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Experiencing Finnair's new A350 - How service innovation can lead to a price premium

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Abstract

This study focuses on the customer experiences of air passengers travelling on the latest-technology aircraft currently available on the market, the Airbus A350. A questionnaire was conducted in cooperation with Europe's first A350 operator, Finnair, to study the customer experience of flying on this new aircraft. Altogether 1,404 responses were recorded. The questionnaire focused on the A350 as a service innovation as well as on 10 aspects that had been used by Finnair to communicate the enhanced customer experience of flying on this new aircraft. These innovations were: larger windows, better cabin air, new interior design, 20% increased fuel efficiency, lower cabin pressure, less noise in the cabin, ambient mood lighting, improved food services, better seats as well as improved entertainment systems. In addition to that we also used contingent valuation to test customer's willingness to pay a premium for flying on the A350. Our results showed that there is a significant amount of passengers that showed a willingness to pay a premium for flying on the A350 again. Further, we also detected that certain service innovations had enhanced the willingness to pay such as the improved entertainment system, better seats and less noise in the cabin. In addition to that, we also detected that the 20% increased fuel efficiency had played a significant role for the willingness to pay and that introducing such a new aircraft type can also have a positive effect on the brand image of an airline.

Introduction

Since the deregulation of the airline industry and the market entry of low cost carriers, competition has increased significantly (Baumeister, 2010). While the consumers have been enjoying lower air fares, this certainly has put pressure on the established carriers. Ever since have they been searching for new ways to justify their premium prices through their extended service offerings. One way to make the offering more appealing to the consumer is service innovation. As Victorino, Verma, Plaschka and Dev (2005) found, service innovation can justify a price premium. Nevertheless, so far the idea of using service innovation as a justification for charging a premium price has not received much attention in the airline industry. Therefore, this study set out to investigate whether service innovation can lead to a price premium among air passengers. For this purpose we conducted an online questionnaire among actual air passengers that have recently flown on Finnair's new Airbus A350. The A350 was introduced in mid-2015 and is currently regarded as the technologically most advanced and sophisticated aircraft in the market. It features vast amounts of technological innovations that have increased efficiency, reliability, safety and passenger comfort compared to previous aircraft generations. Finnair was the first airline in Europe, and the third worldwide, to introduce the Airbus A350 in late 2015.

Methods

In order to study whether service innovation can lead to a premium price in the airline industry we conducted an online questionnaire among actual air passengers that have recently flown on Finnair's new Airbus A350. The questionnaire was sent to 5,000 Finnair customers of whom we received 1,404 responses. For studying air passenger's willingness to pay we used contingent valuation letting passengers assume that they have to fly again on the same route with Finnair's A350 as during their previous flight. For this purpose we showed them four different ticket prices for a round trip in economy class, depending on their route. Two prices were below the average price, common on that route, and two prices above. As the prices were based on economy class round fares we only analyzed the answers of those passengers who had flown in economy class during their previous A350 flight. Those were in total 740 participants. In order to further study which of the service innovations of Finnair's new Airbus A350 are most appealing to air passengers, we asked the participants to rate those based on their past experience using 7-point Likert scales. We focused hereby on those 10 service innovations that had been used by Finnair to communicate the enhanced customer experience of flying on this new plane. These were: larger windows letting in more natural light, better cabin air through enhanced filtering system, new interior design, 20% increased fuel efficiency compared to the previous aircraft generation, lower cabin pressure, less noise in the cabin due to quieter engines, ambient mood lighting to simulate day and night, improved food services, better and more comfortable seats as well as improved entertainment through WIFI and larger personal screens. In addition, participants were also asked several questions about the overall satisfaction of flying with Finnair's A350 and what are their preferences when booking a flight using 7-point Likert scales. Finally, participants were asked to rate Finnair and 10 of its closest competitors regarding how environmentally friendly they regard those airlines using a 5-point Likert scale.

Results

The findings of the contingent valuation revealed that 22.48% of the participants showed a willingness to pay an above average price to fly on Finnair's new Airbus A350, would they have to travel on the same route again. The remaining passengers were not willing to pay the average price and preferred rather lower ticket prices in order to fly again on the same route with the Finnair's A350. Next we compared the stated satisfaction of both passenger groups with their recent Finnair A350 flight. A clear difference could be detected as those passengers who showed a willingness to pay more showed also a higher rate of satisfaction with 6.03 on the Likert scale while the remaining passengers scored only 5.55. Followed by that, we had a look at those 10 service innovations that were communicated by Finnair concerning the Airbus A350. Table 1 gives an overview of the ranking of those 10 service innovations both from the passengers that showed a willingness to pay a premium and the remaining ones. For the passengers that showed a willingness to pay a premium price, improved entertainment through WIFI and larger personal screens followed by better and more comfortable seats and less noise in the cabin due to quieter engines were the most important service innovations of Finnair's new A350. Ambient mood lighting to simulate day and night and larger windows letting in more natural light were the least significant improvements. For the remaining passengers better and more comfortable seats were the most important innovation followed by less noise in the cabin and improved entertainment through WIFI and larger personal

