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Development of a Model of Airline Consumer Satisfaction

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Abstract

Previous research on perceptions, satisfaction, and attitudes regarding the major commercial air carriers in the United States has provided little more than an interesting descriptive “snapshot” of the average air traveler. Building upon 20 years of work with the National Airline Quality Rating, the present study attempts to move beyond basic descriptive information of air travelers to identify attitudinal patterns and relationships in the way consumers at varying levels of travel frequency view the commercial air industry. Development of such a model allows key players the ability to improve their understanding of the prime drivers and perceptions of passenger behavior. The modeling of attitudinal patterns and perceptions plays an important role in determining the need and priority, and potential consequences of such action. This study will exemplify the connectivity between subjective measures as reported by the survey respondents, and the formula driven weighted average that constitutes the Airline Quality Rating.

Keywords: Airline Passenger Survey, customer complaints, performance measures, DOT, airline improvement

1. The Airline Quality Rating (AQR)

Developed in 1991 by Drs. Brent Bowen and Dean Headley, the Airline Quality Rating (AQR) debuted as an innovative, objective method of comparing airline quality on combined multiple performance criteria. Two decades of data have since been reported and published. Prior to the AQR, there was no consistent method for monitoring the quality of airlines on a timely, objective and comparable basis. The introduction of the AQR resulted in a multi-factor, weighted average approach that had not been previously utilized in the airline industry. The outcome is a rating for individual airlines with interval scale properties that is comparable across airlines and across time.

The Airline Quality Rating is a summary of month-by-month quality ratings for U.S. airlines that have at least 1% of domestic passenger volume. AQR scores for the calendar year are based on 15 elements in four major areas that focus on airline performance aspects important to air travel consumers. Using the Airline Quality Rating system of weighted averages and monthly performance data in the areas of on-time arrivals, involuntary denied boardings, mishandled baggage, and a combination of 12 customer complaint categories, airlines' comparative performance for the calendar year is reported.

Elements considered for inclusion in the AQR rating scale were screened to meet two basic criteria; 1) an element must be obtainable from published data sources for each airline; and 2) an element must have relevance to consumer concerns regarding airline quality. Data for the elements used in calculating the ratings represent performance aspects of airlines that are important to consumers. This information is calculated monthly from US Department of Transportation statistical reports and reported annually in a resulting research monograph.

All of the elements are reported in the Air Travel Consumer Report maintained by the U.S. Department of Transportation. The Airline Quality Rating criteria and the weighted average methodology allow a focused comparison of airline domestic performance. Unlike other consumer opinion approaches that rely on consumer surveys and subjective opinion, the AQR continues to use a mathematical formula that takes multiple weighted objective criteria into account in arriving at a single, fully comparable rating for airline industry performance. The Airline Quality Rating provides both consumers and industry

watchers a means for looking at comparative quality for each airline on a timely basis, using objective, performance-based data. Over the years, the Airline Quality Rating has often been cited as an industry standard for comparing airline performance. With the continued global trend in airline operations alliances, the argument becomes even stronger for the Airline Quality Rating to be used as a standard method for comparing the quality of airline performance for international operations as well (AQR, 2011).

2. Airline Passenger Survey Background

In response to airline consumer disappointment in recent years, a new feature of the Airline Quality Rating was developed. On April 6, 2008, a new survey was launched to gauge additional subjective data from frequent travelers. Resulting data is aimed at providing the flying public a new perspective on airline travel. These consumer opinions serve as a supplemental validation of the AQR annual report.

Both the FAA and Congressional representatives are seeking legislative or regulatory changes to commercial air travel with the intent of improving customer satisfaction with the airlines. Additional key players which stand to benefit from this research include decision makers at air carriers, charter services, and those involved with the transportation of air passengers at a variety of levels.

The flying public has, in recent years, sought Congressional intervention to aid in the turmoil that the airline industry continues to experience. “The public is turning to Congress for action, and that’s why we have a member of Congress encouraging us to conduct further research” (Airline quality plummets, 2009) stated AQR co-creator Dr. Brent Bowen. Nebraska Congressman Lee Terry, a member of the Committee on Energy and Commerce, as well as a sponsor of Airline Passenger Bill of Rights legislation, responded by raising questions. Terry is seeking readily available data with a widespread base, stating “I’m sure many of my colleagues in Congress will be interested in this information.” AQR co-creator Dr. Dean Headley adds, “It’s no surprise that frequent flyers are disgruntled. All elements of the air travel experience are getting worse, and the price is going up” (Airline quality plummets, 2009).

