

Search at speed: the key to conversion

By **James M. Miller**

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The need for speed and accuracy

Setting the bar for speed and accuracy changes every day, what's good today is not good enough tomorrow. Consider Wi-Fi: a couple of years ago, consumers were given Wi-Fi in the airport; now they complain if there's no Wi-Fi on the plane. As far as consumers are concerned, access to superfast broadband should no longer be a privilege – it's considered a human right!

For online travel agencies (OTAs), speed matters - it's been proven that there is a direct correlation between speed and conversion rates. A few seconds' delay is enough to create a frustrating user experience that leads to site abandonment. And with repeated speed delays, consumers will give up unless they're extremely committed to completing the task. Optimizing speed is therefore vital for operating in the online space.

Research shows that speed is even more fundamental in the mobile channel. Moreover, this channel is becoming increasingly important within the travel industry. A Travelport forecast predicts that within three years, 70% of transactions will originate on our platform through mobile devices. Travelers are more comfortable adopting self-service and mobile technologies, so it's no surprise that mobile will account for the majority of global online travel sales in the future. This is crucial for OTAs - serving both corporate as well as leisure travelers.

The need for speed and accuracy is a major challenge when trying to garner the attention of consumers searching for flights. Despite being only a click or two away, it's very difficult to convert searches into bookings. Faster search reduces one element of the friction that stands in the way of OTAs and traveler conversion.

Speaking of conversion, the opportunity in the travel industry is huge, particularly among mobile users. Air travel growth is up in recent years, and most consumers now carry smartphones, especially while they travel – seemingly searching for flights 24/7. The criticality of catering to mobile users is evidenced by how Google began ranking websites based on mobile friendliness in 2016. And recent studies show the importance of delivering air search content effectively to smartphones!



About the author

In his role as Vice-President Search Technologies at Travelport, James leads the team charged with evolving Travelport's global air search capabilities. James and his three teams of software engineers are dedicated to algorithmic efficiency, performance, data science, and content enhancement in Travelport's air search service.

James has held several key roles during his 17 years with Travelport, including Director of Software Delivery where he supervised six teams of software engineers dedicated to delivering new feature development, production support, content accuracy, customer engagements, and optimization of results for Travelport's air search service. Prior to that Jim was Principal Software Engineer responsible for lead design and development in search.

Outside of work, James is married with a daughter and is an accomplished musician.

Perfect storm makes it difficult to grab attention

Many challenges face OTAs as they vie for travelers' attention. To begin with, digital travelers searching online expect simplicity and a frictionless experience. Consumers are also loading up more apps than ever before—studies estimate there are currently more than 60,000 travel apps available, leading quickly to app fatigue and app saturation.

With texting, instant messaging, email, phone calls and website searches—sometimes going on all at once—the window to capture the attention of digital travelers is preciously narrow. And the explosion of low-cost mobile technologies now enables consumers to be online anytime, anywhere. Combine all this with the rising number of airlines, flights and airfare options around the globe, and it's the perfect storm.

At the same time, as more-and-more permutations and computations take place for each online air search, the conversion rates of online travel agencies are plummeting. Consumers now bounce across multiple travel-fare sources, aggregators and search engines. They may end up viewing hundreds of different flight options.

To solve this challenge and eliminate consumer frustrations, OTAs must apply relevant technologies to profile travelers and to get to know their preferences. Achieving this level of personalization will allow OTAs to apply search parameters that are most likely to return results that prompt consumers to book flights.



The search technologies that drive enhanced personalization

The online environment adds a layer of difficulty for OTAs to get to know individual travelers shopping for flights. As such, it's especially difficult to entice the traveler to share the type of information that helps narrow down the search.

But content personalization, automation, artificial intelligence and machine learning technologies along with mobility and the cloud are all bringing the OTA industry closer to that ideal state. Tailored, accurate and relevant flight and airfare information can now be delivered fast.

Getting to this ideal search result state is critical — research indicates the vital role of delivering personalized, tailored results quickly when consumers search for flights online.²

Why is smartphone website performance key for OTAs?

