

SATISFACTION SURVEY AND DRAFT MEASURES FOR AVIATION CATERING SERVICES IMPROVEMENT

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Diploma Thesis deals with characteristics of air service, air transport process, air transport catering and activities of catering companies. It also focuses on the analysis of selected catering companies in the air transport and proposals for catering services improvement.

Key Words : Air Transport, Catering, Catering companies, Analysis

1 INTRODUCTION

Air transport and airline services play an important role in the world economy. Catering as one of these services is used by air carriers to make passengers during their flight satisfied. Aim of this work is to describe the meaning of catering in air service, factors associated with meal delivery on board, i. e. its processing, consumption and garbage. Particular aviation catering companies were analysed. These companies were selected on the basis of their importance in the global as well as local market.

2 AIR SERVICE CHARACTERISTICS

Air service is the newest type of movement of people and goods. Air travel is nowadays accessible to all layers of society thanks to the ticket prices reduction over the past few years. It is the safest, most convenient and fastest way of transportation. "Air transport is one of the most dynamic areas of human activity, and significantly affects the global economy and lifestyle of people. Aviation already has lost flavour of romance and has become a highly regulated professional field."¹**Chyba! Nenašiel sa žiaden zdroj odkazov.**

2.1 The Development of Air Transport

People have been trying to imitate the flight of birds for centuries. In the fourth century BC, Greek philosopher Archytas of Tarentum have designed and built the first artificial, self-propelled flying device, a bird-shaped model called "The pigeon." In the sixth century, Chinese discovered the kite that could fly in the air. In the ninth century, Andalusian polymath Abbas Ibn Firnas attempted first glider flight. He created a wooden frame covered in silk.

In the fifteenth century, Leonardo da Vinci was fascinated by the phenomenon of flight, producing many studies of the flight of birds, including his "Codex on the Flight of Birds," as well as plans for several flying machines, including a machine resembling a helicopter, which was to be powered by four men; and a light hang glider. In 1496 da Vinci unsuccessfully tested a flying machine he had constructed. He also discussed the

parachute in a notebook entry but it is unlikely that he actually tested his idea. His flying machines were usually powered by a man.²

First balloons appeared in the 18th century and attracted so much attention that artistic wings were forgotten. In 1783, the Montgolfier brothers were inventors of the first hot air balloon. The brothers accidentally threw a paper bag into the fireplace and discovered that heated air from a fire directed into a paper bag made the bag rise.³

First airship flight took place in 1852. The airship consisted of a long cigar-shaped, gas-filled bag with a propeller, powered by a 3-horsepower steam engine.

In 1894, Slovak inventor and engineer Ján Bahýľ produced a helicopter plan, driven by human power. The future of his plans remained unknown; therefore he is not recognized as the first helicopter inventor. Paul Cornu is known as the first helicopter pilot, who was also a constructor of this flying machine. In 1907 a helicopter lifted its inventor to 0.3 m and remained aloft for 20 seconds.

Also, the Wright Brothers were very deliberate in their quest for flight. On December 17, 1903, at Kitty Hawk, North Carolina, the 1903 Wright Flyer became the first powered, heavier-than-air machine to achieve controlled, sustained flight with a pilot aboard.



Obr.1., First powered, heavier-than-air aircraft, December 17, 1903⁴

Great aviation development was recorded during the years 1920 - 1930, when Charles Lindbergh realized

¹ PRUŠA, Jiří; a kolektiv. *Svět letecké dopravy*. Vydání první. Praha: Galileo CEE Service ČR s.r.o., 2007. 315 s. ISBN 978-80-239-9206-9, str. 15.

² http://sk.wikipedia.org/wiki/Leonardo_da_Vinci

³ <http://referaty.atlas.sk/prirodne-vedy/fyzika-a-astronomia/37959/historia-lietania>

⁴ <http://sk.wikipedia.org/wiki/Súbor:Wrightflyer.jpg>

his transatlantic flight in 1927. The Douglas DC-3 was the first airliner of this period, served for transportation of people only and started a modern era of air transport services.

