ANALYZING FACTORS OF IN-FLIGHT SERVICES OF GARUDA INDONESIA AND BATIK AIR TOWARDS PASSENGERS SATISFACTION

by: Victor Michael Tulandi¹ Ferdinand Tumewu²

1,2 Faculty of Economics and Business, International Business Administration (IBA) Program University of Sam Ratulangi Manado

email: \frac{1}{victortulandi@gmail.com} \frac{2}{tumewufj@gmail.com}

ABSTRACT

Transportation services play an important role in supporting any activity, of human. Various types of the transportation that we use. Among them, are air transportation or airplane. Talk about the satisfaction of airline passenger, nowadays many airlines competing to provide the best service for the passengers, one of the things that can influence passenger satisfaction is through airline service especially in-flight service. The objective of this research is to identify the factors of in-flight services of Garuda Indonesia and Batik Air that influence passengers satisfaction. The method used in this research is quantitative method by spread out the questionnaire to get the primary data. The population of this research are people in the North Sulawesi in particular Bitung city who ever used the airline services especially Garuda Indonesia and Batik Air with sample as many as 99 respondents. The analysis techniques used to analyze the data is exploratory factor analysis. The results of this research found eight factors, those factors are: in-flight physical environmental, food and beverages, in-flight entertainment service, cabin crew service, in-flight seat comfort, in-flight shopping and aircraft, in-flight reading service, and in-flight safety demonstration. Garuda Indonesia and Batik Air should pay attention to in-flight services and should also seek information related to the desire of passengers so they can provide the best in-flight services for the passengers satisfaction.

Keywords: in-flight services, passengers satisfaction

INTRODUCTION

Research Background

Nowadays transportation services play an important role in supporting any activity, of human. So the role of the transportation services cannot be separated from our daily lives. Various types of the transportation, land transport, marine transportation and air transport such as buses, trains, ships and even aircraft we use in daily life. One of kind transportation that we use is airplane. Airplane is often we use for traveling for short-haul and long-haul, business activities, for family or vacation, therefore airplane play an important role in supporting our activities.

Air transportation or airplane these days is not a luxury thing anymore, because nowadays many airlines are offering tickets at low prices so as to give an opportunity to all the people from the lower class, middle-to upper to use the airplane. The concept offered by each airline, in Indonesia itself, the existence of the airline that offers Full Service concept remains the choice for passengers though many airlines that offer Low Cost Carrier concept. The existence of 'red plate' airline Garuda Indonesia as the full service airline and the presence of a new full service airline Batik Air which is a subsidiary of Lion Group creates intense competition and make the existence of full service airline are competing to provide excellent services to passengers.

Talk about the satisfaction of airline passenger, nowadays many airlines competing to provide the best service for the passengers, one of the things that can influence passenger satisfaction is through airline service especially in-flight service. Many ways to provide the best service for passengers, such as through various kinds of services provided in both the service quality and service marketing mix. Good service quality and according to the wishes of passengers will of course influence the satisfaction of the airline passengers.

Research Objective

The objective of this research is to identify the factors of in-flight services of Garuda Indonesia and Batik Air that influences passengers satisfaction

THEORETICAL FRAMEWORK

Service and Marketing

Bateson and Hoffman (2011:4) stated services can be defined as deeds, efforts, or performances. Kotler and Keller (2012:378) defined a service is any act or performance one party can offer to another that is essentially intangible and does not result in the ownership of anything. Marketing is about to identifying and meeting human and social needs and one of the shortest good definitions about marketing is meeting needs profitably (Kotler and Keller, 2012:27). McDaniel, et al (2011:3) argued marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.

Service Quality

Bateson and Hoffman (2011:325) stated service quality is an attitude formed by a long-term, overall evaluation of a firm's performance. Rahaman, et al (2011) stated service quality is an approach to manage business processes in order to ensure full satisfaction of the customers which will help to increase competitiveness and effectiveness of the industry. McDaniel, et al (2011:391) stated service quality by the following five components:

- 1. Reliability: the ability to perform the service dependably, accurately, and consistently. Reliability is performing the service right the first time.
- 2. Responsiveness: the ability to provide prompt service.
- 3. Assurance: the knowledge and courtesy of employees and their ability to convey trust.
- 4. Empathy: caring, individualized attention to customers. Firms whose employees recognize customers, call them by name, and learn their customers' specific requirements are providing empathy.
- 5. Tangibles: the physical evidence of the service. The tangible parts of a service include the physical facilities, tools, and equipment used to provide the service.