The Airline Passenger Survey (APS) addresses this gap in passenger perception by retaining public opinion from frequent fliers. Through a series of relevant questions, attempts to move beyond basic descriptive information of air travelers provided by the annual Airline Quality Rating to identify attitudinal patterns and relationships in the way consumers at varying levels of travel frequency view the commercial air industry. It is the intent of AQR researchers that the collective voices of the flying public be heard. Survey data is to be shared with Congress and the Department of Transportation, among other organizations.

Since its official debut in 2008, AQR.Aero Inc.’s web-based survey, the Airline Passenger Survey, has been issued annually in conjunction with the release of the Airline Quality Rating. The APS is anchored on the AQR’s official web site, www.airlinequalityrating.com. Survey items gathered from the APS include information from the flying public on airline preferences, perceived passenger friendliness, proposed Congressional intervention, satisfaction with the flight experience, and other issues of critical relevance to passengers and industry leaders as it regards the U.S.-based airlines ranked in the AQR.

Airline Passenger Survey respondents are primarily U.S. residents who visited the website www.airlinequalityrating.com and participated in the survey. From February 2008 through January 2013, over 4,000 unique responses from airline consumers were collected. Thus far, this multi-year survey has revealed numerous significant findings regarding consumers’ opinions and perceptions of the airlines and their performance. This conceptual model of airline consumer satisfaction and the critical variables associated with it continues to develop within the framework of the variables comprising the Airline Quality Rating (Bowen, Bowen & Headley, 2010, April).

3. Airline Passenger Survey Methodology

Airline Passenger Survey elements developed via the utilization of rigorous scientific methodology, with the intention of capturing the most important data from passengers while reducing confusion or variability in comprehension of questions. APS items are a combination of demographic variables, categorical data, and Likert-type scale responses asking participants to evaluate statements regarding the current state of the airline industry. The selection of survey items was

based on a review of extant literature on the subject of air passenger satisfaction, current events in the aviation industry that are likely to affect the traveling public, and impending wide-reaching regulatory changes to the aviation industry.

Airline Passenger Survey questions are comprised of both open- and closed-ended questions aimed at gaining a better understanding of the current passenger environment. For example, respondents are asked about their opinions and feelings towards the new fee structure that largely includes a la carte pricing for checked baggage and other services. Passengers are then asked which of the four flagship aspects of air travel (arriving on time, no denied boarding, bags arriving with me, customer service) are most important to consider when booking a flight. Respondents are asked to select which airline is preferred and which is most passenger-friendly. Opinions are also sought as to whether air travel over the past year has improved, remained the same, or gotten worse. Finally, the survey inquires about the stress involved with traveling during the holiday season (Thanksgiving thru New Year's Day).

The APS is designed in such a way that allows data to be delineated among very frequent fliers (those who have flown more than 20 times in the past year) and those who fly less often. Results are also able to be differentiated between those who fly for business purposes versus those who are primarily categorized as leisure fliers. Face data such as gender is also obtained and assessed.

Once the survey has been completed, survey respondents are directed to both the current Airline Quality Rating annual report as well as other timely airline industry information.

4. Airline Passenger Survey Results

Detailed Airline Passenger Survey statistics have been published and are available at Purdue University's repository service website, e-Pubs. Data from 2012 is posted in .pdf format at <http://docs.lib.purdue.edu/aps/3/>.

5.1 Airline Passenger Survey 2012 Primary Findings

APS 2012 data indicate that, for the first time, Delta Airlines was viewed as the preferred carrier by the largest percentage of frequent fliers, with 16% indicating Delta as their preferred airline. Southwest Airlines lost this first –place standing as most preferred carrier for the first time since APS data was first collected in 2008, moving into a close 2nd-place position with 15% of frequent fliers preferring their service. However, Southwest Airlines continues to maintain its title as the friendliest airline, accumulating 35% of the votes. Unfortunately, the percentage of passengers who feel that no airline is the friendliest are the next largest group of respondents at 18%. Over the years, APS researchers have theorized that Southwest's declining performance in the AQR rankings may eventually contribute to a decline in passenger preference perception; this is the first year that the data has provided initial support for this theory.

