icarus

Communications & Digital Technology Industries Committee
ABA Section of Antitrust Law

Spring 2011

Contents

The Economics of Google's Acquisition of ITA Software

Stuart Gurrea
gurrea.s@west.ei.com

Gloria Hurdle
hurdle.g@east.ei.com

Economists Incorporated[1]

On July 1, 2010, Google Inc. ("Google") and ITA Software, Inc. ("ITA") announced an agreement for Google to acquire ITA for $700 million.[2] On April 8, 2011, the Department of Justice ("DOJ") announced that it would allow the proposed acquisition subject to certain conditions. DOJ filed a complaint with the District Court for the District of Columbia ("Complaint") and at the same time filed a proposed settlement ("Final Judgment").[3] The deal combines the most popular general Internet search engine with a leading provider of technological solutions for organizing and facilitating access to flight information, or as DOJ refers to it "independent airfare pricing and shopping systems ("P&S Systems"). This merger is a non-horizontal merger that does not involve firms offering competing services.[4] While many users of online travel sites ("online travel intermediaries" or "OTIs") begin their search with Google,[5] currently Google does not provide the search P&S functions provided by ITA. Google, however, plans to develop a travel website that will offer comparative flight search services.

---

1 Dr. Gurrea and Dr. Hurdle are Vice Presidents at Economists Incorporated (www.ei.com). Dr. Gurrea specializes in applied industrial organization and has consulted on airline economics. Dr. Hurdle has testified in a number of airline matters and co-authored a report on airline Global Distribution System rules.

2 http://investor.google.com/releases/2010/0701.html.

3 http://www.justice.gov/atr/cases/google.html.

4 In other words, the merger is likely to be reviewed under the 1984 Non-Horizontal Merger Guidelines as well as other considerations.

5 http://www.fairsearch.org/wp-content/uploads/2010/12/New-Members-Join-FairSearch-Coalition-Urging-DOJ-Challenge-to-Google-ITA-Dec-13-20101.pdf.

ITA was founded in the mid-nineties by computer scientists from MIT.[6] ITA develops technology solutions for the travel industry, and provides products and services to major airlines (Alaska Airlines, American Airlines, United Airlines, and Virgin Atlantic, among others), to travel meta-search companies ("Metas", such as FareCompare and Kayak), to online travel agents (OTAs, such as Orbitz), and to consumers directly.[7] DOJ was particularly concerned about OTI's access to ITA's QPX airfare pricing and shopping engine and the InstaSearch product that it is developing.[8] From DOJ's perspective, ITA provides a "critical input" to the provision of online travel services.[9]

Google, also founded in the mid-nineties, develops Internet search technologies and offers online targeted advertising. Google also offers "cloud computing" whereby companies and individuals can access computer applications (e.g., for email, word processing, maps, and spreadsheets) from Google's computers via a web-based system without actually installing the applications onto their own computers. Google maintains the application, updating it and making it available to all users.[10] These cloud computing capabilities may become more significant for the online travel industry as cloud platforms are adopted.[11]

---

6 http://www.itasoftware.com/about/history.html.

7 ITA's products include the QPX software tool, which is used by airlines and travel distributors. "QPX™ effortlessly searches – at a billion combinations per query – fares, schedules, and availability." (http://www.itasoftware.com/products/shopping-pricing/qpx.html). Another is ITA PSS, which is ITA's next-generation passenger services system. Needle is a tool used to organize and publish data on the web, and OnTheFly™ is an airfare shopping mobile application. http://www.itasoftware.com/about/history.html. Its FareCompare service allows passengers to find the lowest fare based on selected criteria. For example, the passenger can use this tool to obtain the lowest fare for a particular city pair for each day of a given month.

8 "ITA's InstaSearch is an experimental proof of concept designed to allow travelers without specific plans to quickly see a variety of options for possible destinations, dates and travel times." Cara Kretz, ITA's VP of Corporate Communications, at http://www.tnooz.com/2011/04/11/news/ita-software-works-on-instasearch-and-is-open-to-hotels-cars-and-ancillary-services/ .

9 Complaint, p. 2.

10 http://www.google.com/corporate/tech.html.

