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The Origin of Revenue Management in The Hospitality Industry

How a Chance Encounter Changed History

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To fully understand how the practice of revenue management evolved within the hospitality industry, we have to start with what was a chance encounter between two people named Smith on an American Airlines flight from Los Angeles to New York in 1953.

Cyrus Rowlett "C.R." Smith, then president of American Airlines, and R. Blair Smith, a senior salesman for IBM based in the Santa Monica office, happened to be seated next to each other on this fateful flight. And C.R. Smith had been grappling with a problem.

At that time, airlines mainly took reservations in person at the airport, in ticket offices and by telephone. Agents used hand-written cards, which meant the system was both inefficient and error-prone. C.R. Smith knew that once a plane took off, the seat inventory was gone. The problem was how to effectively match passenger demand with the number of seats available for any flight, or "leg" in airline parlance, before a plane departed the runway.

At the time, IBM was involved in an air-defense project called SAGE (Semi-Automatic Ground Environment) in conjunction with the Massachusetts Institute of Technology. This project allowed real-time interactivity across a computer network using an "electronic brain."

The two men discussed how American Airlines could solve the passenger demand/seat availability equation by ensuring real-time seat inventory data was available electronically to agents regardless of their location. By 1964, after 400 human years of effort and at the cost of around $40 million, the Semi-Automated Business Research Environment (SABRE) was born.

Yes, that Sabre. Perhaps unsurprisingly, it ran on two IBM 7090 mainframe computers connected to 1,500 terminals across the U.S. and Canada.

In the U.S., the Airline Deregulation Act of 1978 meant that airlines needed to think more carefully about pricing. They now had the flexibility to add or eliminate city pairs from their routing system, and pricing for those flights was no longer under government regulation. The addition of "virtual" fare classes, additional booking restrictions, plus origin-destination pricing of multi-leg journeys meant that airlines suddenly had to deal with an exponential number of factors to optimize "passenger revenue per available seat mile" (PRASM). Thus, the practice of yield management was born.

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Ten years later, the field of yield management in the hospitality industry, a precursor to what many refer to as "revenue management" today, began to emerge.

In February of 1988, Eric B. Orkin, who later founded his namesake management-consulting firm, published an article in The Cornell Quarterly. It explained why emphasizing one metric such as occupancy, average rate or results vs. budget as the primary indicator of success in hospitality might have some limitations. While Orkin didn't specifically mention the term revenue per available room (RevPAR), he highlighted a yield statistic of revenue realized divided by revenue potential and astutely illustrated how this was closely related to the combination of occupancy and average rate. The time was ripe for industry-wide performance benchmarking.

In January 1988, at the behest of Holiday Inn, Smith Travel Research (now STR, Inc., a division of CoStar Group) published the first Smith Travel Accommodations Report (STAR), which shows a hotel's operating performance relative to its competitive set. The husband-and-wife team of Randy and Carolyn Smith founded STR three years earlier when they came up with the idea of creating a database that housed the names of all hotel properties in the U.S. Randy Smith was previously director of research for Laventhol & Horwath, once the seventh most prominent accounting firm in the country.

On September 3, 1988, the New York Times published an article titled "Hotels, Like the Airlines, Offer Discounts." That article referenced a new "sophisticated computer technique known as yield management" that was recently developed and implemented in a joint effort between the accounting firm Laventhol & Horwath and Eric B. Orkin Associates, a Durham, New Hampshire-based software company. The article stated other programs using yield management were also under development. AMR, the former name of the Dallas-based parent of American Airlines (and then owner of SABRE), was planning a new system to be in full

operation by 1991 with three major companies: the Hilton Hotels Corp., the Marriott International Corp. and the Budget Rent A Car Corp.

The concept of dynamic pricing models within the hospitality industry was met with a healthy dose of optimism, but also fraught with trepidation. Many felt that the hospitality industry could avoid the mistakes that the airline industry had made. Surely, discounts wouldn't have to be as steep! Adam Aron, then senior vice president of marketing for Hyatt Hotesl Corp., shared his concerns that people were likely to resist certain conditions placed on a discounted reservation, such as length-of-stay or advance booking requirements. He contended that hotel guests preferred pricing that was simple to understand. At the time, he was completely right.

In 1994, Sheryl Kimes of Cornell University, another early pioneer in the field, conducted research on consumer reactions to demand-based pricing practices, indicating that consumers were more accepting of those practices by airlines than by hotels. By 2001, Kimes' follow-up research confirmed that there was no perceived difference between the two. Dynamic pricing was here to stay.

The practice of revenue management in the hospitality industry has continued to evolve since those early years. Modern-day practitioners owe a debt of gratitude to the pioneers who forged a path through the unknown. Through the efforts of these individuals, our chosen profession was able to grow into what it has become today.

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