FLYER'S CORNER: SOME SIMPLE TRUTHS ABOUT SCHEDULED AIR TRAVEL

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ABSTRACT

Airlines in a state of crisis need to take steps to ensure revenues keep coming in. Repeat business and eventually loyalty is critical in that respect. This paper considers airline customer buying behaviour and preferences and post-flight attitudes with a view to identifying what makes the air travel product more appealing to customers. A structured web-based purpose-designed instrument was used to collect travel and traveller data and perceptions and the findings are prioritised using a consensus decision making approach. A major issue is identified and a two-step model is developed to demonstrate its significance for airline customers' loyalty. Specific airline customer communications and other priorities and preferences are identified. In addition, it is found that airline customers have a number of complaints, many of which are not communicated to the airline, and it is demonstrated that these complaints impact on loyalty. It is therefore argued that airlines and researchers alike need to study customer complaints in relation to loyalty in greater detail. In view of both the economic situation in Greece and airline deregulation, this research is of significance to Greek airlines seeking to “tie” their customers and maintain market presence.

Keywords: Airline Customers, Satisfaction, Complaints, Loyalty

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1. INTRODUCTION

For a great deal of sectors, “crisis” is interpreted as a sharp decline in GDP or indeed spending specific to the sector. A “crisis” may be seen as the end of a business cycle, provided this is signalled by some prominent event or events. Depending on sector among others, it can be overcome in due course, aided by such initiatives as Keynesian approaches (Keynes, 1936; Woodford, 1999), or other government or corporate efforts to re-establish equilibrium.

For the aviation world and commercial airlines in particular, crisis may mean a sharp change in revenue or cost streams or volatility that may last from a few weeks to more than a year. These can have a multitude of originating factors. Reduced load factors of some duration, due to a broader economic “crisis” or downturn (with their impact exacerbated by the significant fixed cost element of aircraft leases, trained personnel payroll, slots rental and the like), fuel price volatility, industrial action, airspace disruptions (such as those that resulted from the Icelandic volcano eruption in 2010 or the World Trade Centre attacks in 2001) can all lead to a “crisis”.

A company’s typical response to a crisis is to minimise costs, followed by some efforts to maintain revenues. For airlines, this is where loyalty comes in. On the critical assumption that passengers have a real choice of carrier, and given that occasional travellers have been found to be significantly more price sensitive (Gomez et al., 2006), airlines need to strive to maintain the regular patronage of regular flyers. Indeed, to this precise end they have almost invariably devised some incentive programme and most have now joined an international alliance one of the primary purposes of which is to extend the reach of such programmes.

This paper builds upon the multi-step airline choice (Suzuki, 2007) and traveller perception, satisfaction and loyalty models (Gomez et al. 2006; Oyewole, 2001; Hess et al., 2007; Espino et al., 2008) literature to explore the real issues of concern to travellers. It is argued that there is a significant wealth of information on matters of interest to travellers (delays, luggage handling etc.) that can affect re-purchase and loyalty. This takes the shape of complaint material and appears to be understudied in terms of utilizing models for traveller behaviour. One or a series of specific negative travel experiences, it is argued, can act as a disincentive to repurchase or recommend an airline that can easily counterbalance costly positive actions such as price discounts or incentive programmes.
Section 2 considers the study's design, section 3 presents key passenger buying habits and perceptions, section 4 builds a customer loyalty model to demonstrate the concepts discussed and section 5 presents the study's conclusions and implications.

2. RESEARCH METHODOLOGY

To collect the data, a structured web-based purpose-designed instrument was used. It begins by collecting some general information about respondent's general profile and long distance travel behavior. The second questionnaire section asks about the airline travel offering, as perceived by the traveller, including her involvement in its production/consumption. The third section focuses on the respondent's last trip. This helps to sharpen information and perception recollections, an approach used extensively in the transportation literature (Ben-Akiva et al., 2002). The fourth section considers matters to do with the current economic crises. The last section collects socioeconomic control data identified by the literature as pertinent to air travel analysis (Dolan et al., 2006; Polydoropoulou et al. 2010). Most questions were either multiple choice or answerable on a 7-point scale (from -3: not at all to +3: completely).

