

Farecast: The First And Only Airfare Prediction Web Site

University of Washington



A University of Washington professor developed Farecast.com, a Web site that helps travelers save money by forecasting the best time to buy airline tickets for the best prices.

Oren Etzioni doesn't believe in getting mad. But making sure he doesn't get burned twice, well, that's another thing.

So a few years back, after the University of Washington (UW) computer science and engineering professor learned that the passenger in the seat beside him paid approximately \$70 less for the same flight — and had purchased it later — his brain started to spin.

“My family and I were on our way to my brother's wedding,” he recalls. “Because there were four of us, it wasn't an insignificant amount of money that we'd spent on our airfares.”

That set him thinking how he could use data-mining technology to figure out the best time to buy a ticket for the best price.

It wasn't too long before his annoying experience, and the ensuing research, sparked a company first dubbed Hamlet,

as in “To Buy Or Not To Buy.” Since then, the name has changed to Farecast, to better reflect its mission.

It has attracted more than \$8.5 million in venture capital funding, made 150 billion price observations and spawned a workforce of more than 20 employees in Seattle. And by late 2006, it was covering 75 airports and 2,000 market combinations.

Since its June 2006 launch, Farecast.com has also become popular with users, logging more than 1.5 million unique visitors in its initial beta phase.

Moreover, the Web site has earned accolades right and left, including honors from Time magazine, Popular Science, Business Week, Kiplinger.com and Frommers.com.

And after initial skepticism from the airline industry, it has now been accepted and even endorsed by some key players.

In a statement, American Airlines says: “We support Farecast because they provide useful information that helps consumers make smarter and more confident purchase decisions.”

Etzioni first worked with colleagues at the University of Southern California on the project because they had an infrastructure to gather the necessary flight and pricing data to anticipate price fluctuations. For a start, they studied Seattle and Boston.

“That was how it began,” he says.

They then wrote a paper and presented it at the 2003 Conference on Knowledge, Discovery and Data Mining. The University of Washington followed up with a brief press release on the academic study.

What came next shocked Etzioni.

“I never thought anybody read those press releases,” he says. “But this one triggered a huge amount of interest.”

Media outlets that covered the story at the outset included Wired, MSNBC, “NBC Nightly News,” The Seattle Times and Business Week. Since then, it has received much more coverage.

“I got hundreds of e-mails from people saying ‘Hey, I want this,’” says Etzioni. “In addition, people in the travel industry contacted me and said ‘When can we have it?’ At that point, I realized I’d struck a raw nerve.

“I thought what we’d done was kind of neat,” he allows. “But before that flurry of interest, I never thought it would be the basis for a company.”

Etzioni was also motivated by a somewhat indignant student, who accused the professor of being unhelpful.

“This fellow was sitting in back of my class. He proceeded to tell me how expensive fares were and said he was going to fly home to see his mother,” Etzioni says. “He asked if I could tell him the best time to buy a ticket. When I said I couldn’t because what I’d done was a limited study, he accused me of holding back on him.”

That, and the growing public interest in his project, spurred Etzioni on.

The Washington Research Foundation (WRF), which helps Washington state research institutions derive and enhance value from their emerging technologies, contributed \$30,000 for additional research after the initial results were established, Etzioni says. Even though all he had was a speculative concept and a research prototype, Seattle’s

Madrona Venture Group and WRF Capital (which manages the Washington Research Foundation's seed venture fund) ponied up \$1.5 million in October 2004 to get the company off the ground.

About a year after the first round of funding, Greylock Partners joined Madrona and WRF in a second round that raised another \$7 million.

"Madrona agreed to take a chance on us in part because I serve as an advisor for them and because they have a long relationship with our department and have funded many startups coming out of it," he says.

The University of Washington's Technology Transfer Office then stepped in to help with the licensing deal, which included an inter-institutional agreement with the University of Southern California.

"Everyone said 'We have some great early-stage stuff here,'" says Chuck Williams of the UW. "All the parties wanted to jump on Oren's idea."

Hugh Crean, Farecast's president and CEO, joined the company in November 2004. He says consumers typically save about \$40 on a ticket using the service and that Farecast is accurate nearly 75 percent of the time.

“*Because Farecast sends customers directly to the airlines websites, once they have decided on a flight, they do not have to pay a service fee, like online travel agencies often charge.*”

"Essentially, we're like the weatherman," Crean says. "We make forecasts so people can avoid experiences like Oren's. It really isn't any fun to sit on a plane and find out you bought your ticket earlier than someone next to you did, but you paid more."

Farecast's patented airfare prediction shows whether the lowest fares for trips are rising or dropping over the next seven days. The company also shows anticipated price movements, confidence levels and buying tips when consumers search for flights.

"With many airfares running around \$300, these tickets aren't an inconsequential purchase," says Crean. "We want to be like a 'Consumer Reports' and help online travel shoppers save money and buy with confidence."

To create its proprietary airfare predictions, Crean says Farecast systematically aggregates large amounts of airfare data on a daily basis, and tracks and measures price fluctuations.

Along with each flight search, Farecast.com provides an airfare history graph. The airfare history graph shows online travel shoppers what the lowest available price for their trip has been each day, up to 90 days in the past.

To back up its fare predictions, Farecast in mid-December started testing a new product called "Fare Guard," which gives users an option to lock in low fares for one week without buying the ticket. The cost during the initial test period was a mere \$1. It is scheduled to go up to \$9.95 when the product officially launches in 2007.

"We offer Fare Guard when we predict that fares are dropping, so we're putting our money where our mouth is," says Crean.

This story was originally published in 2007.

To see available technologies from research institutions, [click here](#) to visit the AUTM Innovation Marketplace.