Airline Industry

Nhuta (2012) stated the airline industry is a strategic sector that plays a fundamental role in the globalization of other industries as it promotes tourism, world trade, and foreign investment and, therefore leads to economic growth. Nhuta (2012) also stated however all airlines within the industry operate in a highly dynamic environment where various legal, social, technological and economic forces interact with each other, thus influencing their decisions and actions.

Customer Satisfaction

Satisfaction reflects a person's judgment of a product's perceived performance in relationship to expectations, if the performance falls short of expectations, the customer is dissatisfied, if it matches expectations, the customer is satisfied (Kotler and Keller, 2012:15). Archana and Subha (2012) argued passengers satisfaction service arises when a company can provide passengers with benefits that exceed passengers expectation and this is considered value-added. Excellent passenger satisfaction is one of the greatest assets for air business in today's competitive environment (Archana and Subha, 2012). Bateson and Hoffman (2011:294) stated the importance of customer satisfaction cannot be overstated. Without customers, the service firm has no reason to exist. Bateson and Hoffman (2011:295) also explains although a variety of alternative

definitions exist, the most popular definition of customer satisfaction/dissatisfaction is that it is a comparison of customer expectations to perceptions regarding the actual service encounter.

Literature Review

Upadhyaya (2012) using the exploratory research consisted in a survey that was applied to 100 customers. Questionnaire method has been used for primary data collection. The data from questionnaire and analysis clearly indicate the factors responsible for customer complaint. This study aims timely capturing of customers complaints and emphasizes quick resolution. The Need- Gap analysis determines deviations between actual and expected quality and taking corrective action.

Archana and Subha (2012) in their study examines the underlying forces of service quality influences on passengers satisfaction in aircraft transport. The study examines which dimensions have a positive influence on service quality and which dimensions have the most and least important impact on service quality in international air travel, as perceived by airline passengers. The purpose of this study is to investigate the impact of the in-flight service quality on passenger satisfaction. In this study, passengers are satisfied to the service provided and overall facilities delivered by the airline companies. The passengers are satisfied with the services quality delivered in in-flight service, in-flight digital service and back office operations.

Charoensettasilp and Wu (2013) study that Thai passengers' satisfaction after receiving services from Thailand's domestic low cost airline. Analyze and compare each factor of demographic factors and service marketing mix factor that influence satisfaction of Thai passengers after receiving services from Thailand's domestic low cost airline. Place, product, process and people mostly affect Thai passengers' satisfaction after receiving services from Thailand's domestic low cost airline. Following by physical evidence and price respectively, while promotion is among the bottom ranking.

Manani, et al (2013) in their study explored the key determinants of customer satisfaction for passengers at Kenya Airways. The study used a descriptive survey design to obtain information on key determinants of customer satisfaction for passengers at Kenya Airways. The study findings indicate that among the key determinants of customer satisfaction with passengers were luggage security and safety, proper communication with customers to update them on status of their flights, provision of food variety and ability of the airline to communicate to passengers about the weather on arrival destinations.

RESEARCH METHOD

Type of Research

The purpose of this research is to know about the factors of in-flight services of Garuda Indonesia and Batik Air that influence passengers satisfaction. The type of this research is exploratory research. Exploratory research is conducted to explore the problem situation; that is, to gain ideas and insight into the problem confronting the management or the researcher (Malhotra, 2009:96).

Place and Time of Research

This research was conducted in North Sulawesi in particular Bitung city, the reason is because the city is easily accessible. This study was conducted from June to August 2014.

Research Procedure

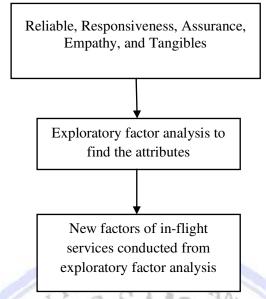


Figure 1. Conceptual Framework

Source: data analysis 2014

Population and Sample

The population of this research is people in the North Sulawesi in particular Bitung city who ever used the airline services especially full service airline (such as: Garuda Indonesia and Batik Air). This research using stratified sampling, is a probability sampling technique that uses a two-step process to partition the population into subpopulations, or strata. Elements are selected from each stratum by a random procedure (Malhotra, 2009:383). Number of sample for this research is 99 respondents. Strata were used in this research is job, focus on three types of job: civil servant, private employee, and entrepreneur. By classification: 33 respondents as a civil servant, 33 respondents as a private employee, and 33 respondents as an entrepreneur.