2.2 Impact of Air Transport on the Health of Passengers

Health problems of passengers during flights are becoming more frequent. Many health issues may be caused by e.g. more than 12 hours long flight, inadequate drinking regime before and during the flight, food that is difficult to digest, rushing to the airport, lack of sleep before the flight, prevalence of older passengers, chronic diseases, surgery or injury before the flight, hormonal contraception or other drugs causing excessive blood clotting, obesity, varices, as well as the increasing number of long-distance flights in the long-range aircraft, where a large number of passengers is situated for a very long time.

It is necessary to be particular in:

- defining the range of healthcare on the board,
- ensuring flight crew first aid training,
- enabling the communication between the aircraft and the ground, as well as between aircrafts for the diagnosis and subsequent treatment of passengers during flight,
- arranging of aircraft construction and cabin properly to enable the treatment of passenger on the designed spot without communication problems,
- ensuring and organizing proper medical assistance on the airport.⁵

Prevention of passengers health problems during the flight consists in:

- get enough sleep and relaxation before the flight,
- limit the amount of before flights,
- a healthy drinking regime before the flight and skin care to prevent skin drying during the flight,
- avoid eating of food that is difficult to digest, when allergic, travel with medicine at hand,
- eye contact with the flight attendant and pilot before getting on board, or cockpit revisal,
- close the eyes and imagine something pleasant,
- avoid looking out of the window at the start and landing.⁶

2.3 Environmental Impact of Aviation

⁵ PRUŠA, Jiří; a kolektiv. *Svet leteckej dopravy*. Vydanie prvé. Praha: Galileo CEE Service ČR s.r.o., 2008. 321 s. ISBN 978-80-8073-938-6, str. 65-66.

⁶http://www.edusan.sk/zdravoveda/cesty/cesta_lietadlom.htm

Air transports contributes to the water, air and soil pollution of areas at and around airports. Also, the main environmental effects of aviation are those of aircraft noise and aircraft emissions. Like all human activities involving combustion, most forms of aviation release carbon dioxide. Along with CO₂, nitrous oxide, water vapor, soot and sulfates are also major forcing contributors to the greenhouse effect.⁷

The use of fire extinguishing foam, aircrafts and runways defrosting, fuelling, aircraft toilets hygienic cleaning cause water and soil pollution; and waste management can not be ignored.⁸

Airport noise largely affect areas at and around airports. It affects sleep, communication, causes learning problems in children, nervousity, anger or depression and also decreases quality of the time spent outdoors.

Energy consumption is one of the environmental impacts of aviation. Energy is needed to lighten the interior and exterior airfield, to power the elevators, escalators and moving sidewalks, moving baggage belts, heating and when considering other resources used the airport operation, the result is that aviation has a significant impact on the Earth's environment.⁹

3 AIR TRANSPORT PROCESS

Air transport process is formed by the sale, distribution and implementation of air transport services that also represent the summary of individual activities. Each airline has its own team of specialists dealing with individual activities, e.g. transportation to the airport, check-in, waiting before departure, security check, boarding, leaving the airport, etc.

3.1 Air Transport Conditions

Every air transport along with its services provided, is subject to the air transport conditions of particular transport operator. When a passengers purchase airline ticket, he or she agrees to the transport conditions of particular company. Individual conditions and clauses are stated on the purchased ticket.

Policies, procedures and standards coordination is the basis regarding the fact that variety of partners work on the transport of passengers, luggage and cargo.

⁷ <http://www.dolceta.eu/slovensko/Mod5/Letecka-doprava-a-zivotne.html>

⁸ PRUŠA, Jiří; a kolektiv. *Svet leteckej dopravy*. Vydanie prvé. Praha: Galileo CEE Service ČR s.r.o., 2008. 321 s. ISBN 978-80-8073-938-6, str. 66-67.

⁹ <http://www.dolceta.eu/slovensko/Mod5/Letecka-doprava-a-zivotne.html>

International coordination of statutes and operation standards is ensured by the IATA organization.¹⁰

3.2 Passenger Transport

The summary of individual procedures a passenger have to go through when traveling by air, can be defined as air travel process. Air travel process includes also indirect procedures which a passenger has to pass in order to depart safely.¹¹

