these directives were aimed at covering up past mistakes, rather than focusing on the best actions for company profitability, performance goals were met at the expense of misdirected decisions.

Current performance measures from many firms inadvertently discourage salespeople from taking actions that maximize company profits. For example, if sales agent performance is measured and compensated on the basis of either the amount of dollars generated or the number of people whose reservations convert, a sales agent often has little incentive to pass up a current sales opportunity, even though it may prevent a more profitable sale at a later date. To help achieve the goal of maximum corporate profitability, incentives and performance measures should recognize the incremental profitability of different types of sales and reward sales agents on that basis. Both short- and long-term effects on profits should be considered. In addition, if making a sale in September is more difficult and provides greater incremental revenues than making a similar sale in July, a performance measurement system should reflect this difference. Policies and procedures must encourage appropriate behavior, possibly providing sales agents with an opportunity to increase their total compensation through more effective use of revenue management tools.

6. Don't Let Your Dreams Become Nightmares

The capability of yield management to increase a company 's profits is widely recognized. However, to be effective, yield management must be supported by customer service improvements. Failure to develop such supports can lead to operational disasters. For example, overbooking flights allows airlines to generate millions of dollars of additional revenue and permits more passengers to make reservations for the flight of their choice. Occasionally, this results in the need to deny boarding to some travelers, because more passengers show up for the flight than there are seats on the plane. Clearly, such a situation could lead to tense confrontations between passengers and airport personnel. To defuse this situation, airlines have introduced programs that provide various types of compensation to those travelers who voluntarily give up their seats. Before these programs were introduced, the airlines decided which passengers would have to give up their seats. Because these passengers had no choice, much ill will was generated.

The volunteer programs have been extremely successful in reversing passenger attitudes and behavior toward overbooking. Now, even before being asked, passengers

Yield management is a powerful tool that offers great benefits. But a decision to embark on a yield management program does not automatically guarantee that benefits will be realized. Haphazard implementation of yield management may be just as bad, or even worse, than not taking advantage of proven concepts and techniques. A carefully planned approach, with an effective system development review process, can provide a firm with the means to achieve both greater revenues and improved customer service—key ingredients for surviving in today's ever-increasing competitive environment.

with flexible schedules often inform airline personnel that they are willing to give up their seats voluntarily if it becomes necessary. The passengers who are most concerned about overbooking are generally those who fly rarely or remember the procedures for overbooked flights before the introduction of the volunteer program.

This significant improvement in customer service also has allowed airlines to reap benefits from yield management—when the volunteer program has been well-designed and well-implemented.

Basing field procedures, such as the volunteer program, on standardized guidelines encourages consistency, but field personnel must be able to respond to events as they unfold. Employees must be trained to handle unusual circumstances that may result from yield management decisions. Some airlines, for example, authorize agents to placate disgruntled passengers with various types of "rewards." Reporting systems should be developed that track potential problem situations and record how they are resolved. A firm can then review the frequency of such situations, determine whether employees are responding appropriately, and assess whether yield management policies should be revised. Continued education and training should be instituted so employees can learn from their—and others'—experiences.

7. Do It to Them Before They Do It to You

A yield management system enables a company to gain a strategic marketing advantage over its competitors. And when its competitors have effective yield management programs, such a system becomes a necessary marketing tool. Until recently, a major rental car firm focused on its efforts on attracting highly profitable corporate rentals; its efforts to attract leisure business were limited. Many of its car rental locations experienced cycles of high and low fleet utilization because of cyclical corporate travel patterns. Noting the rental patterns and needs of leisure renters differed from business travelers in many ways, the company launched a major marketing campaign to attract leisure rentals to supplement the firm's corporate business. The marketing effort included designing new products that would appeal to leisure travelers and controlling the volume of such rentals so they would not displace the more profitable business rentals.

The marketing actions also differed by location, reflecting variations in rental patterns. These actions put significant pressures on smaller car rental companies that focused on attracting leisure rentals by offering low rates.

Selective, rather than broad-based, pricing actions can enable a firm to generate greater revenues while meeting the competition. The danger of failing to do so is well-illustrated by the experience of the former airline, People Express. People Express discounted its airline seats across-the-board; all seats on a flight sold for a low price. Initially, People Express was very successful in diverting passengers from other carriers to its service. However, over time, its competitors developed yield management capabilities and were able to compete more effectively by offering a limited number of discounted fares on each flight, with restrictions that leisure passengers could accept. The number of discounted fares available for a flight depended on how many higher fare-paying business travelers were expected to make a reservation for that flight. By limiting the number of discount fares available for a flight, airlines avoided displacing the higher-fare business passengers with lower-fare leisure travelers. So, while People Express allowed business passengers to pay much less than they were willing to pay, its competitors had mechanisms in place enabling them to receive higher revenues and much higher profits from these passengers. The lack of yield management capabilities at People Express is generally acknowledged to be a primary reason for its demise.

