A2A SERVICE APPROACH FOR PRM IN AVIATION INDUSTRY

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Abstract

Before 1999, easyJet was a small privately owned airline company, where the owner hated Internet per se. However, that was the first air carrier to start selling tickets online and became the leader in no time. After 15 years, we rarely find a person still buying tickets through a booking office at the airport. This research is to highlight a new prospective in the aviation industry development. Vision for a new product – A2A Concierge – would reshape an existing model of providing services. Cargo and passengers will travel from and to an address, not airport. The elements of that are already widely offered by agencies and airlines. Airports may become dispatching services, while coordinating much wider spectrum of travel arrangements than presently. The reshape should result in more efficiency and increased turnover.

Key words: A2A Concierge, Passengers with Reduced Mobility (PRM), passenger traffic planning, A2A time span, A2A travel voucher

1. INTRODUCTION

Contemporary airports around the world are primarily administrated on the ground of regulations and protocols to secure safety of air traffic and provision of standard services. In part, this is due to a situation when airports are still state enterprises. For a state, an airport is a primarily strategic point and much less business enterprise. The two concepts of management are totally different. In the first case, the airdrome is an object of infrastructure to serve the needs of the state with a moderate service level for passengers. In the second case, the airport is the business and to secure higher profits, the management team must stress the greater service standards for its clients – airlines, passengers and companies providing non-aviation services.

The authors of this paper have chosen to concentrate on service models in airport management business. Up to now, there is no single sufficient model of customer service proposed and accepted by all boards of airports. Having no model means absence of measurement of service. To be more specific, there are numerous approaches or even simply interpretations of what might be the standard for services. But, what is common for the service oriented airport administrations, they would do everything possible to satisfy their clients.

One should realize that satisfaction of different types of clients is not the same. Needs of a passenger at the airport are not alike to airlines or non-aviation services provider, like an eatery or DHL. The passenger looks for empathy and variety of services, but businesses consistency. But what should lead all the clients to satisfaction are efficiency, consistency and timeliness of operations. The authors went further to introduce new variable in evaluation of satisfaction of the clients is the total time spend by a passenger from an address he is going to travel from to a destination address. Calculating time of travelling beyond that spent by passenger at airdrome extends existing paradigm of providing services by an airport. Presently, every passenger plans and reaches an airport on his own. Airport administrations consider it unprofitable and out of their scope to manage delivery of passengers from an address. However, the authors plan extension of their research to reintroduce important variable of total time spent by a passenger for travelling.

Majority of airport administrators do not care about a client before it has arrived at a door of an enterprise. Often, infrastructure and transportation to get to an airport are provided, but are very basic and only partly meet the needs of, for example, passengers with reduced mobility (PRM). In their scientific work, the authors have distinguished specific needs of two other groups – business and remotely located travellers, but left consideration of both beyond this study. Maybe it seems less a
matters while in the homeland, but it makes at least much more sense when a traveller is abroad. Let us consider only one example. It is still common in Europe for travellers being overcharged for transportation services. One should mention numerous scandals, including in our home Riga, where taxi drivers were scamming their passengers. One of the authors had a situation in Cologne, Germany, when he had to call an official taxi company taking him to a wrong hotel, but a dispatcher offered to talk in German or Turkish only. Interesting, but calling police did not help much, as an officer did not speak English as well. Adding problems related to using different currencies makes travelling a real challenge for many travellers.

Passengers with reduced mobility (PRM) are a relatively new category of air travellers, introduced by the European Commission in its regulation 1107/2006. The document defines the passenger with special needs and regulates the operations of an airport while serving him or her. However, the scope of the power of the document is limited to a specific object, an airport, but it does not regulate what happens during a period of time in between a PRM leaves an address or location and moves towards the airport, as well as the time after he or she would leave an airport after arrival for a destination address. There is no text is known to the authors to discuss such the necessity of extension of services. Not existent for the moment airport concierge services would coordinate all the activities and movements related to address-to-address (A2A) travel.

Reflecting to possible objections, one should be informed that many airports and airlines are implementing elements of A2A concierge model of travelling already. For instance, Riga airport offers special services for VIP and PRM. VIP services are more advanced as solidly paid. In its part, any service beyond the airport premises for PRM are per fee as well. Often, lonely PRM would not be able to completely self-care, as well as they may not afford such the expenses. In the present state of affairs there is a vicious cycle of what is impossible for the majority of PRM. The authors have collected enough opinions and data to claim necessity of introduction of A2A Concierge to PRM and VIP, but later to the rest of the passengers.

