

The Bigger Idea Inside the Big Idea

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Before Expedia, before Orbitz, before "Book Now" buttons—there was our startup.

I co-founded a company with <u>Mark Ahlstrom</u> and <u>Bruce Keller</u> that launched one of the **first PC-based airline reservation systems**. This was in the **early days of personal computing (and before the Internet)**, when the idea of using PCs for mission-critical tasks was still radical. At the time, booking flights meant relying on travel agents. We flipped that model by giving everyday users the power to book directly. **This was the beginning of disrupting the way people booked air travel.** It was a **very big idea**—and we sold it to a major airline just two years later.

But the truly disruptive part wasn't just what we built—it was how we built it.

Airline fare rules back then were **unstructured chaos**—built by humans, often deliberately cryptic, and sometimes designed to send not-so-subtle messages to airline competitors (I still remember a fare code literally named "screwU75"). Rules varied by day, city pair, flight time, and often were contradictory. Agents had to read and interpret them manually.

We engineered a **rule parser** smart enough to convert that unstructured data into structured logic. Our system could:

- Interpret complex fare rules
- Display only bookable flight options
- Monitor and **auto-rebook** tickets if fares dropped

That alone saved users money and time—and eliminated the need for travel agent expertise.

But here's the twist. To make all that work, we had to overcome a **bigger** problem: **compute power.**

Back then, airline reservation systems ran on **mainframes**. We obviously couldn't afford one. So we connected **hundreds of PCs** into a distributed network—building an early version of **virtualized compute** before cloud computing had a name. We created:

- Load balancers
- A networked job distribution system
- A scalable processing engine using commodity hardware

Our "room full of PCs" processed thousands of fare combinations and rules daily. We were so focused on solving the travel problem that we didn't realize we'd invented something bigger: a blueprint for future data centers and cloud infrastructure.

We missed that second innovation—but I haven't forgotten the lesson.

Sometimes, the bigger opportunity is hiding inside your big idea.

While you're focused on the end-user problem, don't lose sight of the infrastructure, processes, or tools you're building along the way. They might be the real breakthrough.