11 Airlines are increasingly adopting virtual infrastructure environments. In the short run, however, the trend is towards an adoption of private cloud services. Airlines have cited privacy concerns as justification for their reluctance to rely on third-party providers.

The proposed transaction is of particular economic significance because it concerns the multibillion online travel industry – the largest segment of e-commerce.[12] While the two companies offer different services and are not in direct competition, concerns have been raised – primarily by OTIs (e.g., Kayak, Travelport, Expedia, and Microsoft Bing Travel) – about the negative effects the deal will have on competition. Generally, concerns over acquisitions between non-competing firms stem from the potential that a dominant position in one market can be leveraged to other markets. In this case, DOJ's main concern is that Google's acquisition of a "critical input" to the provision of travel search would enable Google to foreclose access to competing travel search providers.[13]

Given Google's large share of online search,[14] competition agencies have carefully scrutinized its attempts to acquire other companies. For example, Google's proposed advertising agreement with Yahoo! (a horizontal competitor) was blocked on the grounds that the two firms accounted for most of the antitrust relevant market and that the agreement would reduce competition in the search advertising business.[15] In a similar vein, Google's bid for online coupon site Groupon may have fallen apart over concerns about antitrust scrutiny.[16] Notwithstanding this scrutiny, Google has succeeded in acquiring a variety of providers of online services, including companies offering advertising and online payments. For example,

---

http://searchcloudcomputing.techtarget.com/news/1515692/Aviation-industry-avoids-the-public-cloud.

12 In July 2010 U.S. online travel spending reached $8.2 billion. http://www.comscoredatamine.com/2010/09/travel-ecommerce-spending/. Online travel sales were predicted to account for more than half of US retail e-commerce in 2010. http://www.emarketer.com/Reports/All/Emarketer_2000672.aspx.

13 Complaint, p. 2.

14 Google's share of searches among the core search engines in December 2010 was estimated to be 66.6 percent. (ComScore, U.S. DIGITAL Year in Review 2010, February 2011 at 14).

15 According to the US Department of Justice, the agreement would have allowed Yahoo! to rely on Google to sell ads to be placed on Yahoo!'s search results, replacing a significant portion of the ads that otherwise would have been sold through its own Yahoo! advertising platform. DOJ alleged that Google and Yahoo! had a combined share of 90 and 95 percent in the internet search advertising and internet search syndication markets respectively. http://www.justice.gov/atr/public/press_releases/2008/239167.htm.

16 http://www.businessweek.com/technology/content/dec2010/tc2010124_281295.htm.

recently the U.S. Federal Trade Commission cleared Google's acquisition of DoubleClick Inc.[17] and mobile-ad company AdMob.[18]

A. The Online Travel Industry

The travel industry continuously generates a wealth of information, including data on flight schedules, airfares, and seat availability. Airline travel information is largely a result of airlines' decisions about where, when, and at what prices to fly. This is a dynamic set of information, changing continuously as airlines try to maximize their revenue by adjusting their capacity, schedules, and pricing.

A number of companies – among them ITA – specialize in developing technical solutions (P&S Systems) to organize, analyze, and distribute this information to make travel data accessible to consumers. Prior to the appearance of online travel agencies, companies known as Global Distribution Systems (GDSs) handled computer reservations for multiple airlines and provided search capabilities to travel agencies. Subsequently, software tools developed by the GDSs were integrated into websites to facilitate consumers' access to travel information.[19] ITA's search method permits airlines and travel agencies to offer search capabilities online without using a GDS.

Flight travel information is currently made available to consumers online through several channels. Meta-search sites ("Metas") offering flight comparisons, such as Kayak.com or Microsoft's Bing.com, provide travel search tools that facilitate consumers' flight selection

---

[17] The FTC's examination of the Google-Double Click transaction included an assessment of the likelihood that the "transaction may allow a dominant seller of one product to harm competition in the market for a related complementary product." The FTC concluded that "the evidence failed to show that DoubleClick has market power in the third party ad serving markets" and thus there was no evidence of likely competitive harm. http://www.ftc.gov/opa/2007/12/googledc.shtm.