The data was collected in May 2011 and 188 responses were received, essentially from within Greece. As can be seen from Table 1, a reasonably stratified sample was achieved according to a number of dimensions, except for a higher than average number of student traveller cases (48%). These are not necessarily all from the authors' research location base (i.e. the island of Chios) since only 8.5% of reported “last trips” landing or departing at Chios. Given sufficient controls, these were all maintained in the sample. With an average of 8 trips in the last year, respondents generally appear to be experienced air travellers, although most of them (62%) are not Frequent Flyer Programme (FFP) (incentive programme) members.

In the exploratory section of the study, tabulation based diagrams were used to aid concept presentation. To prioritise the issues to consider, a consensus decision making approach was employed, with people combining transport research skills, air traveller profiles and general business acumen singling-out those results that appear below. Tests were subsequently carried out to discern the robustness of results where named factors were ranked and the significance of any differences to the values attached to each studied.

In the explanatory section of the study, a two-step model is used to demonstrate factor interaction.
Table 1: Key Sample Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Percent (N. obs. 188)</th>
<th>Complaints</th>
<th>Percent (N. obs. 188)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>55%</td>
<td>Yes</td>
<td>13%</td>
</tr>
<tr>
<td>Female</td>
<td>45%</td>
<td>No</td>
<td>87%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-26</td>
<td>54%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27-40</td>
<td>23%</td>
<td></td>
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</tr>
<tr>
<td>More than 41</td>
<td>23%</td>
<td></td>
<td></td>
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<tr>
<td>Educational level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>66%</td>
<td></td>
<td></td>
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<tr>
<td>Master</td>
<td>27%</td>
<td></td>
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<tr>
<td>Doctoral</td>
<td>7%</td>
<td></td>
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<tr>
<td>Occupation</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Public Services</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private sector</td>
<td>30%</td>
<td></td>
<td></td>
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<tr>
<td>Businessperson</td>
<td>12%</td>
<td></td>
<td></td>
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<tr>
<td>Student</td>
<td>48%</td>
<td></td>
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<tr>
<td>Air Company (last trip)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aegean</td>
<td>40%</td>
<td></td>
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<tr>
<td>Olympic</td>
<td>27%</td>
<td></td>
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<tr>
<td>Trips in the last 12 months</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>8 trips on average</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>FFP membership</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Yes</td>
<td>38%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>62%</td>
<td></td>
<td></td>
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<tr>
<td>Monthly family income (cont.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;€1000</td>
<td>22%</td>
<td></td>
<td></td>
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<tr>
<td>€1000-€2000</td>
<td>16%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>€2000-€3000</td>
<td>18%</td>
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</tr>
<tr>
<td>€3000-€4000</td>
<td>18%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than €4000</td>
<td>26%</td>
<td></td>
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</table>

3. DATA ANALYSIS

3.1 TRAVEL BEHAVIOR AND ECONOMIC CRISIS

From the airline customers' views, the current economic crisis (in Greece) has affected both the demand for air travel and the price sensitivity of travellers. Experienced travellers (incentive programme members) exhibit those behaviours marginally less, as they report tougher time constraints and a lower transport mode substitution (Figure 1).

3.2 BOOKING

The front end of the air travel business has clearly moved to the e-business era. Some 94% of respondents use the web to inform themselves about available flights and fares while 53% use it to book a flight (Figures 2, 3). Interestingly, it is not young age that makes the “modern” traveller, with on-line buyers being on average older (at 33 years) than traditional buyers (at 29.5 years).
To the extent that e-booking can reduce airline costs and that extending it does not lead to reduced availability of more traditional ways of booking for those that need them, there is still ample scope for increasing the take-up of e-booking.

Subsequent research can look into ways of encouraging this, including dealing with price incentives, differential approaches to cancellations and ticket modifications, trust and confidence issues with regard to e-payments and other similar parameters (Papola and Polydoropoulou, 1996).
3.3 AIRLINE ADVERTISEMENT AND INFORMATION POLICY

Flyers feel that traditional advertising is inconsequential for services pertaining to a specific journey. Any impact should therefore probably be sought in brand profile building (Figure 4).

Passengers have clear and specific preferences on advertising communications. They wish to receive ticket offer information by email (75% overall and 90% for incentive programme members) and incentive programme information on their mobile telephone (88%) (Figures 5, 6).