screens were only ranked third. Also among those passengers the mood lighting and the larger windows were ranked the least important. While the ranking of the service innovations differed slightly between the two groups, the mean values between the two groups were close to identical. The largest difference in mean values could be detected regarding the 20% increased fuel efficiency compared to the previous aircraft generation. Here the passengers who showed a willingness to pay a premium saw far more importance in the fact that the Airbus A350 is 20% more fuel efficient than its predecessor, the Airbus A340.

Table 1. Ranking of Finnair's A350 10 service innovations by passengers

Rank	Passengers willing to pay a premium		Passengers NOT willing to pay a premium	
	Product innovation	Mean	Product innovation	Mean
1	WIFI & larger PTV	6.18	Better seats	6.12
2	Better seats	6.15	Less noise	5.99
3	Less noise	6.06	WIFI & larger PTV	5.97
4	Better cabin air	5.79	Better cabin air	5.77
5	20% fuel efficient	5.60	Improved food	5.38
6	Improved food	5.42	20% fuel efficient	5.31
7	New interior design	5.18	Lower cabin pressure	5.14
8	Lower cabin pressure	5.02	New interior design	4.91
9	Mood lighting	4.80	Mood lighting	4.67
10	Larger windows	3.67	Larger windows	3.60

As the largest difference between the two passenger groups is related to the service innovation of increased fuel-efficiency, we further analyzed the attitudes of both groups regarding the environmental aspect of flying, in order to find out whether there are relevant differences that could play a role in the willingness to pay a premium price for flying on a more fuel efficient plane. This service innovation is also in this regarding interesting to study as it is the only one out of the list of 10 which cannot directly be felt by the passenger or enhance their comfort. Therefore, we asked both passenger groups how important particular aspects to them are that relate to the environment when booking a flight as displayed in table 2.

Table 2. Passenger's attitudes towards environmental aspects of flying

Statement: I prefer to fly with airlines that ...	WTP	Non-WTP
... use modern aircraft.	5.93	5.60
... have a positive attitude towards the environment.	5.23	4.93
... offer carbon offsetting.	3.73	3.29
... are testing biofuels.	4.26	3.85

The results in table 2 clearly indicated that those passengers who had shown a willingness to pay a premium for flying again on Finnair's Airbus A350 saw also much more importance in environmental aspects of flying. Finally, we asked the participants to rank Finnair and 10 of its closest competitors in regard to how environmentally friendly they perceived those carriers as shown in table 3.

Table 3. Ranking of airlines perceived environmental friendliness

Rank	Passengers willing to pay a premium		Passengers NOT willing to pay a premium	
	Airline	Mean	Airline	Mean
1	Finnair	4.76	Emirates	4.88
2	Lufthansa	4.75	Qatar	4.83
3	Emirates	4.70	Finnair	4.74
4	Qatar	4.66	Lufthansa	4.73
5	British Airways	4.57	SAS	4.70
6	SAS	4.57	Air France-KLM	4.60
7	Norwegian	4.54	British Airways	4.59
8	Air France-KLM	4.38	Norwegian	4.55
9	Air China	4.12	Air China	4.28
10	Turkish	4.12	Turkish	4.25
11	Aeroflot	3.55	Aeroflot	3.77

Table 3 indicates that those passengers who showed a willingness to pay a premium for flying on Finnair's A350 also ranked Finnair as the most environmentally friendly airline while Finnair didn't receive top scores from the remaining passengers.

Discussion & Conclusion

This study set out to investigate whether service innovation in the airline industry could lead to a premium price. The findings clearly indicated that there is a significant share of actual air passengers who are willing to pay a premium for flying again on a next generation aircraft whose service innovations they have already experienced before. While the innovations concerning the increased passenger comfort (improved entertainment, seats, less cabin noise) have been ranked the highest also the improved fuel efficiency has played an important role, especially for those passengers that have shown a willingness to pay a premium. The results have also further revealed that those passengers are paying more attention to environmental aspects when selecting an airline or flight. Finally results also showed that these passengers had ranked Finnair on top among its closest competitors in terms of environmental friendliness. It can therefore be concluded that service innovations in the airline industry through new aircrafts not only stimulate a willingness to pay a premium among a significant group of air passengers but, that the improved fuel efficiency not only means a saving potential for airlines but does also influence the brand image positively.

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