[18] In clearing the Google-AdMob deal, the FTC stated that "although the combination of the two leading mobile advertising networks raised serious antitrust issues, the agency's concerns ultimately were overshadowed by recent developments in the market, most notably a move by Apple Computer Inc. – the maker of the iPhone – to launch its own, competing mobile ad network." http://www.ftc.gov/opa/2010/05/ggladmob.shtm.

[19] For example, a GDS, SABRE, provides the software for Travelocity. ITA currently offers consumers direct access to some data. http://matrix.itasoftware.com/.

decisions.[20] From the meta-search site, consumers are directed to OTAs such as Expedia, Orbitz, or Travelocity, or to airline websites such as AA.com, Delta.com, or United.com to complete their purchases. Consumers may also by-pass the Metas and search travel industry data directly at OTA sites or at airline websites.

Google's current role in online travel is primarily limited to providing general ("horizontal") search.[21] It has not yet entered the "vertical" travel search business whereby a customer with a specific itinerary or travel plan can search for fares. Unlike Metas (e.g., Kayak, Bing Travel) that offer customized travel searches to access fares and other travel information over multiple websites including OTAs and airlines, Google primarily directs consumers conducting travel-related searches to OTIs (Metas and OTAs) and to airline websites without regard to any fares or availability. Google's current search capabilities do not include travel comparison information among its results. This contrasts with Microsoft's Bing search site, which offers the option to conduct travel specific searches, obtain travel comparison results, and obtain information on predicted trends on flight fares.

Through this acquisition, Google hopes to expand its expertise in general search to develop travel-specific search tools to access and display airline data provided by ITA. This extension from general search (horizontal) to specialized travel search (vertical) would represent a direct new source of competition to Kayak.com and Bing.com in their provision of travel search tools. As is the case at existing sites that do not sell airline tickets, if Google does not enter the business of booking airline tickets, consumers who access travel information at Google would be directed to online travel agencies and airlines to book travel.[22]

These potential changes would occur at a time when other developments in the industry also are likely to result in structural changes that will reshape its competitive landscape. American Airlines wants Orbitz to adopt American's direct-connect reservation technology that books directly with the airline, which would permit American Airlines to avoid paying fees to

---

[20] Microsoft began providing travel search with the acquisition of Farecast, an airfare pricing comparison tool that also used a predictive algorithm to recommend when to purchase a ticket. http://techcrunch.com/2008/04/17/microsoft-acquires-farecast-for-115m/#.

[21] To a lesser extent, other online services offered by Google (e.g., Google Maps) have a role in online travel.

[22] Although Google has indicated it currently does not plan to offer booking capabilities, adding the ability to make bookings to the search tools offered by Google would put Google in direct competition with airline booking sites and OTAs such as Expedia, Orbitz, and Travelocity.

GDSs.[23] This push by airlines reflects their desire to gain control over the reservation and purchase process. American Airlines's proposition has led Orbitz and Expedia to remove American Airlines from their searches and Sabre Holdings (a privately held company that includes the Sabre GDS and Travelocity) to threaten to downgrade American Airlines' position in its listings.[24] A combined Google-ITA could offer an alternative to reliance on GDSs, with airlines sharing data with Google, travel searches being completed at Google, and passengers then being directed to the airline, bypassing traditional GDSs and, potentially, online travel agencies.

B. Potential Effects on Competition

As expected, DOJ's regulatory review of Google's acquisition of ITA was motivated by concerns over detrimental effects that the transaction may have on competition in the affected markets and ultimately on consumers. If the transaction leads to the acquisition of market power in any of the markets affected by the transaction, consumers could face higher prices or lower quality. DOJ's complaint, settlement, and competitive impact statements, however, failed to discuss any potential benefits to consumers associated with the transaction that might offset competitive harm. Nevertheless, the fact that DOJ entered into an agreement that permitted the acquisition to go forward may signal DOJ's recognition of the overall benefits of the transaction.