Data Collection Method

There are two types of data that are used in this research:

- 1. Primary data obtained through a questionnaire that researcher given to the respondents in order to get the data or information.
- 2. Secondary data is taken from information or supporting data from the textbooks, journals, articles, and the internet.

Operational Definition of Research Variables and Measurement of Research Variables

In-flight service is a service provided by every airline for passengers during the flight, through service quality (reliability, responsiveness, assurance, empathy, and tangibles). Passengers Satisfaction is a situation where passengers are satisfied with the service or the performance received and given by the service provider. Being an exploratory factor analysis, the variables are settled from the exploration based on the literature review and theories related especially the theories about service quality. Then the variables developed as attributes for questionnaire. The attributes are:

- X₁ Friendliness of Cabin Crew is friendly attitude, a smile, and a warm greeting from the cabin crew to every passengers
- X₂ Grooming of Cabin Crew is appearance of the cabin crew is always attractive and neat
- X₃ Responsiveness of Cabin Crew is cabin crew are always responsive in serving every customer request
- X_4 Blankets is availability of blankets for passengers
- X₅ Newspapers Service is the availability of newspapers for passengers that the passengers have reading material during the flight

- X₆ Magazines is availability of magazines for passengers that the passengers have reading material during the flight
- X_7 Leg Room is the distance between the seat or leg room were quite spacious
- X₈ Seat Size is seat comfort and seat size wide and comfortable for passengers
- X_9 Air Temperature is the air temperature is cool, which is not too cold even not hot for passengers
- X_{10} Lighting is sufficient lighting in the cabin of the aircraft
- X₁₁ In-flight Entertainment Equipment is availability of in-flight entertainment equipment which can be either LCD/TV that contains entertainment content
- X₁₂ Audio/Music is the availability of various options of audio/music in the in-flight entertainment equipment
- X₁₃ Movie/Video is the availability of various options of movie/video in the in-flight entertainment equipment
- X_{14} Games is the availability of various options of games in the in-flight entertainment equipment
- X₁₅ Headset is headsets are available for passengers so that passengers can listen to the audio/music and movie/video in in-light entertainment equipment
- X_{16} Ambience of Cabin is the atmosphere of the cabin is quiet and comfortable
- X_{17} Cleanliness of Cabin is cabins are always clean and tidy
- X₁₈ Cleanliness of Toilets is toilets are always clean and tidy
- X_{19} Food Choice is food choice are varied and according to the taste of passengers
- X₂₀ Food Quantity is food quantity/size is sufficient
- X_{21} Food Taste is he food taste is delicious
- X₂₂ Drinks Choice is various options of drinks
- X₂₃ Safety Instructions/Lights is safety instructions/intructions are always displayed and obvious
- X₂₄ Safety Demonstration is safety demonstrations performed by cabin crew and through video
- X₂₅ In-flight Shopping is the availability of in-flight shopping that can meet the demand of consumers who want to buy merchandise
- X₂₆ Age of Airplane is new aircraft or old but still well maintained

Measurement of variables used in this research is Likert scale. Likert scale is a measurement scale with five response categories ranging from "strongly disagree" to "strongly agree", which requires the respondents to indicate a degree of agreement or disagreement with each of a series of statements related to the stimulus object (Malhotra, 2009:306). Five points of scale are: 1 = "strongly disagree", 2 = "disagree", 3 = "neutral", 4 = "agree", 5 = "strongly agree".

Data Analysis Method

Validity and Reliability Test

Anti-image Correlation is used to measure the validity of the research instruments. Coefficient Alpha or Cronbach's Alpha is used to measure reliability.

FAKULTAS EKONOMI

Factor Analysis

Factor analysis is a multivariate technique that confirms the dimensions of the concept that have been operationally defined, as well as indicating which of the items are most appropriate for each dimension (Sekaran and Bougie, 2009:161). There are two types of factor analysis: exploratory factor analysis (EFA), and confirmatory factor analysis (CFA). This research used Exploratory Factor Analysis.

