Practice Article

The future of online travel

Received (in revised form): 29th September 2010

Ben Vinod

Ben Vinod serves as Chief Scientist and Senior Vice President at Sabre Holdings. Before rejoining Sabre in 2004, he was Vice President of Airline Solutions, responsible for pricing and yield management.

Correspondence: B. Vinod, Chief Scientist & Senior Vice President, Sabre Holdings, 3150 Sabre Drive, Southlake, TX 76092, USA

ABSTRACT This article provides a perspective on the key factors that have influenced the exponential growth of online travel over the past decade. Online travel is fiercely competitive and the landscape continues to rapidly evolve across transaction processing and media. Key decision support initiatives to ensure relevancy, enhance customer loyalty and improve site profitability are also reviewed.

Journal of Revenue and Pricing Management (2011) 10, 56–61. doi:10.1057/rpm.2010.41;
published online 5 November 2010

Keywords: online travel agencies; supplier sites; customer centric; content; leisure; corporate travel

INTRODUCTION

Over the past decade, online bookings have grown in leaps and bounds. Online markets in the United States, Western Europe, Japan, Australia, New Zealand and Singapore have matured over the past decade. According to Forrester Research,¹ US online travel bookings will increase by 8.1 per cent each year to \$153 billion through 2014. In contrast, countries in South East Asia like Vietnam and Indonesia are in the very early stages of adoption. Emerging markets, such as China and Malaysia are rapidly embracing online travel. India, where the economy is predominantly cash based, is rapidly changing with the burgeoning middle class who are not averse to using credit cards and book travel online. With the maturity in the western markets, growth in online travel bookings is shifting overseas to emerging markets in Asia Pacific and Latin America.

The online landscape is highly competitive with online travel agencies (OTA), supplier websites, tour operators, consolidators, meta search and corporate. The OTAs that have

witnessed the highest growth rates are those selling simpler products, such as only the hotel sites, but this will change as market demand grows to address all components of travel with its associated complexity.

As the economy recovery gains momentum, site traffic is expected to grow. However, customer acquisition costs will also grow, with increases in costs for advertising and paid search. Competition will be tough for a variety of reasons – the large OTAs will continue to penetrate secondary markets with merchant hotel rates, meta search engines such as Kayak will divert traffic to both OTAs and supplier air and hotel sites.

Negotiating group rates for air travel has traditionally been viewed as high cost due to the labor-intensive sales cycle of accepting a group and negotiating the contract. In an effort to reduce group handling costs, self-service automation with online group e-Commerce solutions to accept and manage group bookings, bundle partner products and alternate payment methods to provide a full-service

experience for group customers is a key trend to manage group bookings. A group self-service portal can also support Global Distribution System (GDS) agency requests for seats from an airline. In this scenario, the eventual ticketing will be on the originating GDS request.

With the broad adoption of 3G (broadband wireless), mobile has become the third screen alongside the desktop and the laptop. Business travelers now use smart phones to find local attractions, get navigation assistance, have access to OTAs and supplier sites, read user reviews, and access social networking. Over 2000 travel-related mobile applications are available in the market today.

Besides convenience and the bargain hunting mentality of online customers, several factors that have contributed to the growth in online travel are outlined below.

Unparalleled transparency

The Internet has offered customers unparalleled transparency into schedules and fares offered by suppliers. A growing number of customers believe that booking travel online fulfills two primary needs – convenience and the ability to find the best value for their travel needs.

Consumer demographic

Over the past decade, there has been a significant growth in the tech-savvy online buying population. Major contributors to this trend are the 'Generation Y' population born between 1978 and 2000. These consumers grew up in the Internet era and see it as part of their environment rather than as new technology.

Consumer generated media

Social networking with consumer generated media (CGM), as a source of travel research, has changed travel consumption patterns and become mainstream. There are several categories of web-based communities that have promoted interactivity, collaboration and

sharing among users. Websites that focus on traveler reviews such as TripAdvisor, IgoUgo, and RealTravel are influential. Hotel reviews available on OTAs such as Travelocity, Expedia, Orbitz, Priceline and hotels.com are growing to be more important than brand in influencing bookings. Online travel journals or travel blogs, such as Lonely Planet and Frommers, are popular. Finally, there are sites that are focused on building communities and CGM around travel, such as Yahoo! Travel's Trip Planner and TravelMuse. Online shoppers are influenced by CGM in the 'dream' and 'plan' stages of travel. According to online market research firm Compete Inc, 71 per cent of consumers are influenced by CGM and two-thirds of travelers prefer consumer reviews to confirm a decision, or to decide between their top considerations.²

Supplier driven push for leisure traffic

In an effort to reduce product distribution costs, promote brand recognition and interact directly with customers, travel suppliers have aggressively promoted direct bookings through their websites with a combination of web-only fares, frequent traveler credits and partner incentives. The emergence of low cost carriers (LCCs), who use direct distribution as the primary channel for selling their product, has also contributed to the growth in online bookings.

