# The search for and purchasing of an airline ticket

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#### **Abstract**

Passengers are increasingly trying to optimise their search and purchasing of airline tickets by becoming familiar with the relationship between the time of purchase and the ticket price. This study investigated passengers' perceptions of the best time to purchase tickets to gain a price advantage and their preferred distribution channel. A web based survey of airline passengers in South Africa was done and it was found that airline websites are the preferred channel when searching for airline tickets and passengers perceive a price advantage when booking airline tickets further in advance of time of departure. The results also indicate that passengers are not willing to spend a substantial amount of time when searching for airline tickets in order to obtain the best price.

Keywords: Airline distribution, consumer purchase-decision, price advantage, South Africa

#### 1 Introduction

The fluctuation in the prices of airline tickets through different distribution channels is a well-known phenomenon and is ascribed to airlines' revenue management systems. Most studies on revenue or yield management have focused on its benefits to airlines (Anderson & Wilson, 2003; Jerath, Netessine & Veeraraghavan, 2010), with little being done on passenger perceptions of the most favourable time to purchase tickets and which channel they prefer to use. Airline passengers' buying behaviour has been looked at by Diggines, (2010), Gupta, Su and Walter (2004) and Yu (2008) but most research has focused on general consumer search theory (Armstrong, Vickers & Zhou 2009; Koch & Cebula, 2002; Öörni, 2003; Stigler, 1961; Zhang, Fang & Sheng, 2006) relating to optimal strategies that consumers use to make purchase decisions when faced with alternatives in the market. Studies on consumer perceptions of variable pricing, based on supplier revenue management systems, have focussed mainly on fairness issues and mostly in the hotel environment (Rohlfs & Kimes, 2007). Lii and Sy (2009) looked at the Internet as a distribution channel (although not specifically for airlines) and customer perceptions, emotions and responses to Internet differential pricing, but again focused on fairness issues.

Optimum purchase time and most effective channel have not been well-researched, particularly in the airline environment and the purpose of this study is thus to add to the limited body of knowledge. The study investigates passenger perceptions of the most favourable time to purchase an airline ticket, the preferred channels and the amount of time consumers are prepared to search for the best price.

# 2 Airline pricing and distribution channels

Airline pricing is based on yield management. The simplest definition of yield management as stated by Kimes (2002:22) is to "sell the right inventory unit to the right customer at the right time for the right price." It guides the decision of how to allocate a limited capacity of inventory (e.g. airplane seats or hotel rooms) to the current demand in such a way as to maximise profits (Kimes, 2002). Padhi and Aggarwal (2011) refers to yield management as a strategy or an array of tactics that are employed in order to manage the process of allocating inventory to the demand of end-users in such a way as to maximise revenue. According to Choi and Kimes (2002), in their overview of revenue management in the hotel industry, too little attention has been paid to the revenue-management implications of using various distribution channels in demand-based pricing. The same problem seems to exist in the airline environment. Airline passengers, have multiple distribution channels through which transactions can be made. These channels include supplier websites, a variety of online intermediaries and traditional travel agents with a number of studies showing the increasing migration of consumers towards purchasing online (Koo, Mantin & O'Connor, 2009). Studies have shown that time of purchase is important. Passengers seeking the optimum time to purchase an airline ticket in order to gain a price advantage may postpone the decision to purchase if they believe the price will be discounted in the future (Lazear, 1986). Anderson and Wilson (2003) found that passengers who understand pricing strategy and have access to information may decide to postpone purchasing airline tickets if they believe that cheaper options will become available in the future.

One of the most cited statements in the theory of consumer search is that "a buyer (or seller) who wishes to ascertain the most favourable price must canvas various sellers (or buyers)" (Stigler, 1961). In their search, consumers incur costs which Bakos 1997:1677) defines as "any costs incurred by consumers in order to find the appropriate seller and purchase a product/service". In earlier studies of conventional markets (not online), the main search cost incurred by consumers was considered to be the time spent searching (Bloch, Sherrell & Ridgway, 1986; Stigler, 1961). Bakos (1997) identified other costs such as transportation (to travel agencies and/or information centres), telephone calls, computer fees and magazine subscriptions. In the electronic marketplace Bakos (1997) found that time is also the main search cost, although an advantage of an electronic marketplace is that it reduces the total search costs, especially that of time. Öörni (2003) investigated the search costs consumers incur in the online environment when looking at travel services, more specifically flights, and contrary to Bakos' (1997) findings, this study indicated that passengers in fact spend *more* time searching for their perceived optimal airline ticket in the online

environment. However the search is more productive as it yields more results per time unit. Authors agree that time is an important search cost that consumers incur when looking for the appropriate need satisfying products and services and that consumers engaging in longer searches usually intend to purchase at lower prices (Bakos, 1997; Gupta *et al.*, 2004; Stigler, 1961).

In this study passengers' perceptions of the most favourable time to purchase an airline ticket, the channels which they use and the amount of time consumers are prepared to search for the best price is investigated.

## 3 Methodology

The target population of the study was airline passengers in South Africa who travel domestically for leisure purposes. Leisure passengers are generally more price sensitive than business travellers since they use their discretionary income for purchasing. The study was conducted amongst passengers of a full-service and low-cost carrier in South Africa with a combined database of 42 982 passengers being made available. Data was collected using a self-completion, web-based questionnaire. Due to the size and geographic spread of the population this method of data collection provided the most feasible way of reaching potential respondents. All passengers on the database received the questionnaire and a total of 1649 usable responses was realised, representing a 3.86% response rate. The responses were slightly dominated by female respondents (53%), with males making up the remainder of the sample (46%). Passengers indicating that they travelled on the low cost carrier amounted to approximately 24% with the rest being passengers on the full-service carrier.