To address further doubts of sceptics, one should bring the matter of social services, which are the function of the state. The problem beyond the scope of this study is limited income of PRM. They would literally not able to travel without having sufficient funds. It is responsibility of the state and citizens to launch a program supporting PRM in their travel needs. For instance, volunteer Lions Clubs across USA and other countries would provide transportation and other services to citizens with disabilities and veterans. Programs, like “give a lift to a veteran” are popular in many countries. The programs would create the perfect ground for not only transporting or otherwise helping, but buying trips for PRM as well. It is proven that businesses would join and demonstrate social responsibility. Finally, adding that there are about 30 percent airline seats are left unfilled, one may speculate that PRM reserve uncalculated potential of additional revenues for all the related to air travel businesses.

Presently, PRM needs are often overlooked and not deliberated underserved by air industry. It is a matter of time and business initiative before it will become a dominating model of booking and travelling between the addresses. Presently, no person can exactly calculate, how much time and money he would exactly spent between the addresses. There are several always changing variables in the equation. Though for both groups businessmen and PRM it is often crucial to have time and budget calculated. Having very limited funds, PRM would expect very precise calculations of time and costs.

A2A Concierge trip of PRM would be coordinated by an organization like Lions Club or a government agency. The one would employ volunteer and per fee services both locally and abroad. Airlines and hotels would provide tickets in a similar to Last Minute Travel bookings. For instance, administrators of loyalty currency program (PINS) in the Baltics would reserve or directly reach the airline and ask for a discounted seat. If confirmed, the passenger only pays a reasonable fee and gets his travel voucher. Same is about booking a hotel. Atatürk International airport in Istanbul (Turkey) offers any passenger having a lag between connection flights to spend his hours at very comfortable four stars Hilton Hotel in the city absolutely for free. Hundreds of passengers using the opportunity and are attracted to this transfer destination. Adding relatively low prices for Turkish Airlines flights makes travelling for PRM even more realistic. For the remark, due to better planning and organization, the mentioned hotel profits from booking the room two or three times per 24 hours.
The goal of this paper is to partly test essential propositions of a new service model in aviation industry, where airports sell, but passengers buy their travel vouchers from and to an address, not airport. To narrow the scope, the authors limited their study to review needs and expected services by passengers with reduced mobility (PRM) during the whole trip, starting at home address. It is expected that a new variable of time spent for travelling from and to an address may take aviation industry to a completely new level. Presently, no one counts time for a travelling passenger (Castro, Lohmann, 2014). Authors believe that introduction of the new concept will decrease total time and money spent by passengers for their complete travel, but increase general satisfaction. The new service is expected to cover any traveller’s (PRM) arrangements between the addresses. The authors admit, they were not able to find many articles specifically on the subject of PRM travel arrangements before arriving to an airport and after leaving the one - the fact pose limitation on the outcome of the study.

2. THEORETICAL BACKGROUND

In their work the authors came across of numerous researches examining important variables of key factors affecting travelers’ choice of a departure and destination airport. Commonly, authors of the papers do not segment passengers in groups beyond demographic markers. For instance, some authors would divide passengers on residents versus not residents, others on business versus leisure travelers. But very seldom any author would apply a division based on disability, for example Passengers with Reduced Mobility (PRM) versus other groups. Cited sources give good introduction to the problem.

Kim, Park and Choi (2016) analyzed preferences of people using airports. The researchers concentrated on features of airports passengers consider more important. They build their approach on understanding what makes the characteristic of the airport significant and what makes travelers to believe that they are satisfied. According to their findings, the majority of passengers travel for business purposes. Further, authors describe a paradox - while business travelers primarily favor importance of convenient timetables, variety of routes and generally prices over characteristics of airport facilities, they would be commonly unsatisfied with the former ones, and generally satisfied with the latter.

Marucci and Gatta (2011) distinguished the following travelers’ airport choice characteristics – travel booking method and time spent for that, accessibility of the airdrome (including time to get to the airport), parking convenience and fees, number of flight per day, waiting time while reaching the gate, ease of transit, aircraft type and others. The analysis showed higher importance of access time to the airport and convenience of transit over any waiting time. In its part, American study by Skinner (1995) revealed that accessibility and flight schedule are two the most influential factors. In the given studies the researchers picked and stronger stressed the matter of time spent for booking and accessibility of the airports by PRM.

In his research, Marco (2008) found travel costs, availability of seats, airport accessibility, parking, characteristics of check-in and other non-aviation services facilities, as well as flights frequency, duration and quality, as stressed by travelers the most. In his part, Loo (2008) added factors as time of reaching an airport, access method and expenses, number of airlines and flights, cost of travel. His study revealed one more law relationship – tourists valued the airfare as the most important topic. Again, one may observe factors stressing accessibility of the airport and time, but no discussion of PRM.