OTAs – parity and comprehensive content

Web supermarkets serve as a one-stop shop for air, hotels, car rental and cruise lines. Customers are comfortable with the transparency offered by the OTAs with competing airline schedules and available fares; user rating, star rating, selling room rates and accurate description of hotels by destination market. In addition, with the elimination of service fees in 2009, OTAs have parity on total price with the supplier sites. They have seen a surge in booking volumes beyond planned growth,

probably because of consumer shifts from the supplier sites.

Travel policy compliance and the growth of online managed business travel

The recent economic downturn forced corporations to reevaluate their travel policies and maintain a high adoption level for online travel bookings to enforce compliance with corporate travel policies. Although there is growing acceptance that there are very few air trips that cannot be booked online, booking compliance for hotels continues to be challenging due to specific geographic needs and group rates for conferences. Some companies have tougher mandates for increasing compliance to realize savings. For example, agencies may be instructed not to take reservations over the telephone if the trip can be booked online. In emerging markets, the rising cost of labor has also contributed to the accelerated adoption of online travel.

DECISION SUPPORT FOR ONLINE RETAILING

Primary challenges faced by online agencies are offering competitive products, gaining customer retention/loyalty with an enhanced customer experience, revenue growth, operational cost reduction through automation and ultimately profitability. The future success of the OTAs and supplier websites will depend on their ability to operate with a lower-cost model, create targeted offers and services based on a deep understanding of local trends and consumer behavior. Online retailing is multifaceted and the core areas where advances in algorithms, statistical analysis, revenue management techniques and decision support can support a competitive travel site is summarized below.

Air shopping

Air shopping has critical business challenges for OTA's and travel agencies on multiple

fronts – shopping efficacy, functional capabilities, performance and cost. Shopping efficacy has several dimensions – advances in schedule- and fare-led algorithms for low fare search performance *and* diversity of options presented based on carrier, schedule and service to maximize conversion rates. As price may be the main driver in purchasing online travel, diversity is important for consumers to understand the fare differences between itineraries in making a decision. In addition, caching algorithms for instant access to accurate availability data is required to minimize price jumps, a configurable global application based on customer segment and fast response times. Functional capabilities mandate a broad, rich feature set for users that include alternate dates, weekend and calendar shopping, branded fare products, attribute based shopping, alternate cities, promotional shopping and a large number of options (for example, 400–1000) for each shopping request. Performance and cost effectiveness with a scalable architecture and low operating costs are critical, because shopping volumes have grown disproportionately to air bookings.

Overcoming hidden fees

With the proliferation of hidden airline fees for a range of ancillaries, such as checked baggage, itinerary changes, advanced seat selection, lounge access, food and WIFI; an air shopping response based on the base fare is inadequate because consumers do not know the total price for a trip before making a booking. Virtually all media coverage has publically come out in support of transparency for consumer shopping for air travel. To provide transparency to consumers, Sabre was the first to launch Air Total Pricing (Dooley, 2010) in September 2010 based on publicly available ancillary fee data from airlines filing their fares via ATPCo (Airline Tariff Publishing Company) Optional Services and an internal database. With this capability, travel management companies and OTAs can shop for specific ancillary services based on their

preferences and frequent flyer status and determine the total price. The true cost of an itinerary minimizes consumer angst about the range of new fees imposed by airlines.

Marketing efficiency

Marketing is one of the primary cost drivers of the online business. OTAs require sophisticated econometric models to determine the effectiveness of marketing spend by line of business (air, hotel, car, package, cruise and rail bookings and so on). For example, the return on investment (ROI) can be measured for cable TV, network TV, radio, newspaper, magazines, online, paid search brand keywords, paid search non-brand keywords, e-mail and brand. With data available on spend versus bookings, specific questions that can be answered are the optimal marketing budget to achieve a specific objective, the optimal mix of online and off-line spend to achieve the target booking volumes and determining the optimal allocation of the budget by market (for example, country).

Text mining of consumer generated media

Social networks influence purchasing decisions and there is growing evidence that mining the text data of user reviews can provide important insights and also serve as an effective sales tool. Interpreting consumer sentiment by evaluating traveler reviews is in its early stages of evolution. Interpreting how consumers rate their experience can be used to create quality scores for brand, flights, hotels and so on. For example, a traveler review describing a hotel as 'incredible' should receive a higher score than 'good' or 'nice'. Text mining of CGM can also influence paid search (Search Engine Marketing) decisions on bidding for keywords.

