



*The Internet's Largest and Most Trusted Publisher
of the Best Travel Deals*

Taking Travel Search To New Heights

***How Travelzoo delivered Fly.com™ with Agile
Application Lifecycle Management***

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Travelzoo Background

- Travelzoo (NASDAQ: TZOO) is the most trusted publisher of travel deals
- Travelzoo evaluates & tests thousands of travel deals for true value
- Over 18 million subscribers
- Largest publisher of travel deals on the Internet
- Has offers listed from 1,000+ leading travel companies worldwide
- Deal experts located in 21 offices across North America, Europe & Asia.
- Properties include:
 - Travelzoo Top 20® list;
 - Newsflash™ e-mail alert service;
 - Travelzoo Network™;
 - SuperSearch™ booking tool;
 - and most recently Fly.com™

The screenshot shows the Travelzoo website interface. At the top, there are logos for 'super search', 'TOP 20', 'NEWS FLASH', and 'Last Minute Travel'. Below these is the text 'With over 17 million subscribers, we're the #1 information source!'. The main content area is divided into several sections: 'All Deals | Hotels Only' with a search bar; 'Hot Destinations' (Germany); 'Best of the Season' (Fall Getaway Deals); 'Airfare Sales' (North America, Europe, International, NetFares); 'Entertainment Deals' (New York City, Las Vegas, More); 'Hotel Specials' (Las Vegas, Orlando, New York City, Washington, D.C., Chicago & Midwest, California, Florida, Hawaii, More U.S. & Canada, Caribbean & Mexico, International, Resorts & Spas); 'Vacation Specials' (Florida, Hawaii, Las Vegas, More U.S. & Canada, Caribbean, Mexico, Europe, Central & S. America, Asia & South Pacific, Golf & Ski, Luxury, Romance, More); 'Car Rental Deals' (North America, International); 'Cruise Sales' (Caribbean, Bahamas & Bermuda, Europe, Alaska, Mexico & Panama Canal, Exotic, More); and 'Find Fares from Recommended Sites' with a search form for 'From', 'To', 'Depart', and 'Return' dates. On the right side, there is a 'FREE Subscription to the Top 20' sign-up form and a 'Today's Top Deals' section for Friday, Sept. 25, 2009, listing several deals like 'Upscale London hotel over holidays, half off Apex City of London Hotel' and '\$1599 -- 14-night Mediterranean cruise w/air & hotels'. At the bottom right, there is a 'Deal Locator' map and a 'Deals Featured on TV' section.

Why Build Fly.com?

- **Address a gap in Travelzoo's portfolio of services:**
 - a travel metasearch engine
- **Fly.com needed to:**
 - be an innovative travel search engine
 - be fast & easy to use
 - allow users to find best values on flights from hundreds of airlines & online travel agencies
 - be built quickly & cheaply; adapting to changes in industry during development; meet & exceed competitive capabilities
- **It needed to match & exceed functionality of competitive air metasearch engines.**
 - Industry benchmarks suggested that similar metasearch engines built by competitors took up to 2+ years to build and cost between \$5-10M.

Technical Options for Building Fly.com

- Create well defined, detailed specifications & outsource creation of Fly.com to large services provider
- Build internally as a waterfall project in .NET
- Build a custom solution using Agile Methodologies & the Agile Platform

Why Choose OutSystems & Agile?



OutSystems technology coupled with its Agile methodology provided a significant set of advantages:

