The overall revenue management problem involves a network of airports and literally thousands of flights.

Clearly optimization is needed.

Myopic solutions leave significant revenue on the table.

Furthermore, revenue management involves tens of different classes that have different restrictions, different characteristics like mile awards, and fares.

PEOPLExpress could not compete with American Airlines' Ultimate Super Saver fares.

Donald Burr, CEO of PEOPLExpress in 1985, notes, "We were a vibrant, profitable company from 1981 to 1985, and then we tipped right over into losing $50 million a month.

We had been profitable from the day we started until American came at us with Ultimate Super Savers." Revenue management is the science of selling the right seats to the right customers at the right prices.

To illustrate the impact that revenue management has had on American Airlines, we note what Robert Crandall, CEO of American, wrote during the period that revenue management practices were applied.

"Revenue management is the single most important technical development in transportation management since we entered the era of airline deregulation.

We estimate that revenue management has generated $1.4 billion in incremental revenue in the last three years." Let us see the impact of revenue management more broadly.

Today, American Airlines has emerged from bankruptcy by merging with US Air Airlines.

However, American Airlines has spun off Sabre Holdings, the entity that built revenue management for American.

As of November 2012, Sabre ranked 133rd among America's largest private companies with $3.15 billion in sales, 400 airlines, 90,000 hotels, and 30 car rental companies as clients.

Today, companies prosper from revenue management.

Delta Airlines, for example, increased annual revenue by $300 million.

Marriott hotels increased annual revenue by $100 million.