### 4 Data analysis and results

The questionnaire covered consumer behaviour in terms of past flights taken and trips planned within the next six months. Three areas were covered in the questionnaire: channels used/planning to use for booking; time of booking prior to departure date; and amount of time spent on searching for the best price. The distribution channel accessed for the last flight taken by respondents delivered the following results. Seventy three per cent of respondents' last flights were booked through an airline website; while 10% booked their last flight through a retail travel agent. A total of 6% of flights were booked through alternative channels; such as retail outlets (for example household goods stores and theatre booking sites). Price comparison websites such as www.farecompare.com were used by 4% of respondents to book their last flights. The fact that the majority of respondents used airline websites to book their flights is in line with expectations as literature shows the ever increasing trend of airlines selling more tickets through their own websites than other channels.

In terms of the planned trip respondents were asked what their channel preferences were when searching for airline tickets for a domestic leisure trip. The results

indicated that 89% of respondents would use Internet (i.e. online) channels when planning such a flight, with only 0.36% of respondents preferring to use offline channels; 10.56% respondents indicated that they would use both Internet and offline channels when searching for such a flight. Of the 89.07% respondents that would use the Internet, 75.08% of respondents would use an airline's website. Twenty-one per cent (21%) of respondents who said they would use Internet channels indicated that they would use price comparison websites to plan such trips. This may reflect the increasing awareness that airline passengers have of the complexities involved in airline ticket pricing thus using channels which integrate such complexities into their search platforms (Yu, 2008).

The second category covered in the questionnaire related to passengers' perception of the optimal time to purchase an airline ticket to gain a price advantage. Respondents were asked about their last booking and provided with six options regarding when they booked their last tickets. These options covered fifteen day intervals starting at "0 to 14 days" and ending with "more than 180 days" in advance of departure date. The largest number of respondents (46.31%) indicated that, for their last trip, they purchased their tickets 0 to 14 days in advance of their departure date. The same options were given for future purchases. Table 1 reflects a shift in respondents' future purchasing behaviour as the largest group of respondents (30.41%) stated that the optimal purchase period would be 31 to 59 days in advance of their departure\

**Table 1.** Optimal period of purchase for a domestic, leisure trip in 6 months

	Previous behaviour (%)	Future behaviour (%)	
Period of purchase			
0 - 14 days in advance	46.3	9.7	
15 - 30 days in advance	24.9	24.8	
31- 59 days in advance	16.6	30.4	
60 - 90 days in advance	7.6	22.0	
91 – 179 days in advance	3.1	9.9	
More than 180 days in advance	1.6	3.2	
Total	100	100	

The results suggest that airline passengers in South Africa, when given the option, increasingly prefer to purchase tickets *further in advance* of their departures. When considering passengers' previous purchasing behaviour, a question was asked to ascertain the reasons for which passengers booked their tickets in the time frame that they did. Sixty six percent of respondents believed they would get the best price when they booked within the selected time frame, followed by personal convenience and seat availability. For future purchase behaviour, respondents were asked to rank what they believe the most important reasons for selecting an optimal time to book would be, where 1 = strongly agree and 4 = strongly disagree, the results are shown in table 2. Best price was ranked the highest (M=1.35) followed by personal convenience (M=2.56) and seat availability (M=2.85).

Table 2. The most important reasons for selecting the time of booking

	N	Mean	Mode	Std Dev
Best price	1634	1.35	1	.763
Personal convenience	1629	2.56	2	.977
Seat availability	1629	2.85	4	1.036
Peace of mind	1630	2.97	4	1.021

Respondents were asked about the amount of time they were willing to spend on searching for a domestic, leisure flight in order to obtain the best price. Most (66.77%) said that they would spend 0.5 to 1 hour searching, and 19.59% of respondents would spend 1.5 to 2 hours searching. This result suggests that more people are inclined to want to spend less time on the search for an optimal price.

### 5 Discussion

The main purpose of this study was to gain an understanding of when passengers think the optimal time to purchase an airline ticket is and which channels they use to do so. In terms of channel use, the results indicated that not only are Internet channels being used more, but airline websites are the preferred channel. What is possibly more important is that airline websites are preferred by passengers for future domestic leisure trips. Looking at the period of purchase, the results suggest that despite past purchase behaviours, airline passengers would prefer to purchase tickets further in advance of their departures. The results also indicated that airline passengers are not willing to spend more than two hours when searching for tickets in order to obtain the best price. This study provides some evidence that airline passengers are aware of the relationship between time of purchase, channel used and time spent searching for a price advantage. The results must be seen against the limitations of the study. The quationnaire was sent to all on the available database, thus the respondents were not randomly selected limiting the findings to the respondents of this particular study in South Africa. It does however, provides some indication of passenger perception of optimum time, distribution channel and search cost when purchasing an airline ticket and, as such, could form the basis of more in-depth studies in this regard. In general, airlines' efforts should be directed at finding ways to facilitate passenger's purchasedecision processes, especially the "information search" and "evaluation of options" phases as passengers are faced with a variety of alternatives. Due to the various alternatives that passengers are presented with in terms of the airline product; efforts should be directed at offering competitive prices further in advance, together with a strong communication of product features in order to differentiate themselves from competitors (Diggines, 2010; O'Connell & Williams, 2005). Moreover, time seems to be an important search cost for passengers in South Africa. Passengers are not willing to spend substantial amounts of time searching for "best price" tickets, which is contrary to Öörni's (2003) findings and more in line with Bakos's (1997) findings. Thus, managers may capitalise on this by ensuring airline websites are easily

navigable and more importantly, quick to produce options when consecutive search queries are entered.

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