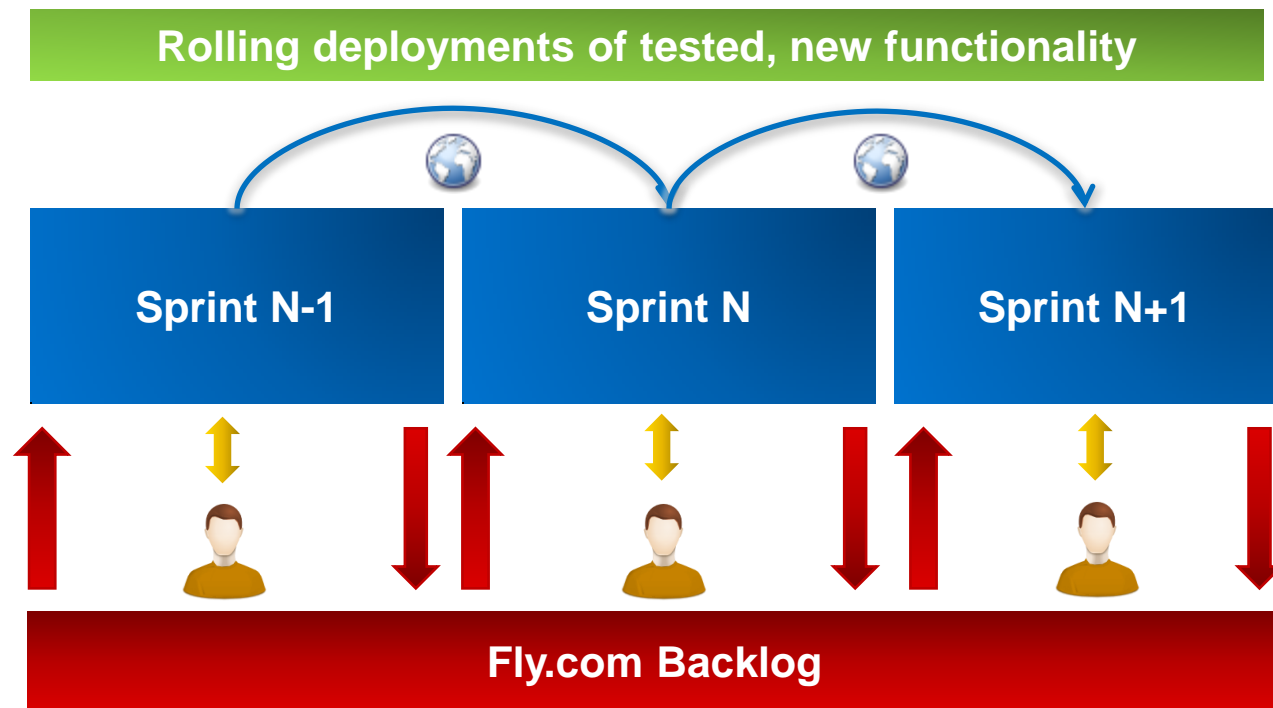
- Ability to evolve full vision of final product as Travelzoo gained expertise in the space, avoiding common issues like overproduction, waiting to decide, etc
- No need to write in-depth spec before starting; explore market needs while developing system
- Full integrated support (technology + process) for a rich Application Lifecycle Methodology (ALM) – delivering rapidly, on target, often *and* with quality.

Fly.com Project Data Points

- **Duration**
 - Expected: 28 weeks Actual: 32 weeks
 - Number of Sprints: 14 (including a tuning sprint,) Number of Demos: 12
 - 250 change requests (using Agile Platform Embedded Change Technology)
 - 4 week tuning sprint & 4 versions released during tuning
- **The Team**
 - Business Sponsor: Chief Technology Officer
 - 1 Engagement Manager
 - 1 Delivery Manager
 - 3-5 Developers & 1 QA FTE
 - 7 Key Users
- **Technology**
 - OutSystems Agile Platform used for: requirements gathering, design, integration, component assembly, version control & configuration management, deployment & performance management
 - Over 20 integrations w/ databases, third party systems etc
 - .NET environment.

