

POINT OF SALE

It All Adds Up

ITA Software has a mathematical approach to finding low airline fares

By Karen Anderson

ITA Software has gotten a lot of attention since it partnered with the multi-airline Web site that is now officially called Orbitz, but for ITA President and CEO Jeremy Wertheimer, the controversial site is just another valued customer.

The Cambridge, Mass.-based firm's other customers include click-and-mortar consortium Travelbyus.com. Through a partnership with Amadeus, which holds a 20 percent stake in ITA, it can reach more than 50,000 agents worldwide. ITA was developed by a group of computer scientists from the MIT Artificial Intelligence Lab. Wertheimer, who holds a doctorate from MIT, became interested in the air travel pricing and reservation process in the early 1990s purely from a mathematical standpoint. "It's a nice, interesting, hard problem that no one was working on," he says.

While studying in Cambridge, Wertheimer became acquainted with the retailers at a nearby Thomas Cook agency. "It became apparent that what travel agents were doing through their CRSs were very complex [mathematical] optimization problems," he says.

He found that the GDSs weren't giving agents everything they needed, and his answer was to develop tools that would enable agents to solve "very complex planning problems."

In 1996 Wertheimer began working on the mathematical algorithm on which the current software is based, and by 1998 ITA Software brought to the market what some experts call a revolutionary travel shopping and fare pricing tool.

ITA's shopping software evaluates all the fare and flight combinations for each travel request and in seconds can review billions of flight options to return hundreds—if not thousands—of fare and flight options. The system also offers customizable shopping options. In addition to doing point-to-point airport searches, the system can search multiple

airports in a location to figure out the best options. Browsers also can conduct a search over a range of travel dates or within a specific time frame, and they can make queries for the lowest fares to multiple destinations.

In September 1998 Amadeus announced a partnership with ITA that allowed the GDS to offer its customers new low-fare search product options. As a result of this arrangement, agents who use Amadeus' fare-search product have quick access to a broader range of low fares. In addition to co-developing the product, Amadeus has some exclusive licensing rights to the software.

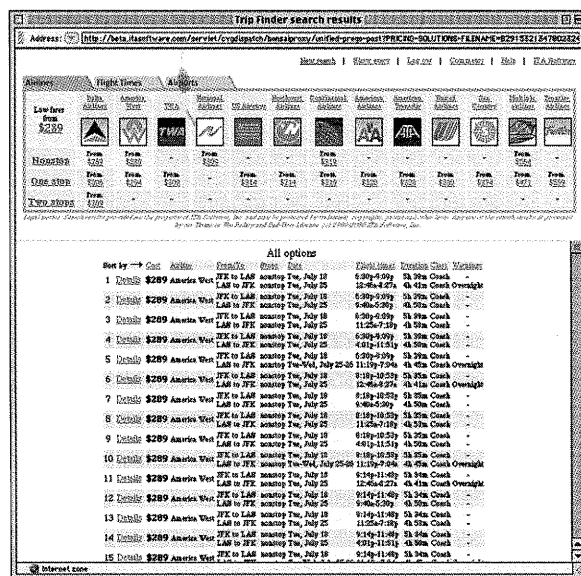
With the integration of ITA's technology, Amadeus is able to enhance its Value Pricer low-fare pricing system, and it will release an upgraded version for agents in August, according to Mel Trudeau, Amadeus' vice president of on-line sales and commercial development. "The agents have a value-proving [technology]," Trudeau says. "The difference [will be] slightly faster response times, and in some cases different answers can search out additional queries over the current pricer.... It will look for more and it will do it faster."

Amadeus and ITA have teams of programmers in Cambridge, France and Miami. "By and large for travel agents, it will be transparent," says Trudeau. "Everything will happen in the

back end of Amadeus."

Amadeus also is helping ITA develop the product. Says Trudeau: "We will continue to improve the product. Our primary focus is making international fares available through the product."

Later this year ITA, with the help of Amadeus, will add U.S. flights to Europe and within Europe.



ITA Software is enhancing its fare-finding system.

While some say that such products as ITA's software will eventually replace the current GDS systems, Trudeau says he is not concerned about that. "The GDS does a lot more than just search for schedules and fares," he says, citing such things as developing complete PNRs and serving as a complete communication link between agents and suppliers.

Agents Are Integral

"The agent's going to be an integral part of [the travel booking process]," says Trudeau. "There will be some creeping in of systems that are bypassing the GDS, but it's going to be specialized, and it certainly has its limits. We are a content aggregator, and we are expanding our scope and expanding our feature set."

John Stowe, president of travel agency solutions for Sabre, says ITA has a different way of shopping that uses a combination of its database of information plus the input from the GDS. "It's actually more efficient in the way it uses our system," he says. "On the other hand, we think it's still very limited on really finding the lowest fare.... We've been working on finding the lowest fare for a while."

Orbitz also has been giving side-by-side evaluations of its fare finder compared with other popular Web travel sites, including Sabre-owned Travelocity. ITA says it found a cheaper

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fare from New York to Los Angeles on another site but that the savings turned out to be illusory. "What they neglected to tell everybody is that that was a [flight from] Los Angeles to Islip, Long Island," says Stowe. "You could save \$30 on the fare, but then it is a \$130 cab fare to get to New York."

Alex Zoghlin, chief technology officer at Orbitz, says ITA has fulfilled its promise to deliver the most consumer-oriented online site. "ITA's technology provides travelers unbiased access to the most flights and fares available anywhere," he says. "We're excited to help consumers save time, money and effort in their travel purchases, while at the same time give them the widest array of flight options for their traveling convenience."

Reno-based Travelbyus.com is licensing ITA Software's low-fare search engine as its own search engine. ITA Software's technology will enable Travelbyus' agents and customers to search for fares using a range of flexible criteria. For example, a customer will be able to search for fares using multiple departure dates, multiple arrival and departure airports, and

multiple segments. The product should provide Travelbyus' agents and customers more choice and less complexity, says John Whyte, senior vice president of e-commerce and co-founder of Rogue Technologies, a Travelbyus.com-owned Web technology firm.

ITA has been receiving praise from the consumer press as a great resource for finding the lowest fares. *The Washington Post* wrote in a recent article: "The simplest way to check out an air fare is to visit ITA, a site that quickly calculates available fares on itineraries in the U.S." In June, Yahoo! Internet Life rated ITA Software's Trip Finder one of its "Incredibly Useful Sites of the Day." Wrote Yahoo: "Travel hubs have revolutionized ticket buying. They all claim to find you the cheapest flights, but if you've used more than one, you know that isn't always true. Expand your search options with the ITA Trip Planner (still in beta as of this writing). Along with the usual fields, you can also specify how many miles you'd be willing to drive to a nearby airport, and you can specify a range of hours or days if your plans are flexible. Flexible plans translate into cheaper fares in the airline biz." 