By 2019,

70%



of transactions will originate on our platform through mobile devices

In 2016,

56%

of U.S. smartphone users abandoned mobile transactions

In that same year, abandoned mobile transactions in the retail space resulted in

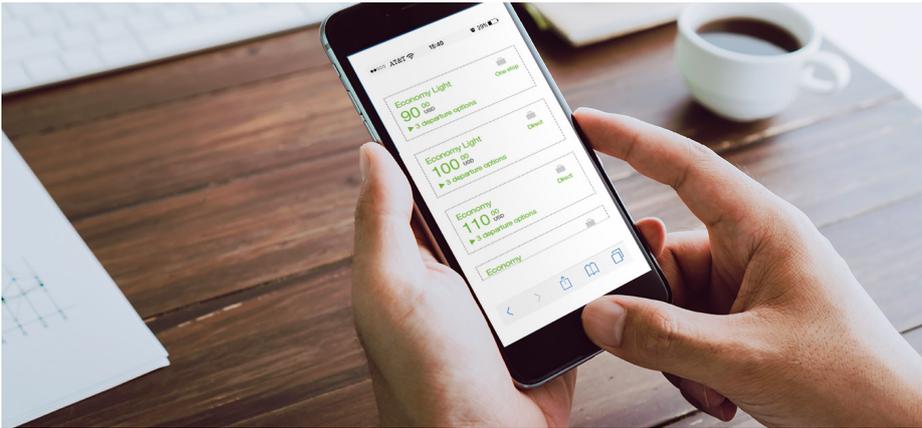
\$25 billion

in lost revenues

Optimized mobile experience plays key role

In addition to leveraging content personalization, automation, artificial intelligence and machine learning technologies, it's important for OTAs to optimize the mobile experience. Asking smartphone users to scroll through hundreds of flight choices will not hold their attention.

Fast, accurate and relevant search results thus become an absolute necessity. The key technology in play on smartphones is the API—the application programming interface. By configuring search-engine APIs to conform to mobile users, OTAs can deliver the right information, quickly and at the right time, irrespective of the devices consumers use.



An API optimized for mobile devices makes flight searches fast and easy. It also accelerates response times and provides the right content by connecting directly to search-engines rather than going through unnecessary network infrastructures.

OTAs can also deliver message sizes that are a lot smaller. This further improves the delivery speed over the Internet as well as the mobile-carrier networks used by consumers. Optimized APIs also support pagination and asynchronous streaming results.

Pagination helps make use of the limited shelf space on a mobile screen to only display a few results at a time. The traveler can use a “More” or “Next” button to get the next set of small, but relevant results. The trick is to find the balance between not enough content and too much - and this can be managed through spacing out content across multiple screens, with the best and most relevant content appearing first.

Another great way for OTAs to capture the ever-fleeting attention of travelers is to make use of the typical “waiting” screen. This should occur after the traveler clicks “Search” and before the first results begin to display. Rather than a spinning clock, why not return a few fast and convenient search results while the full result set populates? This technology is called asynchronous search, and it can make a big difference between engagement and abandonment as travelers wait for their search results to appear.

Finally, configuring search upfront through the use of personas and profiles that can then be leveraged dynamically through the API. This will also lead to more relevant results and higher conversion rates.

Tailored searches increase bookings and reduce response times

Through the application of tailored search parameters, OTAs can create generic search rules based on their opinion of what their travelers want—as shown in the two case studies below:

flygpoolen

Flygpoolen, one of Sweden's largest privately-owned travel industry companies, has the experience to optimally position airline content to create traffic on its website. However, the agency needed to easily control content and adapt search responses to metasearch providers, which is key since content and conversion vary across the channel. By utilizing channel-specific search rules from Travelport, Flygpoolen gained the ability to tailor search requests and customize content for smartphones. Gaining this capability and transferring the knowledge of internal experts over to the search rules allowed the agency to increase bookings 100% in its primary market.

FlightNetwork®

With more than two-million customers, **FlightNetwork** is one of Canada's largest online travel agencies. The back-end of the agency's airfare search engine generates a staggering number of searches—about 15,000 per minute—which makes it challenging to deliver accurate and relevant air content. Travelport's personalized search technologies enabled FlightNetwork to dramatically reduce its response time to any request, which is particularly helpful during unexpected spikes in traffic and search volumes. If the look-to-book ratio with a particular airline is too high, FlightNetwork can immediately add search rules to offset the situation and reduce irrelevant traffic in a matter of minutes.



Creating the personalized experience today's consumers demand

Many OTAs are already leveraging the flexibility to set parameters that render online air searches based on their internal expertise. The online travel search industry is now setting its sights on technologies that will enable OTAs to analyze consumers' real-time online behavior and their previous airfare purchases in order to fine-tune search results even further.

Techniques like machine learning and predictive analytics will lend themselves well to further optimize these types of searches. And as the capabilities across these functions continue to evolve, OTAs can improve their ability to deliver search results faster, with more accuracy and greater relevancy.

Given all the searches that take place, moving the conversion needle even just 1% will have a huge impact on return on trip. It's all about presenting on-target content according to what consumers want—and making sure it's delivered fast so they stick around. Achieving this mission will enable OTAs to create the personalized experiences that today's consumers demand while also improving air-search conversion rates.

Why is it important to deliver on-target info that hits the sweet-spot?

79%

of customers dissatisfied with website performance are less likely to buy from that site again

64%

of mobile users expect search result pages to load in less than four seconds

47%



expect pages to load in two seconds or less

40%

of consumers abandon pages that load in over three seconds

5.7 seconds

is the average load for travel sites

Any delay is harmful — a one-second lag translates into a

7% reduction in conversions

¹ Jumio, "Mobile Abandonment by Industry", 2015

² SearchEngine Watch, "How speed affects your site's performance," 2016

To find out how Travelport helps OTAs drive more personalized experiences for online consumers searching for flights by delivering fast, accurate and relevant results, visit www.travelport.com/platform/search

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Redefining travel commerce