Fundamentals of Our Agile Application Lifecycle Approach

- Constantly evolving process (w/ retrospectives at the beginning of each 2-week sprint)
- Daily user interaction and feedback (no delays & lean application developed)
- The *Project-focused* approach used in initial development phase was transformed into *product-focused* approach during ongoing maintenance



5 Key Aspects of Agile ALM Platform

#1 Integrate w/ Databases & 3rd Party Systems

- Easy to integrate Fly.com w/ 20+ external DBs & apps
- Easy to enable incoming integrations to Fly.com

#2 Develop, Assemble & Reuse Components

- Component library built for reuse in Fly.com & 3rd party sites
- Wrapped existing Travelzoo billing system for reuse

#3 Deploy New Functionality Regularly

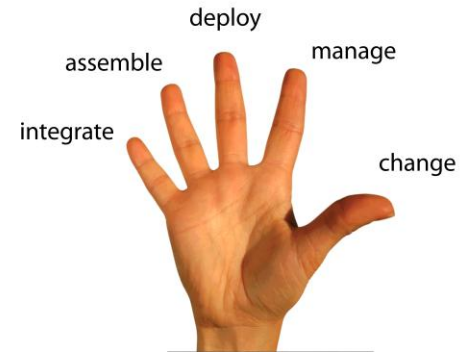
- New functionality deployed every 2 weeks
- Zero downtime during deployment

#4 Manage Process, Team & System

- Agile Platform's Service Center sent real time alerts of any slow-down or bottleneck
- OutSystems Agile Network used for project management & issues management

#5 Enable Rapid Change

- Embedded Change Technology (ECT) used by product & project managers to give feedback
- "Change with impunity"
- Agility allows A/B/C/D/... tests to replace guesswork, even for major commercial partnerships



Cheap Roundtrip Fares to New York from:		POWERED BY fly.com	
<small>(Per person, including taxes and fees. Click a price to verify availability now.)</small>			
Chicago	\$155	Raleigh	\$99
Miami	\$179	Washington	\$97
Orlando	\$139	more cities	

Managing a Distributed Team



- Need to engage with globally distributed stakeholders
- Engagement manager holds daily status meeting with each team
- Development team have daily SCRUM stand-ups
- Agile Network used to manage backlogs & sprints
- Retrospectives of previous sprint at the start of each new sprint

The Results

- World class flight search (beating competitors in objective tests)
- Unique summary & low fare calendars
- Built-in usage tracking & reporting
- Back-office interface with flexible controls
- High performance API broker engine
- Out-of-the-box operational monitors
- Extraordinarily LEAN service delivery
- Smooth transition from project to product

Fare alert: Washington, DC (WAS) to Fort Lauderdale (FLL) from \$126 Roundtrip, Including Taxes

Fly.com™, a new site by Travelzoo®, continuously searches and scouts hundreds of airline sites and travel agencies all over the internet for the cheapest deals. Here are the lowest fares we have recently found:

1) Pick departure date

October \$132	November \$126	December \$126	January \$150
Sun 29 \$233	Mon 30 \$179	Tue 1 \$150	Wed 2 \$128
Thu 3 \$149	Fri 4 \$159	Sat 5 \$132	Sun 6 \$132
Mon 7 \$126	Tue 8 \$126	Wed 9 \$133	Thu 10 \$143
Fri 11 \$132	Sat 12 \$132	Sun 13 \$132	Mon 14 \$126
Tue 15 \$126	Wed 16 \$132	Thu 17 \$119	Fri 18 \$245
Sat 19 \$229	Sun 20 \$175	Mon 21 \$210	Tue 22 \$215
Wed 23 \$250	Thu 24 \$250	Fri 25 \$278	Sat 26 \$220
Sun 27 \$264	Mon 28 \$223	Tue 29 \$202	Wed 30 \$178
Thu 31 \$149	Fri 1 \$169	Sat 2 \$199	Sun 3 \$199

2) Pick return date

December \$126						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
\$132	\$132	\$132	\$132	\$132	\$132	\$132
\$132	\$132	\$132	\$132	\$132	\$132	\$132
\$132	\$132	\$132	\$132	\$132	\$132	\$132
\$132	\$132	\$132	\$132	\$132	\$132	\$132
\$132	\$132	\$132	\$132	\$132	\$132	\$132

fly.com beta See the world. Search on Fly.™

Refine Results

Austin (AUS) to London (LHR)
18/12/2009 to 26/12/2009
1 traveller
[Modify or start new search](#)

Stops

- nonstop
- 1 stop \$925
- 2+ stops \$1308

Flight Time

Leave take off landing
take off: 5:40a - 5:55p

Return take off landing
take off: 6:20a - 4:30p

Airlines

Cabin Types

select all clear Best

- Economy only \$925
- Premium Economy only \$925
- Business only \$3189
- First only \$3189

Allow multiple cabin types?