RESULT AND DISCUSSION

Result

Validity and Reliability Test

Validity test often using Anti-image Correlation to measure the validity of the research instruments. After deleted three items that not valid, there are 23 items for the rest that shown the items are valid. At the first test, the MSA value of lighting is .494. So this item deleted. Continue for the second test, the MSA value of blankets is .486 and value of games is .453. These two items deleted for the next test. For the third test, this test didn't find the value of anti-image matrices under 0.5. There are 23 items are valid because the MSA value are: friendliness of cabin crew .856, grooming of cabin crew .692, responsiveness of cabin crew .698, newspapers service .607, magazines .595, leg room .576, seat size .596, air temperature .584, in-flight entertainment equipment .726, audio/music .817, movie/video .769, headset .843, ambience of cabin .787, cleanliness of cabin .780, cleanliness of toilets .818, food choice .794, food quantity .855, food taste .822, drinks choice .821, safety instructions/lights .596, safety demonstration .561, in-flight shopping .531, and age of airplane .541.

Reliability test in this research used Cronbach's Alpha. If Cronbach's Alpha is less than 0.6 then it is unreliable. The Cronbach's Alpha for this research is .678 and rounded up to 0.6 it is reliable because the minimum standard is 0.6.

Result of Factor Analysis

KMO and Bartlett's Test

In this research there are three times test because at the first test the MSA value of lighting is .494. So this item deleted. Continue for the second test, the MSA value of blankets is .486 and value of games is .453. These two items deleted for the next test. KMO and Bartlett's for the third test shown that the value of KMO's table is .713 and the significant is 0.000. Kaiser Meyer Olkin Measure of Sampling (KMO) value is considered sufficient if it is more than 0.5.

MI

	V -								
Table 2. KMO and Bartlett's Test									
Kaiser-Meyer-Olkin M Adequacy.	Measure of Sampling	.713							
Bartlett's Test of Sphericity	Approx. Chi-Square	2006. 934							
	Df	253							
	Sig.	.000							

Source: SPSS Output 2014

Rotated Component Matrix

The Rotation Component Matrix can be concluded that there are 23 items that have value above 0.6 which means they have correlated to a factor that finally conducted. From all 23 items, there are 8 new factors conducted.

Table 3. Rotated Component Matrix

	Component									
	1	2	3	4	5	6	7	8		
Safety Instructions/Lights	.890	.100	.055	023	042	035	.018	.300		
Air Temperature	.882	.035	.083	019	056	004	033	.308		
Ambience of Cabin	.836	.068	077	028	.268	086	.005	249		
Cleanliness of Cabin	.770	.026	083	.088	.231	027	.020	366		
Cleanliness of Toilets	.684	.094	069	.018	.079	091	.022	488		
Food Choice	.068	.939	144	107	.016	074	038	.016		
Food Taste	.133	.938	082	042	.016	004	003	042		
Food Quantity	.098	.921	177	004	.002	039	047	058		
Drinks Choice	043	.778	.000	008	.141	.020	169	.017		
In-flight Entertainment Equipment	.011	126	.929	.117	.059	.094	.035	036		
Movie/Video	016	081	.900	.089	065	050	.113	014		
Headset	029	039	.879	.130	.013	032	.081	.052		
Audio/Music	005	147	.819	.180	027	.004	.111	.047		
Responsiveness of Cabin Crew	.010	059	.172	.929	043	.001	.089	.038		
Grooming of Cabin Crew	.104	034	.194	.911	091	.043	.042	004		
Friendliness of Cabin Crew	110	055	.140	.792	.011	141	.162	.222		
Leg Room	.115	.051	023	042	.954	148	.039	076		
Seat Size	.155	.111	.014	081	.945	158	.045	026		
In-flight Shopping	084	086	.007	079	142	.954	.002	.041		
Age of Airplane	063	.009	.001	.004	153	.952	.064	.101		
Magazines	.003	135	.165	.113	009	.023	.945	.067		
Newspapers Service	.014	099	.144	.148	.094	.045	.941	006		
Safety Demonstration	006	026	003	.196	054	.105	.056	.769		

Source: SPSS Output 2014

The value of the items in bold shows the determination of which items go in which factor. The items have been sorted from largest value to the smallest on each factor.