Further discussion of elements affecting travelers’ choice of an airport highlights work of Blackstone et al. (2006). Among other factors, the researchers suggested higher importance of airfare cost, number of airlines, distance to and convenience of ground transport to the airport, number of direct flights and check-in time. Despite expecting utmost importance of airfare for the passenger, they would equally stress availability of non-stop flights, waiting time before check-in and distance to an airport. Bradley (1998) similarly found top importance of airfare, access time to the airport and total travel time for the study selected passengers, but Furuichi and Koppelman (1994) found that all Japanese travelers would chose an airport offering larger number of flights.
Another aspect of the matter described in his research Bondzio (1996). He found that business travelers would appreciate comfort more and spend in average more on better quality services while traveling. Business travelers use taxis more often than leisure travelers. Tourists prefer cheaper public transit. Plus, Windle and Dresner (1995) confirmed that those who travel for business purposes will prefer airports with a larger number of flights than tourists. As well they have found that passengers who undertake several trips per year would originate those from the same airport both in present and in the future. And again researchers divide passengers on business versus leisure or tourists. No needs of PRM are discussed.

One research may be considered very helpful in its further application to studying PRM travel needs. Innes and Doucet (1990) studied passengers’ preferences over type of an aircraft. They found that the majority of passengers would prefer jet versus propeller-type airliners. One may speculate that PRM would show similar pattern of responses, as the latter vehicle vibrates and may create unnecessary discomfort. As well, propeller liners have little space inside. One should admit that jets are literally bigger and give more opportunities to meet the needs of PRM.

Another body of reviewed by the authors research came to better segment passengers while studying their preferences over airports. Linhares Bezerra and Gomez (2016) turned their scope to differences in interaction and behavioral patterns among domestic and international passengers. While studying perceived level of quality, they have spanned their study over perception by travelers of check-in, security, facilities, convenience, ambience, mobility and prices. The latter four were marked as presenting significant difference between the groups. Besides, the authors found that Airport Service Quality (ASQ) reflects in passengers being more relaxed, and consequently more willing to spend time in shopping area. ASQ is crucial for PRM as well.

Luca (2012) compared passengers in Italy who take non-stop versus flights with a transfer. According to the findings, the former are influenced by number of flights, but latter by access time. Adler at al. (2005) and Hess et al. (2007) studied preferences of business, tourists and travelers visiting relatives and friends. All the groups picked airfare and access time to the airport as the most influential in their decision to travel form one airport or another. But Zhang and Xie (2005) applied the known division by business versus tourist travelers to trips from and to small-scale local airports. Airfare, flight schedule (times of departure and arrival), preferred airline, type of the vehicle and distance to the airport were among the highly ranked attributes. Logically, if one would describe a typical passenger of the budget airline, s/he will receive exactly the profile of making choices. Later information may be applied for studying PRM travel planning.

The whole discussion of factors influencing the decision of traveling from one airport or another may sound strange to the travelers in the Baltics, where there is technically only one airport at their reach, like Riga airport in Latvia. Though, the whole story makes more sense when longer trips are discussed. For instance, a leisure passenger traveling from Latvia, but across the Balkans, would face a decision from which airport to travel back. In Bulgaria, for instance, there are several international airports – in Sofia, Plovdiv, Varna and Burges. The factors like airfare may push a traveler to use an airport, even if it will make him to travel for four extra hours. Here the authors reflect to their own experience, when they refused to take a direct flight to Riga from the nearest airport in Burges due to significantly higher price. Notably, other characteristics of the surrounding airports were insignificant.

It sounds obvious that PRM preferences should be something different from average business or leisure traveler, and sometimes those are. Their present choice would be simply reflecting on whether airports and airlines are able to accommodate their special needs. There is not much research available on the topic, possibly due to lesser commercial attractiveness. Rare research by Yu-Chun Chang and Ching-Fu Chen (2012) revealed the primary attributes for PRM traveling overseas: an option to report specific needs during the booking, barrier-free space and facilities, and availability of specially trained staff. The results also show that the choice of an airport may influence availability of personnel helping with arranging transport for overseas travel, specially equipped rooms and travel information. Otherwise, PRM needs are not much different from the rest of the passengers, if the discussed is provided.
According to Chang & Chen (2012) the international trip of PRM is divided into five stages: pre-travel (travel planning and arrangements), pre-flight (at airport), during flight, post-flight (time between landing and leaving an airport), oversees travel (time and activities) after leaving the airport. Their concept is visualized below in the Figure 1.

At the same time, the authors of the given paper have found ways of improving the approach proposed by Chang and Chen. The authors of the concept more or less just visualized the existing model of serve for PRM. They did not plan to elaborate on that. For example, pre-travel stage simply states that somehow the PRM traveler books his or her flight, and later somehow reaches the airport. Only this example shows that the concept has flaws. No, it is crucial to understand how PRM traveler books the trip and how s/he reaches an airport. Plus, the authors vision increase in amount of PRM travelers simply by the fact of introduction of A2A Concierge services, similar to already existing VERTU Concierge for business travelers. In the given case, social workers would qualify and be completely able to serve that function. Same is applied to the final stage (overseas travel), where PRM is on his own in another country. What if PRM is lonely traveler without knowledge of the local language? A2A Concierge might be helpful to coordinate services and resources to make the travel happening.
To conclude, there are a few authors talk about meeting needs of PRM beyond airport’s premises. At the same time, a lot of potentially passengers stay at home. A2A Concierge services would pull all the PRM needs together, as well as communicate those to the outer community. Given research is to highlight the problem and propose the A2A concierge for at least booking the trip and serving PRM from an address to an address, but possibly beyond that.