Given that incentive programme information is generally not more urgent or critical than ticket offers, an explanation might be that programme members are prepared to allow a more “intimate” or close communication with their airline. Carefully designed such communications can logically be expected to positively impact loyalty among others.
3.4 CRITERIA FOR SELECTING AN AIRLINE TO FLY

Air travellers consider multiple factors each time they select an airline carrier (Polydoropoulou et al., 2007; Hess et al., 2007; Nako, 1992).

Interestingly, this research shows that incentive programme membership is ranked lower than even environmental footprint. This is likely the result of a moderately experienced (in terms of average trips per year or incentive programme membership) air travel study sample, as described in section 2, and the recent redesign of major Greek airlines’ incentive programmes to essentially reward only truly regular or premium class flyers, or in non-financial ways (eg. lounge access). If it takes some 25 low cost fares to accumulate incentive mileage sufficient for a 26th journey (equivalent to a 4% discount) and then fees and charges are still due, the discount may fall to under 3% or even 2% in some cases. Hardly an incentive to stick to a carrier and allowing
all sorts of factors such as specific ticket price, punctuality etc. to make the difference for a broad range of passengers.

3.5 SATISFACTION FROM AIRLINE SERVICES AND COMPLAINTS

Passenger satisfaction is a compound concept (Figure 7). There exists a very interesting combination of generally reported satisfaction (Figure 8) and a strong stream of airline reported and non-reported complaints (Figure 9).

![Figure 7: Ranking of factors affecting satisfaction](image)

Airlines are apparently leaving flyers content with overall service provision, the highest scoring factors being booking, welcoming on board and the courtesy of stewardesses, and the lowest scoring being price, food & beverages and on-board entertainment. The booking process, in particular, is an excellent example of how the sector can push forward on matters it sets its mind to (en bloc, as Ott (1993) found). A key component is automated reservation systems, which was one of the early tools airlines used to (perhaps forcefully) enhance customer loyalty with the onset of deregulation in Europe and elsewhere (Lee et al., 1996). This was seamlessly evolved to the e-business era with the advent of (cost reducing) e-booking and more recently and for limited circumstances, e-check in. Another example is the development of (the now omni-present) incentive programmes (Clemes et al., 2008; Miller, 1993). In both cases, the initiatives were taken in the early 1990s in response to deregulation and rising competition, so
one could anticipate that an increase in (market) pressures of various sorts might drive the
development of further satisfaction and loyalty seeking initiatives.

**Figure 8: Flyer's satisfaction from airline services**

![Bar chart showing various aspects of airline services satisfaction](chart1)

**Figure 9: Emphasis of complaints (% in terms of passengers who have complaints)**

![Bar chart showing emphasis of complaints](chart2)

The arguably unfinished state of this process then, perhaps so ad-infinitum, or indeed
management or other issues, may be among the reasons why, at the same time, travellers have
a significant number of concerns and complaints. Indeed, some 13% of respondents reported a
complaint about their last flight, this percentage obviously rising significantly if, say, data had been collected for the last 5 or 10 flights. Slightly more than half of those who had a complaint (55%) were experienced travellers (incentive programme members). Most interestingly, the majority of passengers with complaints (61%) did not bother to report them to the airline.

Customer complaints are personal. They can be voiced to company staff or even put on paper. They are also by their nature specific, much more so that “low satisfaction” is. This means they are to easier understand and, more importantly, set about to dealing with them, although as the data collected during this study suggests, they remain largely (61%) unreported and therefore outside the sphere of airline knowledge.

It was therefore decided to take this finding one step further and consider whether complaints affect customer loyalty. There is significant academic scope for research in this area, with current research carefully mapping complaints without linking them to subsequent subject behaviours (eg. Özlem, 2007).

4. A PRELIMINARY PARAMETRIC MODEL TO PREDICT CUSTOMER LOYALTY

This section presents a preliminary model developed for predicting a customer loyalty. A loyalty index is created as the outcome of a two-step process. In the first step a factor analytic model is estimated to produce a factor from two variables namely customer repurchase and recommendation to others. In the second step the fitted values of the loyalty index is used as the dependent variable of a regression model. Independent variables are travel characteristics (chosen airline company), satisfaction level (overall satisfaction, complaints) and socioeconomic characteristics (income).

