American Airlines Sabre Reservation System

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American Airlines, Inc. was one of the largest United States airlines by the late 1980s. The company president, Robert Crandall, was a major figure in the airline industry's competitive wars. He set American Airlines firmly back on course after violent turbulence in the late 1970s. Faced with the deregulation of the airlines industry, price competition, and unprofitable operation of the airline, Crandall sharpened the computerized reservation system Sabre (Semi-automated Business Research Environment) into a powerful marketing tool.

Before Sabre, American Airlines was suffering from a terrible communication problem. Before the development of a computerized reservation system, travel agents had to call American Airlines for information concerning flight availability, route destinations, time schedules, and confirmation. In addition, they ran into the trouble of making phone calls to discover the fares for certain flights. All too often they would just receive busy signals. This was complicated by the agony of making phone calls for flight cancellations, changes, etc. Also, American Airlines had the difficulties of having to answer phone calls and keeping up records about commissions, etc.

Under the old model, the airlines targeted the end-user – the airline traveler. The traveler would call his or her agent and then place an order. The agent would return the call in several hours or even days with travel options.

Without a uniform, centralized database, immediate corporate decision-making was almost impossible. It was difficult to get strategic information generated from the transactions at the lower levels of the corporation. There were also significant time delays in processing information on operations. In 1973 alone, American Airlines lost $50 million on revenue of $1.3 billion. In the early 1970s, American Airlines operated at a loss.

When then president George Spater altered the flight plans in the early 1970s to concentrate on resort destinations and leisure travel, this eliminated the heavily traveled schedules and convenient connections used by business travelers. The fortunes of the airline began to sink. Operating at a loss, it found itself in great danger. It began to lose the patronage of its frequent customers, particularly business clients.

In addition, government deregulation of the airlines in 1978 left American Airlines facing low-fare price competition. Competitors offered ticket prices 10 percent or more below American. The deregulation of airlines changed the long-term structure of the airline economy and traditional methods of running the business. The action by the U.S. government in 1978 left the airlines in a state of confusion.

New airline companies were attempting to compete with major airlines such as TWA and American by introducing low-ticket fares, which American could not match without losing profit. In addition, the Competitors hired labor at much lower cost. On the other

hand, deregulation suddenly put pressure on management to rely on strategy in the newly competitive free market.

By the mid-1970s, American Airlines, along with a few other airlines, had developed computer reservation systems for internal uses. American Airlines, however, began to also market the system to travel agents under the name Semi-automated Business Research Environment or SABRE.

Sabre linked in many travel agents around the country. The data communications from the travel agents to the hosts were based on dial up internet-like communication. The Sabre system served as the principal distribution network for flight schedules. In the schedule displays, each flight listing is a type of electronic shelf. Sabre lists codes for requesting information about origination and destination, flight time, departure and arrival time, and so forth. Several other airlines displayed their flights through Sabre. However, in order to be listed on the system, other airlines had to pay a fee to American composed of a basic capital fee plus a bookkeeping fee. The travel agents see flight schedules in their computers six to eight lines at a time. To request flight schedules, they punch in the desired dates, times, etc.

In order to build the system, from 1976 to 1982, American Airlines had invested approximately $114 million in hardware plus another $46 million in expansion of central site facilities and equipment. The result was a dramatic transformation of airline ticket distribution methods. *Between 1977 and 1982, American Airlines had installed more than 20,000 computer terminals for agents across' the nation and some in the international markets.* The installations of the reservation system were intended to boost service revenue through ticket sales. In the short run, American Airlines lost money. Between 1976 and 1982, the company experienced an estimated cumulative net loss of $123,888,000.

In the longer run, however, American Airlines was able to use Sabre to change the basis of competition. Some 500,000 regular business customers account for 40 percent of American's airline traffic and 41 percent of the market for automated reservation systems. The installation of the computer reservation system terminals linked through telecommunications networks to travel agents influenced the sales of the tickets. The agents were given easy access to the information they needed to process ticket sales, cancel reservations, or to book the previously reserved airline seats vacated by cancellations. The agents were able to provide much better service to their customers, since they could find out immediately about confirmations of reservations. Agents were also given all the schedules of airline flights without having to call the airlines to check on or verify flights.

Competitive Effects

By using an extended telecommunications system to give access to its mainframe computers, American Airlines used the Sabre system to lock in the customer relationship and raise the cost of entry against competitors. American Airlines developed an ability to

market and distribute the terminals to travel agents. After this, the agents would be transformed into customers, because they would use Sabre to reserve tickets and flights, etc. Since American Airlines was the first to develop this product, Sabre provided an additional way to differentiate its product in the market. In addition, since it represented a considerable investment to build and operate the system, any competitor wishing to compete would have to make the same investment. This essentially raised the cost to enter into the market for the competitors. Also the development of a competitive system would take time, and during the intervening period, American Airlines would continue to have the advantage.

In addition, American Airlines developed a cohost system to get additional revenue and potentially run the telecommunications based reservation system as a separate cost center. American provided the ability to make reservations for other airlines through the Sabre system. As a result, only about 10 percent of travel agent bookings made through Sabre are for American Airlines flight segments. Approximately 58 percent of all messages through the system do not involve bookings on the airline. The American Airlines cohost system collected monthly capital fees from other airlines for installation of the system to designated travel agency locations. Booking fees were collected for each reservation made on the cohost from other Sabre locations.

There were other great secondary benefits from the telecommunications strategy of American Airlines. The telecommunications linkages allowed American to sense the pulses in the market ahead of its competitors. Information on various levels of activities, such as sales volume, busy flight destinations, and the type of people who travel frequently all of this information and more is collected. In addition to being a reservation system, Sabre can be thought of as a very large point of sale terminal for the airline.

Seeds of Destruction

Unfortunately, the success of the Sabre system attracted a spate of lawsuits from the other airlines operating in the cohost mode. They claimed that the system was biased against them and pointed as evidence to the way in which the information regarding their flights was presented on the Sabre screen. American Airlines' flights were listed first, they argued, with unreasonable messages introducing the flights of competitors. Because more than 75 percent of all flight bookings were made off the first batch of listings, the Sabre system was biased, they argued, since American Airlines flights were listed first.

Although American Airlines argued that this type of activity, such as structuring and controlling the way in which information was distributed, was part of the competitive arena, and that Sabre was just another tool in the competitive battlefield, the legal challenge eventually forced American to modify the way in which it offered its information regarding the flights of its competitors.

Prior to 1984, computerized reservation systems were not regulated and airlines developed the systems to give themselves competitive advantages in the distribution process. This created political conflicts over bias and ultimately antitrust lawsuits against

biased information display structuring. However, as a result of a Department of Transportation ruling adopted in 1984, all U.S. computer reservations systems are now totally free of bias favoring individual carriers. Flights are listed by time, not by carrier. These systems are funded by a combination of equipment rentals paid by travel agents and booking fees paid by the airlines and other transportation suppliers whose services are sold through the systems. Government regulation eliminated monopoly and removed a natural advantage of the owners over the cohosts.

At the same time, other airlines began marketing their own systems to travel agents. United Airlines started marketing Apollo and British Airways started marketing Travicomm. Once this element of competition entered the market, other airlines started offering better financial deals to travel agents who adopted their systems over Sabre. From 1977 to 1987, since Sabre entered operation, American Airlines has increased its operating profit almost 400 percent. In 1977, it profited $94,767,000 and 10 years later, it earned a profit of $473,184,000, a difference of $378,417,000. It might be argued that Sabre pulled American Airlines out of the economic valley it was in. It helped attract more business and increase the total operating revenue dramatically.