3. METHODOLOGY AND FINDINGS

Analysis of scientific publications was used to theoretically study the problem. Its results are given in the theoretical background of the paper. Once the problem was understood, there was decided on criteria for selection of experts for the in-depth structured interview. Experts were picked and invited from administration and Ground Handling Department at Riga airport, Association of Social Workers of Latvia, and two associations of individuals with disabilities. Experts gave to a study focused direction.

During the interviews, besides other questions, the experts were shown the Figure by Chang and Chen and asked whether it reflects the present state of affairs and what would be the suggestions to improve it. Experts found the figure to show bigger picture than they would daily operate with. They recognized that never thought about the matter beyond their job description and regulations sent by European Commission and local regulators. Without even getting in many details, they have admitted that holistic view of the problem would increase efficiency of services.

Another set of questions during the interview were to communicate A2A Concierge services for PRM, but potentially for all the passengers. The experts from the airport didn’t much see their direct involvement in the possible changes due to their busy schedule, but social workers and representatives of the associations were very positive about proposed A2A Concierge services. Every expert admitted that much work should be done, but no one confronted the idea itself.

![Diagram](image-url)  
**Fig 2.** A2A concierge service during PRM travel
The following step undertaken by the authors was to interview PRM. Selection criteria were to pick those individuals with reduced mobility that travel. No other demographic or any other limitations were made. The PRM were very concerned of their needs before, during and after the trip. The only attribute that would diminish the difficulties would be available funds. However, the interviewed mentioned that it is more common for PRM to experience financial difficulties and avoid traveling by air because of that. They have recognized that there are a lot of services to help PRM, but all of those are sporadic.

The authors of the study have elaborated on the model described by Chang & Chen. They have accented transition points from one stage to another; propose changing the fifth stage of the model and its saturation. For instance, for PRM is crucial to have continuous care and services without interruption after he or she reach the hotel. Just to mention language barrier that may turn the travel to a complete disaster.

4. CONCLUSIONS AND PROPOSALS

The main conclusion of the given pilot study is that invited experts agreed on the base propositions of the A2A Concierge operational model for PRM. In their opinion, PRM are often not able to travel because numerous elements of the trip are left out of their reach. No organization or service provider would follow PRM along the trip. At the same time, there are several programs for regular passengers, which may become building blocks for discussed project. For instance, PINS program would agree with airlines to sell available unsold seats for the loyalty program points. Additionally, airlines provide transfer to their passengers from specific points in the city, like a hotel, and include the one to the final bill. VERTU Concierge give a very clear example of how to organize that part of the program. Government agencies, charity funds and private organizations already have experience in organization of complex help.

After organizational stage, the process would start from collecting information for a database of those who in need or with reduced mobility. On the other hand, social workers or other administrators would collect information about available resources and services. If it is impossible to get the resource or service for free, the case administrator would post the profile of PRM and needs which are to be met, but must be paid. In response, businesses or individuals would donate their funds or services to completely or partly compensate for the trip. The communication of the case can be made through a webpage. Then, it will be the matter of communication and time to collect the needed funds.

Summary of benefits from potentially introduction of A2A Concierge, not only for PRM, are built around three axes - service, economical and social responsibility. Benefits on the first axis are that improving service of passengers – times spent for booking and travel between geographical locations (not airports), logistics optimization and new services – will result in significantly increased satisfaction level. New business operational model would result in better planning and increased volume of passengers, optimization of cargo and passengers’ logistics, additional profits from introduction of new services, as well as increased employment and GDP indexes. While addressing social responsibility on the third axis, the author and experts stress a potential for an increased traffic for the expense of underserved passengers, for instance elderly and PRM. Finally, implementing A2A Concierge and three-axes model will show any region as modern, efficient and better society, the one that benefits from the best available knowledge and technologies and creates new life opportunities for those in need and underserved.

Whilst studying A2A traveling for PRM, the authors found that no researcher calculates total time for traveling between two addresses. The new variable may become influential in reshaping the transportation industry. Therefore, there is ground to conduct further research on comparing times spent for current and A2A travelling. Hypothesis would claim a passenger on average spending less time to reach his/her destination with A2A ticketing. Another possible study would target a gap in serving disabled, elderly and remotely residing passengers.
REFERENCES