Consumers continue to agree that customer service provided by the airlines is the number one priority when flying (42%), followed by on-time arrival (31%). Those who rated customer service as their top priority considered Delta Air Lines to be their airline of choice, but still chose Southwest as the friendliest airline of the group.

Air travelers have made clear their strong opposition to a la carte fees for added services, preferring higher fares to after-purchase added fees. In fact, such a la carte fees are the leading source of negative comments in response to the question, "What specific actions by the airline industry would encourage you to fly more frequently than you currently do?" (Bowen, Bowen & Headley, 2010). In addition, when asked, "I prefer a la carte fees on flights (e.g., for checked or carry-on bags, seat assignments, food, drinks, etc) to paying a flat ticket price that includes all components of the air travel experience" 65% of respondents oppose the a la carte fee structure (those who disagreed or strongly disagreed).

Service quality in other areas of airline operations were also assessed to determine which aspects of the air travel experience had the lowest customer service experience. Frequent fliers were quick to agree that security was the leading dissatisfier, attracting 35% of the votes. On-board experience and boarding process were also rated as dissatisfiers, capturing 17% and 13% of the votes, respectively.

Conversely, passengers noted that their on-board experience (36%) and ticket purchase process (27%) had the highest levels of personal satisfaction. Even though on-board experience captured a substantial number of votes as both the highest and lowest areas of customer service, many fliers noted that service quality has been largely inconsistent in the airline industry. Polarized service leads some customers to be delighted by their personal experiences while pushing others closer to frustration.

When asked whether this past year offered the best airline service in the last decade, 54% of respondents noted that disagreed or strongly disagreed with the statement, with another 29% neither agreeing nor disagreeing. In fact, 85% of respondents noted that air travel had either gotten worse or stayed the same over the past year. Only 15% of travelers felt that their airline experience had improved during 2012.

5.2 Airline Passenger Survey 2012 Secondary Findings

APS findings again revealed that the nation's regional air carriers uniformly fell at the bottom of the survey results with regard to consumer preference and perceived passenger friendliness.

Travel during the holiday season (Thanksgiving through New Year's Day) has been cited as the busiest times for air carriers; the media is filled with stories regarding poor customer service and long wait times at the airport. Respondents agreed with this: 70% indicate that travel during the holidays is much more stressful than travel during the rest of the year.

Can the Airline Quality Rating measure the success of leadership and management performance in the airline industry? When asked this questions, 60% of respondents agreed (or strongly agreed) that the AQR could be a measure of airline management quality. Of those who agreed, over 85% indicate that air travel had stayed the same or gotten worse in the past year.

5.3 Very Frequent Fliers

The APS revealed that those deemed very frequent fliers (those averaging more than 20 flights per year) made up 19% of total passenger respondents. The majority (91%) are men and were neither delighted nor dissatisfied with their on-board experience; instead, they were simply satisfied (59%) with the service. Frequent fliers also identified much more strongly with United Airlines (23%) and Delta Air Lines (17%) as their preferred carrier, with Southwest slightly lower at 13%.

5.4 Casual Fliers

Representing 44% of APS respondents, casual fliers fly one to five times per year. In addition, a large subset of this group indicates that they have no preference when choosing an airline (18%), but consider Southwest Airlines to be the most passenger friendly (36%). They also tend to feel more stress when traveling during the holiday season, with 63% noting that they either agree or strongly agree to feeling more stress during this time. On-board travel experience for these fliers was also positive, 81% reported having an experience that was satisfactory, excellent, or delightful.

5. Airline Passenger Survey Overall Consumer Rankings

Again, overall consumer rankings are available for public viewing at <http://docs.lib.purdue.edu/aps/3/>. A detailed statistical breakdown of information regarding preferred airlines is provided. Information is further delineated into network, regional and low-cost carriers. Data analysis may also be made by comparing the responses of frequent fliers and casual fliers. Airline-specific findings from AirTran to US Airways are also provided.

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