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## Segmentation of Airports' Customers in Slovakia

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### Abstract

Contribution deals with customers' segmentation in the frame of airports in Slovakia. Research problem was to find out real state of customers' segmentation in chosen Slovakian airports and possibilities for its improving. Situation at the aerial transport market is characterized still growing and there is rising greater competitive environment. Effective segmentation enables transparency of offered services, discovering of problematic areas and consequent improving of services during determination of proper activators. The main recommendation of our research is an appeal for more attention of aerial transport sectors in order to improve their market positions, economical growth and to attract more investors.

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### 1. Introduction

In present time there is no unified market with ground access to airports. There are appearing only files of small market's segments, from which everyone has explicit and measurable characteristic. Therefore many times there is very important to create individual segments of services for separate segments of market, usually by the way of different marketing, prices and rewards according to Mixtaj, Weiss (2013). From the researches we can state that high transport performance of aerial companies is many times summary results of different offered services, where everyone is suggested and adapted to certain concrete segment of market. For example at Tokio Narita Airport there are three individual railway companies, while everyone offers transport at different price level. Other example can

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be London airport Heathrow, where former rapid transport services had been extended by new way of transport, mainly Heathrow expresses Premium, which is more luxury and expensive form of services. Also in such cases, demographic characteristics played important task during creation of new types of offered services with goal to fill gap in given market segment (CAA UK Passenger Survey Report). Liasidou (2013) aims to identify and segment British tourists, who visit the Republic of Cyprus, in terms of their current consumption patterns according to recent airline and tourism developments, with a view to providing insights into the varied profiles of the tourists. Based on a survey of passengers at Manchester Airport in the UK, attitude statements pertaining to psychological constructs from the Theory of Planned Behaviour and the Norm-Activation Theory, combined with key factors relating to the passenger's trip, were used to identify eight behaviourally distinct groups of passengers with varying potential to reduce their private car use (Budd, 2014).

## 2. Segmentation of transportation market

Segmentation of market in area of transportation services is not sufficiently used. Many times offered transportation services are without closer orientation to specific needs or segments. Majority of transportation services providers think that every customer at transportation market wants to buy exactly their service according to Pružinský (2011).

Segmentation of market with transportation services is very important mainly in competitive environment that is already getting stronger due to the influence of integration processes in Europe. Base step during process of transportation market segmentation is determination of customers group, to which transport company wants to offer its services. Analysis of strengths and weaknesses of transport company, as well as evaluation of available sources, should precede determination of market's goal as is stressed by Taušová et al. (2013). Selection of market will then result from evaluation of following conditions:

- Possibilities of transportation services offer,
- Type of customer,
- Space sphere of companies' activity (local, regional, state, international),
- Value chain, to which company wants to be connected.

Marketing theory differentiates several criteria of transportation market segmentation. Subject of transport, so-called transportation service of personal transport and goods traffic presents first criteria of transportation services structure. Moreover such markets can be divided to markets with domestic or international transport. Market with personal transport can be divided to segment of obligatory transport (to school, work, and other responsibilities) and segment of facultative transport (culture, tourism, etc.). From the view of economical effectiveness market can be segmented according volume of achieved profit (mainly profitable or loss making transport). Such way of basic segmentation is called according to Vokounová (2006) as single-level or multilevel segmentation.

## 3. Own research of transportation market segmentation in Slovakia

Goal of the research is to find out present state of customers' segmentation in Slovakian aerial companies, research of travelers' satisfaction with offered services and suggestion for segmentation methodology. Collection of information had been done in Slovakian airports that provide domestic, as well as international flights. In the research we have been orientated exclusively to airports, providing personal transport yet in regular, irregular or charter flights. During elaboration of available information, dealing with process of strategic management, according results of statistical searching of customers we made definition of single scientific problem, which is „not sufficient and absenting segmentation of travelers, using airports of Slovakia that could serve to improve and adapt provided services in chosen airports, little qualitative situation of present segmentation of travelers and also missing methodology of segmentation.“

In the research we defined following five hypothesis:

H1: Minimally 60 % of travelers are satisfied with provided services of airport.

H2: Minimally 60 % of travelers are satisfied with communication of personnel at airport.

H3: Minimally 80 % of travelers plan to use services of airport also in the future.

H4: Frequency of services using at airports does not depend on satisfaction of travelers with services, provided at the airport.

H5: Frequency of services using at airports does not depend on satisfaction with personnel communication.

During data obtaining we used questionnaire by the way of checklists that use Likert scale. For interpretation of questionnaire we used Wald rule max-max that considers optimistic access during decision of respondents. Importance of point evaluation had been done by the way of relative evaluation and consequently their importance or significance had been done through matched comparison.