The Google-ITA merger may very well be beneficial for consumers. Once acquired by Google, ITA may be able to improve the products and services it provides consumers, especially through improvements in travel search; for example, being acquired by Google might hasten ITA's development of a hotel-search capability. If ITA's customers (e.g., OTI's and airline sites) have access at competitive prices to any improved technology that results from the acquisition, they would likely view favorably a transaction that promises to facilitate or improve consumers' travel searches and increase the volume of online bookings. Furthermore, if Google offers an integrated search and booking service, consumers could benefit from more transparent fare offerings, which could allow them to find lower prices or enhanced service.

---

23 http://www.pcmag.com/article2/0,2817,2375900,00.asp#.

24 Travelport owns Orbitz and also three reservation systems –Galileo, Apollo, and Worldspan. If Orbitz were to adopt American Airline's technology, travelers would still be going through the Orbitz site, but Orbitz's parent company would no longer collect fees through its reservation systems for travel on American Airlines. Similarly, Expedia would stand to lose fees collected through its own reservation system. The Department of Transportation sent a letter to Sabre, Amadeus, Travelport, Ltd., Orbitz, Travelocity, and Expedia, stating that they must notify customers if their displays are biased or face possible enforcement action. http://www.bloomberg.com/news/2011-02-14/sabre-expedia-warned-by-u-s-against-bias-in-flight-displays.html. On April 12, 2011 American Airlines filed suit against Travelport and Orbitz alleging exclusionary conduct.

From Google's perspective, this acquisition could offer consumers better ways to access the data offered by ITA and improve overall travel-related searches by combining Google's technology and ITA's software. Google has stated that it does not plan to sell tickets but would direct consumers to airline or OTA sites to make a purchase.[25] As such, Google's entry into travel search would represent an additional source of competition to Metas that may benefit consumers. Strengthening travel search competition may be particularly significant in light of ongoing changes in the distribution of tickets brought on by American Airline's desire to bypass the GDSs.

The central concern in a transaction like this is that acquisitions between non-competing firms may allow a dominant position in one market to be leveraged to acquire or enhance market power in related markets, with the effect of raising prices or lowering quality to the detriment of consumers. The analysis of competitive harm focused on ITA's P&S "market" and Google's future participation in the "flight search market."

This theory of competitive harm—that Google might be able to leverage ITA's market power—could arise if ITA has a dominant position in its market segment. ITA's technology is often described as the best in terms of travel search capabilities. Developing or obtaining comparable search capability without violating ITA's intellectual property could take considerable time and resources. Several competitors in fare search (including Expedia, Kayak, Sabre Holdings and Microsoft) opposed the deal, and their opposition appears to reflect this theory of harm.[26] If ITA has a dominant position in the supply of technical data solutions, ITA potentially could contribute to Google's dominance in the provision of travel search by restricting its supply of data tools to Google's competitors in travel search. Some current purchasers of ITA's software and services are concerned that their current fees to license ITA software may increase, that they may not have access to new enhancements to ITA's software, or that their purchase agreements may not be renewed. They may also fear that Google's ownership of data residing on ITA's computers that has been obtained from ITA's customers could give Google access to sensitive competitive information and an unfair competitive advantage.

---

25 http://www.google.com/press/ita/.

26 Some opponents to the deal state, "Acquiring ITA Software would give Google control over the software that powers most of its closest rivals in travel search and could enable Google to manipulate and dominate the online air travel marketplace. The end result could be higher travel prices, fewer travel choices for consumers and businesses, and less innovation in online travel search." http://www.fairsearch.org/wp-content/uploads/2010/12/New-Members-Join-FairSearch-Coalition-Urging-DOJ-Challenge-to-Google-ITA-Dec-13-20101.pdf.