Discussion

In-flight service is an essential part of the service of any airline. Especially when we talk about the services of full service airline for this research are Garuda Indonesia and Batik Air, in-flight service should really be a critical concern because when passengers choose to use the full service airline, passengers definitely expect more of service prepared for passengers satisfaction itself. In this research there are eight factors of in-

FAKULTAS EKONOMI

expect more of service prepared for passengers satisfaction itself. In this research there are eight factors of inflight services of garuda indonesia and batik air towards passengers satisfaction. Those eight factors are defined as follow:

- 1. The first factor is Cabin Physical Environmental, which consists of items safety instructions/lights, air temperature, ambience of cabin, cleanliness of cabin, and cleanliness of toilets. This research found that respondents as passengers actually really pay attention to each aspect related to physical environmental of the cabin of airplane. So, this factor influence their satisfaction as passengers.
- 2. The second factor is Food and Beverages Services. In this factor consists of items food choice, food taste, food quantity, and drinks choice. This research found that food and beverages services apparently play a role in influencing passenger satisfaction. Passengers apparently considered that given the choice of food, the taste of the food, even the quantity of food and drinks choice also influence passenger satisfaction.
- 3. The third factor is In-flight Entertainment Service, consists of items in-flight entertainment equipment, movie/video, headset, and audio/music also influencing passengers satisfaction. Passengers turns out need things related to entertainment services. Those services will accompany their flights so passengers will not

- feel bored, moreover when the flight takes many hours. This makes in-flight entertainment service influencing passenger satisfaction.
- 4. The fourth factor is Cabin Crew Service. Consists of items responsiveness of cabin crew, grooming of cabin crew, and friendliness of cabin crew. Cabin crew service means, cabin crew are always ready when passengers need assistance, how the appearance of cabin crew can make the passengers satisfied, as well as the friendliness of each cabin crew to each passenger as well as how to care and how they treat each passenger becomes important so passengers will be satisfied. This makes the cabin crew service factors influencing passenger satisfaction.
- 5. The fifth factor is In-flight Seat Comfort. Items that are in this factor is the leg room and seat size. Seat comfort means that the vast leg room makes foot of passengers are not rigid during the long hours of travel and a comfortable seat size which makes passengers can sit freely and not cramped. So, in-flight seat comfort factor influencing passengers satisfaction.
- 6. The sixth factor is In-flight Shopping and Aircraft because in this factor consists of items in-flight shopping and age of the airplane was also influencing passenger satisfaction. In-flight shopping and aircraft means, the passenger was also requiring in-flight shopping like merchandise are sold during the flight and age of airplane either the old or new aircraft could influencing passenger satisfaction.
- 7. The seventh factor is In-flight Reading Service, means that passengers also need reading material such as items magazines and newspapers services. With the read service can make passengers will not bored because they have something to read that would be given by the airline. So it very suitable named this factor as in-flight reading service.
- 8. The eighth factor is In-flight Safety Demonstration, this factor named like this because the item in this factor is only one item, namely safety demonstration. Passengers also turned attention to safety demonstration, both performed by cabin crew as well as through the safety demonstration video is also one of important factor for passengers satisfaction.

CONCLUSION AND RECOMMENDATION

Conclusion

The conclusion of this research based on the research, can be concluded that:

- 1. There are 26 items can be derived from in-flight service of Garuda Indonesia and Batik Air that can influence passengers satisfaction. But there are 3 items that had no high correlation with other items. That three items no valid, because the value of 3 items below 0.5. The first item is lighting, lighting does not have a strong correlation with other items and does not influence passengers satisfaction. Second item is blankets and the third item is games. Items blankets and games also does not have a strong correlation with other items and does not influence passengers satisfaction. So, these 3 items had done deleted from the 26 items that had discussed to the next step. So, there are 23 items that had correlation with other items.
- 2. There are 8 factors that conducted based on the result from table of rotated component matrix, which are: (1) In-flight Physical Environmental Factor (conducted from eight items such as: safety instructions/lights, air temperature, ambience of cabin, cleanliness of cabin, and cleanliness of toilets). (2) Food and Beverages Factor (conducted from four items such as: food choice, food taste, food quantity, and drinks choice). (3) In-flight Entertainment Service Factor (conducted from four items such as: in-flight entertainment equipment, movie/video, headset, and audio/music). (4) Cabin Crew Service Factor (conducted from three items such as: responsiveness of cabin crew, grooming of cabin crew, and friendliness of cabin crew). (5) In-flight Seat Comfort (conducted from two items such as: leg room and seat size). (6) In-flight Shopping and Aircraft Factor (conducted from two items; in-flight shopping and age of airplane). (7) In-flight Reading Service Factor (conducted from two items such as: magazines and newspapers service). (8) In-flight Safety Demonstration Factor (this factor conducted from one item which is safety demonstration).