Availability cache

Air shopping volumes have grown disproportionately to bookings over the past decade. The challenge for OTAs and supplier sites is to

deliver accurate content (availability and prices) to customers across air, hotel and other travel products against the backdrop of exponential growth in shopping volumes. Investment in caching algorithms is an area of active research to ensure the products displayed are bookable. Using cached availability enables response time to be competitive for shopping requests.

Shopping queries

Advanced planning applications for airlines have relied heavily on bookings or ticketed data. However, an untapped data source is customer queries as they interact with a supplier website or an OTA. In the past decade, shopping request volumes have outpaced bookings. For example, if an acceptable volume of queries are received for a destination where a hotel chain does not have a property, it is an important piece of information for future growth. By developing performance metrics, this data can be used to influence key airline marketing planning functions such as capacity planning, fare management, revenue management, marketing programs and frequent flyer redemptions.

Vacation planning

Over the past few years, OTA's that focus on a single line of business – hotels, air, cruise and so on have grown the fastest. However, from a customer perspective, planning a holiday can be complex and challenging. A holiday may include air travel, hotel stays, car rental, planned activities and meals on a budget. Traditional travel agents have an edge to put together complex itineraries. Data aggregation can make online vacation planning a reality. Detailed online vacation planning micro sites by smaller niche players or niche brands created by major players will become reality.

Advertising revenue management

Online media spend is growing rapidly worldwide. With the growth in media revenues,

OTAs view media as an attractive business adjacency for the transaction business. The travel publisher market is crowded with social networking sites (for example, facebook), reviews/ratings sites (for example, TripAdvisor, IgoUgo), price comparison sites (for example, Kayak, mobissimotravel) and transaction sites (for example, OTAs) resulting in significant competition for advertiser media spend. Advertising revenue management is the process of optimizing the screen real estate and consists of three primary components. Capacity forecasting is the first step to determine available real estate based on the expected number of queries that would be submitted by consumers. Capacity can also be created with new web pages based on demand for advertising slots. Display media pricing with CPM (cost per thousand impressions) and CPC (cost per click) is the second step based on advertiser spend, competitor pricing and expected return on investment. B2B pricing in this context is complex because it should be based on total package profitability and lifetime value of the advertiser. The third step is the traditional demand supply match where the publisher provides rules to the ad server (for example, DoubleClick) for placement of the ad that is relevant and maximizes revenues.

Today, the OTA's operate the transaction and media businesses largely independently. To avoid conflicts and exploit synergies, the total revenue – media and transaction – should be maximized when the screen real estate is displayed during shopping, booking and checkout.

Hotel shopping and dynamic ranking of pages

For hotel shopping requests, techniques can be applied to determine the order in which hotels should be displayed for a destination market. The objective of optimal ranking is to improve site traffic conversion rates and generate incremental revenues. Consumer choice models can be calibrated from historical

hotel shopping sessions to display hotel search results that maximize the probability of selecting a property on the first page. This approach also improves customer loyalty because properties displayed are relevant to the search request and a function of the hotel selling rate and popularity.

Optimizing air screen display

Measuring screen quality enables an OTA or supplier site to determine how competitive they are in converting shoppers into bookers. During the shopping process, online customers do not automatically select the lowest priced itinerary. The generation of options that provide diversity expressed by quality of service (for example, non-stops, single connect, double connect, interlines), fares and carriers on both the outbound and inbound schedules play a critical role in the selection process. Screen quality can be measured with a calibrated choice model that determines the probability that a displayed itinerary will be selected. Inputs into this choice model would be fare and schedule attributes (nonstop, elapsed time, time of day and so on). Measuring screen quality offers a continuous improvement to algorithms developed to not display either the wrong options or a large number of options on the website that does not improve conversion rates. Itineraries can also be ranked based on the utility score from the choice model to maximize conversion rates.

For supplier sites, optimizing the screen displays also has great potential that remains to be tapped. For example, altering the screen display order for each shopping request to re-direct demand from high load factor flights to low-load factor flights will reduce displacement of passengers and generate incremental revenues.

CONCLUSIONS

Online leisure and corporate travel continues to grow. The challenge is not growth of

bookings, but increased fragmentation in the market with limited loyalty. To attract and retain profitable customers, OTAs and supplier websites will continue to focus on web analytics, understand consumer preferences and feedback to create targeted relevant offers. To remain competitive in the marketplace, there will be a greater investment in advanced decision support to maximize revenues and conversion rates with every customer interaction.

NOTES

- 1 Erick Schonfeld 'Forrester Forecast: Online Retail Sales Will Grow to \$250 Billion By 2014', 8 March 2010.
- 2 'Y Consumers make a big Splash (part 2)', Australian Business Marketing Services, 6 May 2008.

REFERENCE

Dooley, G. (2010) Sabre launches air total pricing. TravelAgent Central, 15 September 2010.