The resulting model is as follows:

\[
LOYALTY = -1.860 + 0.459\times \text{Satisfaction} - 0.567\times \text{Complaints} - 0.329\times \text{Income} \\
+ 0.612\times \text{Aegean} + 0.374\times \text{Olympic}
\]

Table 2 presents the model's estimation results. The model's overall fit is moderate. However, the coefficients are statistically significant at a 95% level of confidence, while their signs are intuitively correct. Flyer satisfaction and complaints impact loyalty as expected (Fornell et al., 1996; Spreng, et al., 1995; Garow, 2010). “High” income has a negative effect on loyalty, possibly due to reduced time flexibility (time of flight determines airline), a different booking process (eg. through a secretary) or other factors. The airline each passenger last flew also re-
enforces loyalty provided it was a major one, perhaps on the basis of “once you will fly with us, you will always fly with us” and/or limited alternatives (for the 21 islands with airports, traveller choices are essentially a sub-hour flight or a multi-hour boat trip (Kitrinou et al., 2010; Polydoropoulou et al., 2011) while the market is big enough to support only a very limited number of airlines). In general, Aegean customers seem to be more loyal than Olympic Air customers compared to customers of all other airlines.

Table 2: Model Estimation Results

<table>
<thead>
<tr>
<th>Coefficient Names</th>
<th>Coefficient Estimates</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction (overall satisfaction) (7pt Likert Scale: -3=completely dissatisfied,..,+3=completely satisfied)</td>
<td>0.459</td>
<td>8.001</td>
</tr>
<tr>
<td>Complaints (1= yes, 0= o/w)</td>
<td>-0.567</td>
<td>-3.155</td>
</tr>
<tr>
<td>Income (Monthly Family Income more than €4000) (1=yes, 0=o/w)</td>
<td>-0.329</td>
<td>-2.64</td>
</tr>
<tr>
<td>Aegean (passengers who travelled with Aegean at their last trip) (1=yes, 0=o/w)</td>
<td>0.612</td>
<td>4.566</td>
</tr>
<tr>
<td>Olympic (passengers who travelled with Olympic at their last trip) (1=yes, 0=o/w)</td>
<td>0.374</td>
<td>2.495</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.860</td>
<td>-4.638</td>
</tr>
</tbody>
</table>

Statistics

<table>
<thead>
<tr>
<th>Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Observations</td>
<td>188</td>
</tr>
<tr>
<td>R-square</td>
<td>0.403</td>
</tr>
<tr>
<td>Adjusted R-square</td>
<td>0.387</td>
</tr>
</tbody>
</table>

Although the sample used in this research is not extensive, on the basis of the above there is evidence to suggest that customer complaints do have a predictive value for airline passenger behavioural loyalty, as satisfaction does. Moreover, the results obtained create several avenues for future research.

5. CONCLUSIONS

Airlines in a state of crisis need to take steps to ensure revenues keep coming in. Repeat business and eventually loyalty is critical in that respect. This paper considers airline customer buying behaviour and preferences and post-flight attitudes. Specific communications and other priorities and preferences are identified.

Analysis shows that the current economic crisis has affected both the demand for air travel and the price sensitivity of travellers. However, experienced travellers and incentive programme members exhibit those behaviours marginally less, due to tougher time constraints and limited travel mode alternatives.
Nowadays passengers seem to be familiar with the e-services that airline companies offer. The vast majority of the participants use the internet to be informed about flights and fares, while they are willing to receive ticket offer information by email and incentive programme information on their mobile telephone. Interesting is the fact that the participants who use e-booking and e-services are older than traditional buyers. Airlines should encourage more of their passengers to become members of incentive programmes in order to achieve a more close communication with them.

Concluding, it is found that airline customers have many complaints, many of which are not communicated to the airline, and it is demonstrated that these complaints impact on loyalty. It is therefore argued that airlines and researchers alike need to study customer complaints in relation to loyalty in greater detail. Such efforts may benefit from methodological approaches segmenting customers and/or providing value-added propositions based on the Delta Model (Hax et al., 2001) or the Rhombus Model (Litinas et al., 2010).

REFERENCES