Recommendation

In-flight services is important because it can influence passengers satisfaction. So Garuda Indonesia and Batik Air as full service airlines should pay attention to this and they must continue to keep providing the best in-flight services. As full service airline also, they should looks for information related to the desire of passengers to in-flight service so they can provide for the passengers satisfaction.

REFERENCES

- Archana, R., & Subha, M. V. 2012. A study on service quality and passenger satisfaction on Indian airlines. *International Journal of Multidisciplinary Research*, ISSN 2231 5780. Vol 2(2). http://osinb.com/assets/client_files/pdf/jd.pdf, Retrieved on June 1, 2014. Pp.37-49.
- Bateson, J. E. G and Hoffman K. D. 2011. *Sevice Marketing*, 4th Edition, South-Western. Cengage Learning, International Edition, Canada.
- Kotler, P and Keller, K, L. 2012. *Marketing Management*, 14th Edition, Pearson Education, New Jersey.
- Malhotra, N. K. 2009. *Basic Marketing Research: a decision-making approach*. 3rd Edition, Pearson Education, New Jersey.
- Manani, T. O., Nyaoga, R. B., Bosire, R. M., Ombati, T. O., & Kongere, T. O. 2013. Service Quality and Customer Satisfaction at Kenya Airways Ltd. *European Journal of Business and Management*, ISSN 2222-2839. Vol. 5(22). www.iiste.org/Journals/index.php/EJBM/article/download/7467/7784, Retrieved on July 12, 2014. Pp.170-179.
- McDaniel, C. D., Lamb, C. W., & Hair, J. F. 2011. *Introduction to Marketing*, 11th Edition. South-Western. Cengage Learning, International Edition, China.
- Nhuta, S. 2012. An Analysis of The Forces that Determine The Competitive Intensity in The Airline Industry and The Implications for Strategy. *International Journal of Physical and Social Sciences*, ISSN 2249-5894. Vol. 2(9). http://www.ijmra.us/project%20doc/IJPSS SEPTEMBER2012/IJMRA-PSS1711.pdf, Retrieved on July 17, 2014. Pp.433-469.

FAKULTAS EKONOMI

- Rahaman, M. M., Abdullah, M., & Rahman, A. 2011. Measuring service quality using SERVQUAL model: A study on PCBs (Private Commercial Banks) in Bangladesh. *Business Management Dynamics*, ISSN 2047-7031. Vol. 1(1). http://bmdynamics.com/issue_pdf/bmd11011.pdf, Retrieved on July 18, 2014. Pp.1-11.
- Sekaran U. and Bougie R. 2009. *Research Methods for Business: A Skill-Building Approach 5th Edition*. John Wiley & Sons, Ltd, Publication, United Kingdom.
- Sittichai Charoensettasilp & Chong Wu 2013. Thai Passengers' Satisfaction after Receiving Services from Thailand's Domestic Low Cost Airline. *International Journal of u-and e-Service, Science and Technology*, ISSN 2005-4246. Vol. 6(6). http://www.sersc.org/journals/IJUNESST/vol6_no6/11.pdf, Retrieved on May 29, 2014. Pp.107-120.
- Upadhyaya, M. 2012. Customer Satisfaction Measurement in Airline Services: An empirical Study of Need–Gap Analysis. *Business and Management*, ISSN 2231-0703. Vol. 5(1). http://www.facultyjournal.com/webmaster/upload/INFORMED%20Dr.Makarand%20Saudi%20Arabia.pdf, Retrieved on July 12, 2014. Pp.1-11.