The information generated through a yield management program allows a company to achieve a competitive edge by:

- Developing new products that better meet customer needs
- Pricing these products on the basis of customer "willingness to pay"
- Generating additional demand through designing purchasing restrictions that allow multiple prices to be offered with a minimum of revenue dilution (to reach those willing to modify their plans to get a lower price)

- Increasing the firm's ability to target its advertising and to conduct promotional campaigns effectively

8. Don't Negotiate in the Dark

Organizations that purchase large volumes of a product are often able to negotiate for a better price and other advantages that are not available to the general public. The ability of a company to structure a favorable deal often depends on what information the purchaser and the sales agent possess. Broadcasting stations that maintain historical information about advertisers' purchasing habits and marketing needs are better able to negotiate more profitable contracts. Tour operators and travel agencies can structure more advantageous deals when they possess better information than the sales agents with whom they negotiate. This may occur because the sales agents' organization has not maintained historical purchase data or when, despite the availability of such data, the sales agents do not possess the appropriate tools to access and review the data. We have also noted the reverse situation, whereby the seller benefited from the information asymmetry.

Yield management gives a company an opportunity to use purchasing information to help make strategic decisions. For example, one cruise line maintained information on the number of reservations made by travel agencies but did not produce reports illustrating how many of these reservations converted to passengers. The unfortunate result: travel agencies that had historically requested large group blocks, but failed to fill them, received more favorable treatment than those agencies requesting smaller blocks but utilizing them more fully. The solution: capabilities were designed to allow the cruise line to easily access such information and strengthen its negotiating leverage.

9. Communicate, Communicate, Communicate

Communication is always acknowledged as important, but rarely implemented well. Interdepartmental communication about the purpose and types of yield management controls is essential within many groups; e.g., sales, marketing, reservations, pricing, and field personnel. All too often, yield management information among these groups is communicated haphazardly, and misinformation is rampant.

During the design of a yield management system, each department should be encouraged to influence the development process by making its particular needs known. Such input is critical for designing a comprehensive system that gains user buy-in. Communication must continue *after* implementation, so appropriate enhancements can be designed on an on-going basis.

Examples of poor communication are, unfortunately, numerous. One airline developed and implemented a major pricing innovation, resulting in a flurry of reservation requests for discounted fares. These reservations were expected to have a cancellation rate much lower than usual. But because the yield management department was not notified about the pricing initiative, yield management controls were not adjusted, and too many discounted reservations were accepted. In some cases, the number of discounted passengers expected to show up for a flight exceeded the plane's capacity by more than 100. Obviously, significant efforts were needed to avoid an operational crisis at the airport.

Staff members having direct contact with customers are often the least well-informed about the trade-offs associated with yield management and the reasons for certain decisions. Employee misconceptions are then passed on to the customers, resulting in unnecessary ill will. It is critical to educate these employees so they understand how yield management works—both the advantages and disadvantages—and how it affects the customers. Formal training sessions and guided tours of yield management departments and systems are very effective in communicating this information.

10. Never Be Satisfied

The scope of revenue enhancement opportunities addressed by yield management concepts goes well beyond the capabilities of any current system. The magnitude of the research and development dollars spent on enhancing yield management systems is indicative of the additional benefits still available. After over a decade of enhancing its yield management capabilities, a major airline with an advanced yield management system and $10 billion of sales is currently spending approximately $10 million a year enhancing its system.

As evidenced by the efforts of firms of widely varying sizes, it is not necessary, nor advisable, to seek out ultimate yield management solutions. Such efforts are likely to be time consuming and of little value. A yield management program that continually strives for incremental improvement is much more likely to lead to successful efforts, a less complacent staff and increased revenues.

About the Author

Dr. Warren Lieberman is President and co-founder of Veritec Solutions Incorporated. Veritec's business mission is to be the world's highest quality provider of pricing and revenue management solutions, including systems development, educational workshops, strategic consulting, and implementation support.

Dr. Lieberman began his career in yield management at American Airlines in 1984. A pioneer in expanding the pricing and inventory control concepts of revenue management to different industries, he is recognized internationally as perhaps the world's leading expert in non-traditional implementations of revenue management. Prior to forming Veritec, Warren led the Travel and Hospitality Industries Consulting Practice for Talus. Dr. Lieberman has provided design and technical leadership in the development of revenue management systems in a variety of industries, including cruise line, timeshare exchange, and car rental.

Veritec Solutions, Inc.
285 Hamilton Avenue, Suite 325
Palo Alto, CA 94301
Phone 650.833.5990
Fax 650.853.7258
info@veritecsolutions.com
www.veritecsolutions.com

This article first appeared in the *Travel, Tourism, and Hospitality Bulletin* of Arthur D. Little, Inc., June 1991