### 3.1. Object of searching

Our choice consists from airport Bratislava, Žilina, Košice, Poprad-Tatry a Piešťany. Customers of aerial companies are travelers, as well as aerial transporters and other companies, making business at airports in various branches. In condition of Slovakia there are existing in present time eight international public airports that can be differentiated not only due to their geographical position, but also due to the number of travelers. Their basic characteristics are as follows:

- *Airport Milan Rastislav Štefánik in Bratislava* is biggest airport in Slovakia that provides services for approximately 1, 5 millions of traveler per year, while international transport presents over 90%. Airport provides regular aerial transport from 1951. Since then airport proceeded several changes, in 80-ties of last Century both runways have been prolonged and new terminals had been built with present capacity 5 millions of travelers per year. Airport uses regular, as well as charter domestic and international flights, including goods transportation (<http://www.bts.aero/o-spolocnosti/profil-spolocnosti/historia/>).
- *Airport Košice, Inc.*, is second biggest airport in Slovakia with annual capacity of terminal till 800 000 travelers. It is used for international and domestic, regular and charter flights. Crisis influenced also airport Košice, since number of travelers in last years is smoothly decreasing. Most significant intervention to regular transport presented bankruptcy of low-cost company SkyEurope Airlines, Inc. In present time airport provides three regular flights – Prague, Wien, and London. In 2013 airport provided services for more then 230 000 travelers (<http://www.airportkosice.sk/prevadzkovatel/historia/>).
- *Airport Žilina* is in present time used for domestic private flights, international flights, sport's flights and ambulance. During 2006-2009 airport made services annually for more then 10 000 travelers, but this trend started to decline due to the influence of economical crisis. After cancelling of regular flight of Czechoslovakian airlines, number of travelers decreased significantly and it presented only 1712 travelers. (<http://www.letisko.sk/historia/>).
- *Airport Poprad - Tatry* belongs due to its position in 718 m above sea level among highest placed international airports in middle Europe. In present time airport is used for charter flights for tourists and sportsmen, private and business flights, as well as reserve airport for flights, destined to Košice, Sliač or Žilina. In 2009 aerial connection had been extended, in summer flight schedule, connection to Bratislava and Bologna had been added, as well as season connection to Split, in winter flight schedule connection to Bazilei, Brussel and Warsaw had been added. Effort of airport to extend permanently offering services, which was threatened by bankruptcy of aerial company SkyEurope Airlines, Inc. that provides connection to London (in 2009 connection was again renewed), further it provides offer of new destinations, mainly Manchester and Dublin. In 2009 airport provided services for more then 51 000 travelers, but this numbers is decreasing doubly due to the cancelling of almost all regular connection of company Danube Wings. In 2012 regular connection to Prague had been cancelled, provided by Czechoslovakian Airlines (<http://www.airport-poprad.sk>).
- *Airport Piešťany* can be considered as international airport with regional importance, situated at north part of city center. It is used mainly for irregular transport of tourists, arriving to near health spa. Last biggest reconstruction in 2008 prolonged rolling runway and former terminal had been extended, which increased capacity of the airport to 160 dispatched travelers all at once.

### 3.2. Research results

From the results of questionnaire, made among employees of chosen Slovakian airports we found out following facts. Generally segmentation of travelers presents conception that is in spite of insufficient knowledge viewed as positive one and single employees considers segmentation as something that could be properly applied also in their airport. If certain type of segmentation is made at given airports, means information that is not sufficiently spread

among individual groups of employees.

Goal of questionnaire was to find out opinions to satisfaction of travelers to various areas of chosen airports services. Questionnaire had been done as anonymous with necessity to answer to three demographic questions. Other questions had been voluntary and travelers did not need to answer to all of them, but it did not have influence to the evaluation. During statistical elaboration we will mention during individual questions total number of requested, number of answers and number of blank questionnaire. Requesting of potential respondents had been done personally, directly in airports, during arrival or departure, and every traveler, older than 15 years, could participate in research. Traveler had been briefly acquainted with goal and aim of research and after his approval all questions had been requested, as well as offered answers, finally their choice had been recorded. With aim to obtain biggest sample, research had been done during 2011-2013 in whole year, mostly in irregular interval for regular and irregular flights. In case of smaller airports with lower number of flights terminus of research had been adapted to actual arrivals and departures.