Price

\$925 to \$12042

Trip Duration

10h 55m to 25h 35m

Stopover Duration

40m to 13h 35m

19 Lavover airports. Exclude?

Summary List Matrix

This view shows a snapshot of Economy and Premium (business or first) fares. Use the filters to the left to refine your search results, or click on the links below for more details from each airline. To see a list of all flights, [click here](#).

Economy (USD)	Premium* (USD)	Airline	Results
\$925	\$3189	Continental Airlines	168 results
\$1026	\$3211	Multiple Airlines	12 results
\$1086	n/a	Delta Air Lines	4 results
\$1112	\$3612	American Airlines	150 results
\$1113	n/a	United Airlines	50 results
\$1206	\$5045	British Airways	24 results
\$1308	\$3669	Air France	7 results
\$1373	\$3740	bmi	16 results
\$1532	\$11502	Lufthansa	110 results
\$1951	n/a	Northwest Airlines	3 results
\$2468	n/a	KLM Royal Dutch Airlines	2 results
\$3023	\$5913	Iberia	30 results

* Best price with business or first class seating. The lowest price in each column is displayed in green.

fly.com beta See the world. Search on Fly.™

Round Trip One Way

From
Austin, TX - Austin-Bergstrom Int (AU)

To
London, United Kingdom - Heathrow

Include Nearby Airports

Depart
18/12/2009 Anytime

Return
26/12/2009 Anytime

Travellers 1 **Prefer Non-stop**

Compare Sites (in new windows)

TerminalA ebookers.com

Search

Recent Searches

- Austin (AUS) to London (LHR) 18/12/2009 - 26/12/2009
- Austin (AUS) to Cancun (CUN) 18/12/2009 - 26/12/2009

Welcome to Fly.com

Fly.com is a new travel search engine. We invite you to:

- Search multiple sources for the best airfare
- Easily view, sort, and filter results
- Book directly with travel suppliers
- Learn more [about us](#)

Product ideas or bugs found? Send us [feedback](#).

Major Achievements

- Fly.com is able to handle a sustained load of 40,000 searches per hour with 99.8% availability
- Fly.com functionality delivered with less cost & faster than competitive solutions:
 - 6 months to deliver working system that was stress tested, and then new features added to meet & beat the competition
 - Less than 1 year to develop & release what competitors had taken 2+ years to achieve
 - Compares prices from hundreds of airlines & online travel sites with just one user search. Integration of 12+ distinct information providers in real-time, aggregating all the data received, stored & made available asynchronously
 - Links to hundreds of external sites with over 30 types of parameter formatting & integration methods
- Competitive differentiation:
 - Fly.com remains to this day the first and only air metasearch site, offering a complete real-time view of prices for all cabins and our unique integrations of low fare calendars with travel deal offers from Travelzoo.

Summary: Key Success Criteria for the Fly.com Project

- “Lean” was actually a plus – had we more money and time we might have used a traditional approach and missed the mark
- “Agile” was critical – both as a methodology (daily SCRUM stand-ups, 2-week sprints, etc) and in OutSystems’ specific instantiation:
 - “The platform is the methodology” - rich development paradigm with Embedded Change Technology; ability to expose & control all web services; inherent tracking of code state & changes; ability to play through multiple scenarios etc.
 - Operational monitoring, logging, tuning counters that normally would have taken years to create & tune came “free” with OutSystems Platform
- “Aligned” attitude & aptitude:
 - A strong partnership between business users & engineering. The chief business sponsor for the project was the CTO
 - Partnering with OutSystems gave us a vendor who developed a deep understanding of Agile Application Lifecycle management AND ability and desire to learn our business and industry.