Check-in process ensures boarding of the passenger who has paid air ticket, valid documents corresponding to the requirements of the destination state (e.g. visas, health and personal documents). At the time of check-in, the passenger hands over baggage which is checked by the airport security and sealed. Anything that is above the weight limit or which is not allowed to be carried by the passenger himself to the aircraft cabin is usually handed over to the agent at the time of check-in. Subsequently, at the time of check-in, an option of selecting the seats is offered and after the selection, a boarding pass is provided. If the passenger carries a first or business class ticket access to the premium check-in area and/or the lounge may be offered.¹²

Since the terrorist attacks, the rules for luggage and passengers check has become more stringent than ever. There are strict rules for luggage contents and many airline passengers wonder what items are okay to pack and whether or not they should be placed into carry-on or checked luggage. While most of the restrictions focus on what passengers can put in their carry-ons, there are also several restrictions on what passengers can put in their checked luggage. The baggage allowance, is prescribed by the airline and the passenger is told what items are prohibited.

On board of the aircraft, the passenger is provided a variety of services, e.g. a welcome message and directing passengers to their seats. Other services provided to the passenger depend on his or her travel class. Usually the most attention is paid to the passenger who carries a first class or business class ticket.

After aircraft landing, passengers are transferred from the aircraft to the airport terminal building, either on foot by the walking path and air bridge or by bus. In the terminal, the passenger continues according to the corresponding marks and depending on whether he or she

wants to go through passport and/or customs control, pick up the luggage, and leave the terminal or wants to visit one of the waiting halls.

3.3 Cargo Transport

Aircargo transport presents the fast way of cargo transportation and is oriented according to the relocation demand. There are two types of cargo transport. One of them is concerned with the cargo transfer into the passenger transport lines and the other is cargo airline, dedicated only to the transport of cargo, on regular or irregular basis.

Cargo air transport prices are different from the passenger air transport prices. The final price depends on the cargo weight and extent, total quantity of goods, the use of containers or palettes, commodity, supply and demand of the cargo, degree of business competition, delivery schedules and cargo handling. Taking all mentioned factors into consideration, cargo air transport is suitable mainly for the transport of valued lower extent goods by which delivery speed is important.

4 AIR TRANSPORT CATERING

The word catering has its roots in English verb cater = supply, care, feed, deliver supplies.

According to the Slovak language vocabulary, the term means serving of food products, supplying ships and aircrafts, catering.¹³

4.1 Airline Meal Categorization

Meal served to passengers on board differs according to different aspects such as e.g. type of airline company, flight time, tariff class, passenger requirements, etc.

Airline Company

Meal served on board of a common airlines differs from the meal served on board of low-cost airlines. Low-cost airlines do not stand on the food serving because meal is not one of the basic services of the product they offer. That explains why meal served on their board is not free. Common airlines care for passengers comfort which includes a high quality catering services. Almost all flying lines serve soft drinks and free snacks, and other meal depends on the length of the flight and tariff class.

Flight Length

On board meal depends also on the length of flight. On the short-distance flights, some airlines offer free beverages and snacks. On the long-distance flights, i.e.

¹⁰ PRUŠA, Jiří; a kolektiv. *Svet leteckej dopravy*. Vydanie prvé. Praha: Galileo CEE Service ČR s.r.o., 2008. 321 s. ISBN 978-80-8073-938-6, str. 84.

¹¹ http://www.google.sk/url?sa=t&rct=j&q=leteck%C3%BD%20prepravn%C3%BD%20proces&source=web&cd=5&ved=0CDsQFjAE&url=http%3A%2F%2Fwww.pracavusa.com%2Ffiles%2Fdocs%2Fdokumenty%2Fdokument_34.pdf&ei=P8FdUIWCKMbCtAapvIHAaw&usg=AFQjCNH4b2w5Cawf9ela5XxXQ2TuUKRidw

¹² PRUŠA, Jiří; a kolektiv. *Svet leteckej dopravy*. Vydanie prvé. Praha: Galileo CEE Service ČR s.r.o., 2008. 321 s. ISBN 978-80-8073-938-6, str. 90-92.

¹³ <http://slovník.azet.sk/preklad/anglicko-slovensky/?q=catering>

more than 2 hours flights, airlines serve at least one warm meal and beverages are served on the regular basis, usually every hour.

Tariff Class

There are three types of tariff classes, namely economy class, business class and first class. In every class, pices of ticket and on board services differ.