During analyzed period we obtained together 1015 actual questionnaire from all airports. Some questionnaires had been recorded as not actual, where not all three demographic questions were filled, as well as at least one from 13 questions. We can state that success was at high level and from 1015 questionnaires respondents answered to all questions, except question No 5. To question No 5 responded totally 902 respondents, 113 respondents did not answer.

For testing of hypothesis H4 „Frequency of services using at airports does not depend on satisfaction of travelers with services, provided at the airport“ we used contingent tables, in which we searched mutual dependence of questions pair, connected with given hypothesis. In first case we compared dependence between questionnaire' questions No 2 – *How often do you use services of airports?* With following questions, which deal with satisfaction of travelers:

- Question No 5 – When you travel to airport by car, are you satisfied with number of parking places?
- Question No 6 – Express your opinion to the parking fees.
- Question No 7 – Are you satisfied with services, provided during checking process?
- Question No 8 – Are you satisfied with quality of security control?
- Question No 11 – Are you satisfied with orderliness of terminal and surroundings of airport?

Due to the comparison we made contingent table, for which we calculated testing characteristic chí-quadrant that we compared with critical table value for chosen probability of mistake and determined level of variance.

Evaluation:

- Among frequency of services using at airports and satisfaction of travelers with number of parking places there is no statistically important relation. We accept the hypothesis.
- Among frequency of services using at airports and satisfaction of travelers with volume of parking fees there is no statistically important relation. We accept the hypothesis.
- Among frequency of services using at airports and satisfaction of travelers with quality of security control there is no statistically important relation. We accept the hypothesis.
- Among frequency of services using at airports and satisfaction of travelers with orderliness of terminal and surroundings of airport there is statistically important relation. We do not accept the hypothesis.

From mentioned we can state that one of 5 tested cases had been confirmed as statistically important relation. There is therefore proper to state that orderliness of terminal and surroundings of airport is significant evaluation criteria of travelers' satisfaction that has direct connection with their frequency of chosen airport using. We accept hypothesis in 4 of 5 cases, so we can state *we accept hypothesis H4*.

For testing of final hypothesis H5 „Frequency of services using at airports does not depend on satisfaction with communication of personnel“ we searched dependence among question No 2 – *How often do you use services of airports?* With questionnaire questions, connected with communication of personnel, this means:

- Question No 9 – Are you satisfied with communication of personnel at the airport?
- Question No 10 – Are you satisfied with understandability and clarity of announcements and prompts at the airport?

Also in this case we have chosen testing method chí-quadrant.

Evaluation:

- Among frequency of services using at airports and satisfaction of travelers with communication of personnel at airports there is no statistically important relation. We accept the hypothesis.

- Among frequency of services using at airports and satisfaction of travelers with understandability and clarity of announcements and prompts at the airport there is no statistically important relation. We accept the hypothesis. From higher mentioned testing of questions we can evaluate hypothesis H5 as relevant, since it had been confirmed in both tests. *We accept hypothesis H5.*

#### 4. Conclusion

Results of research prove that almost half of all travelers are created by people with finished university education, from which we can state that probably this group could be target segment for aerial companies, to which they could invest and orientate to their demands. But we should also consider second biggest group that is created by travelers with secondary school education. Both groups should become target segments of airports in Slovakia.

From results of research results that there is statistically important relation among gender of travelers and their satisfaction with volume of parking fees and among achieved education of travelers and their frequency of services using at airports. After elaboration of results from questionnaire, their evaluation and control, we can choose target segment of travelers. Choice of target segment depends greatly on chosen strategy of the company. After its choice, there is necessary to make its deeper analysis that should reveal real satisfaction of chosen travelers, their priorities, behavior pattern, etc.

Due to the successful establishment of segmentation in the future there is necessary to make process, describing individual steps, which means so-called methodology of segmentation. This process should consist from several important processes and key activities, mainly:

1. Analysis of established segmentation:
  - Control of present state of segmentation.
  - Choice of available improvements in area of travelers' segmentation.
2. Methodology of improvement.
  - Methodology of improved segmentation establishment to the company.
  - Control of improvement methodology of travelers' segmentation.

Individual key activities must consist from steps, by which demanded result could be achieved. In the area of aerial companies responsible employee would be responsible for every step, commonly chosen from correspondent division, according type and character of the task. This methodology of segmentation in the future can be elaborated by the way of available information technologies with aim that its form and content would be clear, readable for all employees and with stated goal, or expected results.

Today any economy or market could act without providing of qualitative transport of persons and goods. Transportation of persons is speeded up due to the aerial transport, and also volume of transports from place to place is increasing. Increasing of services' quality in this segment of transport is therefore very important due to the increasing volume of transported persons.

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