This theory of competitive harm turns on the analysis of ITA's market position in the provision of search technology solutions. For Google to succeed in foreclosing competition in online flight search, ITA would need to have a position of dominance: Its competitors would have to depend on ITA's products to compete effectively. If this is the case, Google may gain a dominant position in travel search not by competitive means but by limiting where consumers can access such travel search information. In addition, Google must have an incentive to engage in foreclosure, rather than marketing ITA's services to existing and future competitors. It must be more profitable for Google to withhold ITA's services rather than offering them to others at competitive rates.[27]

DOJ concluded that Google/ITA would have the incentive to weaken its travel search competitors because "increased profits from driving customers to its new travel service from rival OTIs will likely outweigh any lost profits from reduced licensing revenues from OPX." (Complaint, ¶38) These incentives are supported by DOJ's conclusion that there are no adequate existing or potential substitutes to the QPX system. Assessing this theory also requires evaluating the use that travel sites make or could make of alternatives to ITA such as Sabre, Travelport, Amadeus, or Expedia's own Best Fare Search.[28] DOJ, in its complaint, noted that some OTIs that are owned or partially owned by Expedia or Travelport do not use the P&S system of their parent, but rather license ITA's QPX because of its superiority. Thus DOJ concluded that "[a]fter acquiring QPX, Google would have the ability and incentive to foreclose competing OTIs' access to QPX and thereby weaken the ability of its rivals to compete." (Complaint, ¶29).

Even if ITA currently holds a dominant position, however, there may be constraints on Google's ability to leverage that dominant position. First, given ITA's current licensing agreements, disadvantaging other users would require the termination of existing licensing terms, a refusal to renew licensing agreements or offer licensing agreements to new users, or the offering of unfavorable licensing terms (including lower quality products) to Google's rivals in

---

[27] See European Commission, Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52008XC1018(03):EN:NOT. ("Essentially, the merged entity faces a trade-off between the profit lost in the upstream market due to a reduction of input sales to (actual or potential) rivals and the profit gain, in the short or longer term, from expanding sales downstream or, as the case may be, being able to raise prices to consumers.").

[28] Expedia developed a fare search program at about the same time as ITA. Vayant and Europe's Everbread also are developing fare search capabilities. http://www.tnooz.com/2010/05/10/news/if-google-reins-in-ita-software-would-expedia-ride-to-metasearch-rescue/.

the provision of travel search. Second, companies could begin providing alternatives to ITA. Examples of such competitors may include Everbread and Vayant. Third, Google might not find such a strategy profitable, compared to alternatives such as licensing the software and enhancing its advertising revenues.[29] Nevertheless, DOJ found that Google could refuse to renew contracts or enter into contracts at less favorable terms, or degrade the speed or quality of QPX offered to competitors and that it had the incentive to do so.

In response to these concerns, the Department of Justice sought to preserve competition in the flight search market by imposing licensing requirements on Google and thereby maintaining access of competing OTIs to the QPX P&S system.[30] In particular, The Department's proposed Final Judgment requires Google to license ITA technology (QPX and InstaSearch) to Google's rivals in travel search at commercially reasonable and non-discriminatory rates.[31] Implementation of this type of remedy comes with challenges, including the determination of the licensing price, which should be competitive but not onerous to the licensor. In addition, by vertically integrating, Google eliminates the "double marginalization" that occurs from purchasing from an independent vendor, while competitors would pay the (higher) market price. Another challenge is determining whether the technology being licensed is the most advanced product or if, instead, it puts the licensee at a disadvantage.

The Final Judgment puts DOJ in the position of determining "reasonable rates," which DOJ in the past had been reluctant to do. The Final Judgment uses existing contracts as a starting point and allows competitors to negotiate extensions that are fair, reasonable, and nondiscriminatory compared to the terms of existing QPX agreements as of the date of the Final Judgment. Future "ordinary course upgrades" during the term of the agreements will be offered to competitors at the same price as Google uses for its own customers. The same version of QPX must be offered to competitors as is offered to Google's customers. Finally, Google must continue to spend at least as much on research and development and maintenance of QPX as it

---

29 Online advertising may also be the reason that Google has stated it will not become an OTA and begin booking flights. Google potentially could become a one-shop stop where consumers could complete their travel searches and purchases. This would put Google in direct competition with OTAs for travel bookings. As one analyst explains, "[W]hy would the company risk all that higher-margin advertising revenue from online travel companies and suppliers, which invest heavily in keyword marketing?" http://www.breakingtravelnews.com/focus/article/google-ita-acquisition-what-lies-ahead/.

30 http://www.justice.gov/atr/public/guidelines/205108.htm#N9.