First class

For each passenger, individual care is provided, as well as high level catering services. Meal is served in porcelain and on the tablecloth. Passenger can choose from variety of dishes, dinners and desserts. For food preparation, fresh seasonal ingredients of the highest quality are used, such as seafood, caviar, fresh fruit juice, truffle. Food and drink consumption is free and amount unlimited.

Business class

Passengers in business class can feel the comfort of this class even before departure, because they have access to the VIP lounge where they are served free drinks and sometimes also refreshment. This class differs from the economy class also in elegantly furnished and decorated stools. Fancy tableware is used to serve the refreshment. Food is being served gradually and after the last part of the meal, passenger is provided with a small towel. Compared to the first class, hot meals choice is not so rich but on the other hand, richer than in the economy class. Beverage consumption is unlimited and free.

Economy class

Economy class transports the highest number of passengers, therefore it is not possible to provide them with the same services as in the first and business class. During long-distance flights, the passenger can choose between two warm meals. Price for one meal is included in the ticket fare. Soft drink consumption is unlimited and free. Serving of alcoholic drinks depends on the particular airline-it can be free or not. Cart is being served by two people, person pushing the cart forward is offering drinks and person on the opposite side offers travelers a menu.

Aircrew Meal

Catering company delivering food to airlines, is responsible for passenger, as well as aircrew meal. For security reasons, the pilot and copilot food must be prepared from different materials and in separate places. Meal is prepared by different cooks and through the entire process of production can not come into contact with passengers food. The possibility of food contamination during its processing lead to this security measure. In the case of food contamination there is need for a person capable of first aid providing. Airline food menu needs to be varied. Exchange rate cycle depends on the lenght of

the flight and particular airline. Menu is changing more often on short-distance flights because it is possible that the same passenger is travelling more often and therefore repeatedly. Cycle length is one or two weeks. In long-distance flights, the menu varies after one or two months; in chart flights it is after twelve months.¹⁴

4.2 Quality and Sanitary Meal

The main catering companies' requirement is a high quality food and observance of hygienic rules. Airline food is at very high risk of contamination due to the fact that the cooking time is not in line with its subsequent consumption. Therefore, food must be properly stored and maintained over the period between the food preparation and its serving to the passengers.

Hazard Analysis and Critical Control Points (HAACP) has become internationally recognized standard, followed by almost every airline, therefore catering companies have to process food according to its standards. If food storage, production and preparation control is neglected, it may result in food poisoning or contamination. Contaminated food can affect more than half of passengers, that is why economy class passengers can choose between two meals. Advantage is the possibility of passenger's choice of food.

Since 1993, the HACCP system is being used in the air transport.¹⁵ Airline catering companies are considered to be the first to process food according to the HACCP system. Airlines require catering companies to follow the HAACP critical control points, therefore catering companies requires their suppliers to do the same.

5 ACTIVITIES OF CATERING COMPANIES

On board refreshment is provided by airlines in the form of outsourcing.

Outsourcing is a compound of words out and source and means: obtain (goods or a service) from an outside supplier, esp. in place of an internal source.

Outsourcing is said to help firms to perform well in their core competencies and mitigate shortage of skill or expertise in the areas where they want to outsource. Two organizations may enter into a contractual agreement involving an exchange of services and payments. It is provided either by own subsidiary company providing catering services or fully independent catering company.

¹⁴ JONES, Peter, et al. *Flight Catering*. Second edition. [s.l.]: Elsevier Butterworth-Heinemann, 2004. 319 s.

ISBN 075-066-216-6, str. 85-86

¹⁵ www.poling.sk/haccp/haccp-vzor-na-doplnenie.pdf

6 ANALYSIS OF THE SELECTED AIRLINE CATERING COMPANIES

LSG Sky Chefs¹⁶

LSG Sky Chefs group is the global leader in airline catering and the management of all in-flight service related processes. The group consists of 148 companies with 194 customer service centres in 52 countries and is more than 70 years old.

Among all catering companies, LSG Sky Chefs has the widest airline kitchen chain. Its kitchens are situated on every inhabited world continent, except Australia. The highest number of its kitchens occurs in America, by making use of joint venture. On the other hand, in Africa only four kitchens can be found.

LSG Sky Chefs prepares different kinds of food with respect to the local cuisine. In addition to classic dishes, it offers frozen meals served on board and more than 600 kinds of food.

