

way ( $\$117 \text{ fare} \times 37 \text{ passengers} = \$4,329$ ). We also know that we could sell 17 full-fare coach tickets to business travelers for \$398 each way ( $\$398 \text{ fare} \times 17 \text{ passengers} = \$6,766$ ). If this were an either/or decision, we would choose to sell only full-fare coach tickets because it would result in \$2,437 more in revenue (\$6,766 compared to \$4,329); we could focus more attention on each passenger with the same required flight crew; and we would save fuel with a lighter load.

However, neither one of these choices will allow us to maximize revenues for this flight. What we need to do is hold back enough seats in the full-fare (\$398) category to serve our business customers who need to travel on fixed schedules, usually purchase at the last minute, and do not make their travel decisions solely on price. At the same time, we still want to fill the plane to generate as much revenue as possible. We could sell all of the remaining 22 seats at the \$117 advance purchase excursion fare. However, this choice would still not maximize revenues.

Based on information provided from our revenue management system, we decide to sell eight seats at \$117 each if they are reserved more than 180 days in advance, 12 seats at \$189 if they are reserved more than 21 days in advance, and hold 17 seats that based on past experience we will be able to sell at the full \$398 fare up to the time of departure. By making these decisions, we have begun the process of maximizing revenues.

Our true yield for this flight will be based on the number of revenue-paying passengers who actually fly on the day of departure. Passengers buying discounted tickets know that these fares are nonrefundable and have restrictions. Therefore, they typically arrive for the flight, claim their reservations, and board the plane. On the other hand, passengers who have paid full fare may not claim their reservations, because they can be canceled and/or changed without penalties. Knowing this, we might overbook the flight, realizing that based on historical information, a certain percentage of passengers holding reservations will not show up to claim their seats.

Figure 5.2 shows a seating configuration for a 37-passenger airplane and how these seats might be filled with revenue-paying passengers in our example. By managing our seats to meet the needs of specific target groups, we will generate \$9,970 in total revenue if all passengers honor their reservations. Remember that for the sake of simplicity in our example, we used a smaller aircraft flying a direct route and offered only three fare categories. As the size of aircraft increases, we add in a round trip, and the number of **legs** multiplies; revenue management calculations can become very complex, requiring sophisticated computer hardware and software programs.

There are several other key statistics that can be generated from the data that are gathered to maintain our revenue management system. These data include **available seat miles (ASMs)**, **revenue passenger miles (RPMs)**, and **load factor**. In our flight example with a 37 seat aircraft, we would have 9,250 ASMs ( $250 \text{ miles} \times 37 \text{ seats}$ ), and if we had only sold 30 seats we would have generated 7,500 RPMs ( $250 \text{ miles} \times 30 \text{ revenue passengers}$ ), resulting in a load factor of 81% ( $7,500 \text{ RPMs} \div 9,250 \text{ ASMs}$ ).

Airlines have continued to expand the capabilities of revenue management. Not only are they using it for its original intent, but they are also expanding its use to generate other operating efficiencies. Everything from flight planning and crew management to group sales management and cargo sales are being incorporated into an integrated system.<sup>22</sup>

Technology will definitely change the face of the tourism industry. Where and when these changes will occur is anybody's guess. What we do know is that technological advances will change how operators deliver services and how customers access and enjoy these services. As more tourism suppliers fully adopt the revenue management concept and as software developers create more sophisticated programs, additional applications are being tapped. No longer are users looking to simply enhance revenues, they are now seeking to implement profit optimization strategies. In addition, they are also seeking to enhance revenues from all yieldable revenue streams such as meeting spaces, food and beverage offerings, retail outlets, and even spa and professional services.<sup>23</sup>