31 Orbitz recently renewed its contract with ITA through 2015. http://phx.corporate-ir.net/phoenix.zhtml?c=212312&p=irol-newsArticle&ID=1525967&highlight=Google.

did in the prior two years.[32] Additional licensing requirements apply to ITA's future InstaSearch product. There is no guarantee in the Final Judgment that InstaSearch Service will prove commercially useful for customers. In addition, Google may develop products, service, or technology exclusively for its own use.

The Final Judgment also provides for arbitration of disputes, requires Google to develop a website with forms for submitting complaints, prohibits Google from entering into an agreement with an airline that restricts the airline's right to share information with other parties unless the airline enters into such an agreement with other OTIs, prevents tying of QPX or InstaSearch to other Google products, and requires a firewall to protect confidential data.

The licensing terms of the agreement, however, do not solve the problem of pricing for new contracts after five years, nor would it solve the "double-marginalization" issue. In addition, the optimal terms of this type of remedy, including scope and duration, depend on the structure of the market. For example, if market entry is likely, access to ITA's technology should be required only for a shorter period. DOJ limited the duration to 5 years, which suggests that DOJ expects alternatives to QPX or InstaSearch to be available within that time period.

A second theory of competitive harm stems from Google's share of online search. To the extent that Google has a dominant position in online search, Google may leverage it to gain an unfair advantage in travel search. The European Commission's investigation of Google's search tactics focused on this issue, namely: Does Google use its dominant position in search to lower the ranking of unpaid search results from other providers of specialized (vertical) search? The European Commission's investigation of Google's search tactics concerns this behavior. According to the EC, "the Commission is investigating whether Google lowered the page placement of unpaid results of services with which it competes, such as price comparison or specialized search, and placed its own services higher to shut out competition." [33]

In the context of flight search, if companies offering flight search tools to consumers continue to purchase ITA's products or obtain them from competitors, they may be concerned that Google's search results might display its competitors in a less visible part of the search page – or at least Google might have incentives to manipulate competitors' search results if Google offers competing services. Currently, consumers searching on Google are directed to meta-search companies that offer flight information across multiple websites. Potentially, search results generated by Google for these meta-search companies could be displayed less

---

[32] There are exceptions. For example, the amount may be reduced it Google's third-party licensing revenue from QPX declines.

[33] In addition, "The commission will also investigate allegations that Google lowered its Quality Score for sponsored, or paid, links of competing search services." http://online.wsj.com/article/BT-CO-20110208-704805.html.

prominently or ranked below Google's own services. This concern is premised on the notion that companies depend on internet traffic directed by Google, i.e., that Google accounts for a significant portion of the traffic accessing travel websites.[34] If providers of flight search are not able to compete effectively, consumers may be harmed because they have fewer search alternatives and pay higher prices.

The resolution of the European Commission's investigation on Google's search-related conduct may pave the way for addressing specific concerns related to travel search. For example, the Commission may issue an order that will shape Google's business conduct by requiring it not to disadvantage specialized search competitors in the ranking of general search results. Such limitations on Google's conduct could mitigate related concerns raised in the Google-ITA transaction (but only if the EC's order is applicable to the United States as well as Europe).

From a competition policy perspective, the relevant question is whether the changes to the competitive landscape in flight data organization and flight search associated with the Google-ITA transaction are likely to be detrimental to consumers. Addressing this question requires not only understanding the current role of the merging parties in the markets in which they participate and how these relate, but also requires assessing the transaction in the context of a changing industry.[35] As noted above, as airlines, OTAs, and GDSs redefine their role in the online travel industry, the structure of the industry will also change.

34 While Google has about a 66% share of online search, it is estimated that more than 30 percent of all search engine traffic to online travel sites comes from Google. http://www.fairsearch.org/wp-content/uploads/2010/12/New-Members-Join-FairSearch-Coalition-Urging-DOJ-Challenge-to-Google-ITA-Dec-13-20101.pdf.

35 For example, decreased use of GDSs affects both online and brick-and-mortar travel agents, who rely on GDSs for a portion of their revenue. In addition, analysis of the transaction must consider the effect on pricing and access to the raw data from the airlines.