As to the waste disposal, company is applying so-called green policy. It cares about the environment and uses state-of-the-art energy and material-saving equipment. Company's customer service centers are required to report their energy consumption and waste levels into a central database.

Besides the basic service, company offers to its airlines advanced services such as logistic solutions, board management, supply chain management, etc.

Gate Gourmet¹⁷

Gate Gourmet is Swiss airline catering firm with headquarters in Zürich. It is the world's independent provider of catering and provisioning services. It employs 27 thousand of people working in more than 170 facilities, 130 places in 35 countries on 6 continents. Catering services are performed in 25 countries, 110 airline kitchens, whilst airport services are provided in nearly 20 locations. In 2011, the company achieved revenue of nearly 2,7 billions CHF.

Company's aim is to provide restaurant-quality fine dining for international flights. It also adapts to the local cuisine menu and therefore employs chefs from all over the world. Gate Gourmet claims to have the industry's largest team of menu design and operational chefs. Company conducts a survey on local passenger's food demand regularly, and it tries to adapt its menu according to the survey's outcome.

The aircraft waste is recycled and separated on every airport served by the company. Moreover, it tries to use recyclable materials and packaging only, thus ensuring low volume of non-renewable waste.

Servair¹⁸

Third largest catering company is Servair. Servair is French company and has its head office in Roissy, Paris Charles de Gaulle Airport.

Through its subsidiary Jet Chef Prestige, Servair offers superior catering service. Services are provided on board of VIP flights. In the past, they were used by Concord aircraft. Jet Chef Prestige offers luxurious catering not only for the aviation, but also for shipping and various social events.

In 1990, Servair formed the CAP company. CAP offers charter flights catering. In 2001, certified kitchen was opened in Paris, for preparation of special vegetarian and kosher meals. The kitchen is operated by a subsidiary of Servair, SMC. In 2007, another subsidiary CPA received a certificate for the halal food production.

Emirates Flight Catering¹⁹

Emirates is one of the world's most successful international airlines, and owns a fleet of 143 Boeing and Airbus aircrafts, and 8 airliners. It is operating to 100 destinations across six continents and employs more than 6500 workers.

In 2003, Emirates as one of the few airlines founded its own catering company named Emirates Flight Catering, formed out of Emirates Abela Catering Company.

Emirates Flight Catering is based in Dubai, United Arab Emirates, and provides catering and support services for Emirates Airline and all other airlines based at Dubai International Airport. In the case that particular destinations are very distant from its hub, Emirates also uses the services of other caterers. For example, in Africa it cooperates with Servair company, in Australia with Alpha Flight.

Emirates Flight Catering produces high quality food for all tariff classes. Generally, kitchen has a very good reputation, therefore is also used by other international airlines.

Alpha Flight Services²⁰

Alpha Flight Services is dominant catering company within the Australian market. It is subsidiary of Dnata company. It won the prestigious ITCA Mercury Award for innovative sales programs.

Alpha Flight Services produces various international meals, e.g. eastern cuisine for Japanese airline ANA, produced on the Heathrow airport in London, or grilled steaks for the American Airlines first class.

¹⁶ <http://www.lsgskychefts.com/en/about-us.html>

¹⁷ <http://www.gategourmet.com/>

¹⁸ <http://www.servair-catering.com/index.aspx>

¹⁹ <http://www.ekfc.com/index.asp>

²⁰ <http://www.alpha-group.com>

Flying Food Group²¹

Flying Food Group is the main catering company in the USA, with its head office in Chicago. It was established in 1983 by the Chinese emigrant in the USA, Sue Gin. It consists of Flying Food Group Airline Catering, providing service for airlines and Flying Food Group Fresh Food Solutions, serving companies outside the aviation.

Flying Food Group company operates only within the American and Chinese market.

Company is famous by its creative kitchen that cooks from fresh ingredients from reliable suppliers. Flying Food Group prepares a wide variety national dishes including halal.

7 SATISFACTION SURVEY AND SUGGESTION PART

7.1 Satisfaction Survey of Catering Services

The survey in the form of questionnaire serves to discover and increase the level of air catering service.

It consists of questions that are the basis not for the objective data but for subjective answers and opinions of respondents. The problem of the authenticity of the data, their variability and reliability is partly solved by the anonymity of respondents, which presents, compared to other methods of research, a certain advantage.

The questionnaire was formed by 18 questions: 15 closed, 3 open.

It was provided to the travelers of Košice airport who were using the Steward cafe services, situated inside the airport building next to the departure lounge. At the time of the questionnaire distribution, 61 travelers were present. Of this number, 58 passengers have participated in the survey, i.e. 83 %.

Aims:

1. The main aim of the survey is to discover passengers' views on the current state of airline catering services.
2. Analyse and discover the shortcomings of airline catering services.
3. To find out how to help in increasing the level of airline catering services.

Hypothesis:

1. Airline catering services are charged.
2. Respondents identify the taste of food as the main cause of airline catering services setback.
3. Flight attendants' language level is high.

4. Attendants have to provide good-class catering services only with the basic technical and material equipment on board.
5. Most travelers think that airline catering services are indispensable.

Survey Evaluation:

Question no. 1: *How long do you use air transport services?*

Table 1 The length of use of air transport services

Options	less than 2 years	2-5 years	5-10 years	10-15 years	more than 15 years
Number of respondents	0	14	19	13	12

The table shows that 19 passengers use air transport 5-10 years, average duration of air transport use is 8 years.

Question no. 2: *How often do you use air transport services?*

Table 2 The use of air transport services

Options	daily	several times a week	once a week	few times a month	less than once a month
No. of respondents	0	0	15	17	26

The table shows that 26 passengers use the air transport services less than once a month, 17 passengers use them several times a month and 15 passengers once a month. None of the respondents uses the air transport services on the daily basis.

Question no. 3: *Which airline do you use more often - low cost or classic airline?*

To the question "Which airline do you use more often - low cost or classic airline?" 56 respondents answered "low cost airline", 2 respondents answered "classic airline."

²¹ <http://www.flyingfood.com>

Question no. 4: *Did you have to pay for airline catering services?*

To the question "Did you have to pay for airline catering services?" answered 58 respondents "yes." None of the respondents provided "no" answer, thus my hypothesis no. 1 has been 100% confirmed.

Question no. 5: *Is the way of airline food serving important to you?*

To the question "Is the way of airline food serving important to you?" 50 respondents answered "yes, it is important for me," 8 respondents "yes, but I do not consider it necessary," and none of the respondents answered "no, it is not important for me."

Question no. 6: *What do you consider to be the main cause of airline catering services setback?*

To the question "What do you consider to be the main cause of airline catering services setback?" 58 respondents answered "taste of food" and at the same time 8 from them answered "food appearance." None of the respondents mentioned "food temperature" or "the way of serving." Hypothesis no. 2 that most respondents identify the taste of food as the main cause of airline catering services setback, has been 100 % confirmed.

Question no. 7: *Were you satisfied with the quality of food provided on board (taste, freshness, combination of soup and dinner)? If not, please give reasons why.*

To the question "Were you satisfied with the quality of food provided on board?" 26 respondents answered "yes" and 32 respondents' answer was "no," whereas the reason was taste and freshness of food.

Question no. 8: *Were you satisfied with the size of meal provided on the board of airplane?*

To the question "Were you satisfied with the size of meal provided on the board of airplane?" 26 respondents answered "yes" and 32 respondents "no."

Question no. 9: *Were you offered drinks on the board?*

To the question "Were you offered drinks on the board?" 100% of respondents answered "yes."

Question no. 10: *Were you satisfied with the food temperature? If not, please give reasons why.*

To the question "Were you satisfied with the food temperature?" 56 respondents answered "yes" and 2 respondents "no," The reasons for "no" answer were cold and lukewarm food.

Question no. 11: *Would you like to choose from side dish, compote, fruit, vegetables or salads during your food ordering?*

Table 3 Choice of side dish, compote, fruit, vegetables or salads during food ordering

Options	definitely yes	rather yes	rather no	definitely no
Number of respondents	58	0	0	0

The table shows that 100% of respondents would like to choose from side dish, compote, fruit, vegetables or salads during food ordering.

Question no. 12: *Would you like to choose from desserts, i.e. to buy a dessert after your dinner?*

To the question "Would you like to choose from desserts, i.e. to buy a dessert after your dinner?" 47 respondents answered "yes," and 11 respondents "no."

Question no. 13: *Were you satisfied with the level of hygiene (cleanness of cutlery, plates, glasses, etc.).?*

Table 4 Satisfaction with the level of hygiene

Options	very satisfied	satisfied	unsatisfied	very unsatisfied
Number of respondents	0	37	19	2

The table shows that 37 respondents are satisfied with the level of hygiene, 19 respondents are unsatisfied and 2 respondents are very unsatisfied.

Question no. 14: *Were you satisfied with the attendant?*

To the question "Were you satisfied with the attendant?" 57 respondents answered "very satisfied," and 1 respondent "satisfied." None of the respondents answered "unsatisfied" or "very unsatisfied."

Question no. 15: *At what level were the language skills of the attendant?*

To the question "At what level were the language skills of the attendant?" 100% of respondents answered "high level," and none of them answered "middle level," or "low level," thus my hypothesis no. 3 has been confirmed.

Question no. 16: *Do you think that the flying attendants have to provide quality airline catering services by using only basic technical and material equipment?*

To this question, 58 respondents answered positively, confirming my hypothesis no. 4. None of the respondents think that flying attendants have adequate technical and material equipment for providing quality catering service.

Question no. 17: *How much are you willing to pay for higher quality and broader range of goods? If nothing, please state why.*

Table 5 Excess pay for higher quality and broader range of goods

Options	nothing	less than 0,50 €	less than 1 €	less than 2 €
Number of respondents	22	17	17	2

Table shows that 2 respondents are willing to pay for higher quality and broader range of goods, less than 2 €, 17 respondents less than 1 € and 17 respondentov less than 0,50 €. 22 respondents are not willing to pay for higher quality and broader range of goods, they think that quality and range of goods should be included in the ticket price.

Question no. 18: *Do you think that aviation catering services are indispensable?*

This question was answered "yes" by 100% of respondents, confirming hypothesis no. 5.

7.2 State of Catering Services Analysis and Improvement Measures Proposal

On the basis of questionnaire evaluation and author's own experience, improvement measures draft for catering services was created:

- increase the variety of the menu focusing on various categories such as. vegetarian dishes, meat dishes, pasta, salads, meals for diabetics, gluten-free meals, etc.,
- choice from 5 kinds of food when purchasing the ticket via the internet or at the reservation without charge. The advantage would be that the catering companies would know exactly how many ingredients they should buy to prepare ordered meals, thus reducing food wastage,
- choice of two kinds of meals directly on the board for a fee, thus avoiding the big amount of not consumed free food on board,
- choice of side dish, compote, fruit, vegetables or salads during food ordering without fee, thereby increasing comfort of provided catering services, what would have a positive impact on the passenger,
- abolishment of fees for catering services at low cost airlines during the flights booking,
- more stringent requirements in the cooks and attendants selection to avoid preparation of disgusting meal with disgusting appearance.

Attendants serving meal should be communicative, friendly and helpful,

- obligation of companies to participate in various workshops and courses for the services improvement,
- pay attention to the served food temperature in order to avoid cold or lukewarm food, so as unnecessary complaints from passengers and the possibility of their use of a different type of transportation in the future,
- use cutlery of lightweight metals, hygienically packed in a plastic bag. Replacement of plastic cups, plates and cutlery would lead to the airplane waste reduction,
- use ultra light carts to carry food and beverages, thus reduce the weight of the aircraft.

The proposals have been drawn up based on the discovered state and subsequent analysis. They are designed to improve airline catering services by their realisation.

8 CONCLUSION

In the diploma thesis, air transport characteristics, its history, passengers and environment influence was discussed.

Subsequent parts discussed air transport process, its requirements, so as passenger and cargo transport. Airline catering services are explained in detail, its process from work coordination, through the loading and unloading of goods to the waste management. Impact was laid on the importance of food served on board to be good-class and safe.

Important part of the thesis was the analysis of particular catering companies selected on the basis of their importance in the world market. For their analysis, catering companies websites were used.

The final part of the work was devoted to research and draft part, where nine measures were proposed. These measures would lead to the improvement of the provided catering services.

Diploma thesis was based on the teoretical knowledge gained by dealing with this thesis, so as on the practical skills gained during author's multiannual experience in restaurant and catering services.

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