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# Main Determinants of Shaping the Quality of Air Transport Services

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Joanna Hawlena<sup>1</sup>, Anna Mazurek-Kusiak<sup>2</sup>, Agata Kobyłka<sup>3\*</sup> Abstract:

Purpose: The purpose of the article is to demonstrate the impact of the most important determinants on the selection of the best quality variant of the air service level, depending on the proposed price, standard, comfort, service quality, loyalty, scope of additional services and other criteria.

**Design/Methodology/Approach:** Research on the determinants governing the choice of the air travel segment is based on available literature, statistical documentation, IATA and ULC, Airbus and Boeing, and mainly based on own empirical research. The tests carried out using the diagnostic survey method included two comparable periods in 2011 and 2018. They were carried out on a group of 321 passengers, who started their journey at Katowice-Pyrzowice, Kraków-Balice, Rzeszów-Jasionka and Lublin-Świdnik airports.

Findings: The undertaken research based on own empirical study demonstrates the decisive importance of quality in creating the unique services and added value. The effectiveness of reasons determining the passengers' movements between traditional and low-cost carriers, was also demonstrated as a result of the improvement of consumer service in internal, intersegmental and inter-branch conditions of competition.

**Practical Implications:** The key determinant of obtaining a competitive market advantage by service providers is the improvement of passenger service quality at the departure port, on the aircraft and at the destination port. The skill and effectiveness of this dominant use is demonstrated by the level of elimination of unfavorable features of the service already in the design phase, the dimension of the outflow of loyal passengers to competitors, the number of new increments and the expansion of loyal customers, which is expressed in a synthetic way by the increase in purchases.

Originality/Value: Comparison of services of traditional air carriers with the low-cost carriers on the polish market. Data can be compared with other countries.

**Keywords:** Determinants of choice, quality of services, air transport.

JEL code: L15, R19, R40, R41, R49, Z32.

Paper type: Study research.

<sup>&</sup>lt;sup>1</sup>University of Life Sciences in Lublin, Faculty of Agrobioengineering, Department of Tourism and Recreation, hawlena@interia.pl

<sup>&</sup>lt;sup>2</sup> University of Life Sciences in Lublin, Faculty of Agrobioengineering, Department of Tourism and Recreation, anna.mazurek@up.lublin.pl

<sup>&</sup>lt;sup>3</sup>Corresponding author, University of Life Sciences in Lublin, Faculty of Agrobioengineering, Department of Tourism and Recreation, agata.kobylka@up.lublin.pl

### 1. Introduction

The analysis of the passenger transport development process shows that in the second decade of the 21st century, a mechanism specific to this type of transport was created, shaping two very important market processes: gaining advantage and domination in a competitive environment and eliminating weaker players from the market. The main source of these processes is the intensification of competition and the implementation of qualitative changes in the micro and macro environment. In the structure of determinants shaping the global transformation process, the improvement of quality has become an absolute requirement to gain a durable market advantage and the most effective way to maintain the long-term dominance on the market. It was shown that passenger air transport is subject to the same economic constraints, market mechanisms and development stimulators like any production activity, with necessary requirement of quality improvement, which has become the most important global trend.

Despite the wide range of universal quality functions, the features of its specialized separateness are becoming increasingly important. The same service accepted by a specific group of recipients may be rejected by another, because it does not fully meet their requirements and expectations. In the supply of air services, improving the level of quality requires exceptional professionalism, because almost 90% of dissatisfied customers will resign from further cooperation with the service provider, and each of them may discourage the purchase of a further 10 to 20 people. These losses may in certain circumstances destabilize the tenderer's market position. This increases the importance of the quality of offering and loyalty links, confirming the rightness of using such solutions and calculating the benefits, showing that the cost of retaining a client is less than the acquisition of a new one. Incorporation of a new passenger into the company's system usually involves spending significant expenditures on promotion, but without this mechanism, the chances of a significant increase in the size of demand decrease (Hawlena, 2012a; Hough, 2004). Lowering the quality also generates hardly measurable effects, including loss of brand, reputation, reduction of cooperative abilities, and quitting of part of the crew. In some cases, the sum of these losses may increase up to 35% of the sales value.

Shaping of passenger air services is a complex process, in which the lifecycle of the service should be taken into account, i.e. all phases of its construction and implementation, because the final quality level consists of values developed both at the implementation and application stage. A professional quality improvement program in each of the listed phases positions the recipient at the center and subordinates all functions of the company's operations to his/her expectations. Under current market conditions, the level of so-called reliable service provision is a condition that is insufficient to increase demand. In a competitive environment with an increase in market share, the quality and innovativeness of the service are increasingly decisive. Meeting these criteria requires accurate reading of the

recipients' requirements and expectations and constructing a service that will ensure that these expectations are met in the long term.

This is due to the intensifying competition, both domestic and international, and striving to obtain a leading position and in the long-term market competitive advantage. In addressing this scope of issues, it is first necessary to identify the concept of quality, because its scientific significance has not yet been clearly defined.

# 2. Concept of Quality and its Characteristic Features

In a common perception, quality is a comprehensible and unambiguous concept, while in science, it is ambiguous and interpreted differently by the authors. On the basis of economic criteria, quality reflects the degree of conformity of the product with the requirements of the recipient, which in turn result from its needs and are determined by the level of income and the price level (Kireenko and Nevzorova, 2015). Similarly, quality is seen in terms of technology, in which it is identified with the relevant norms, standards and assumptions set in projects (Saha and Theingi, 2009). In other terms, for example in the sociological aspect, quality is the response of customers to specific features of products and services (Deb and Ahmend, 2018), while in humanistic terms, quality is the creation of an appropriate standard of living referring to the culture and work (Zeithaml *et al.*, 1996; Wang *et al.*, 2017). There is also an approach to quality that, in the most general sense, reflects the level of consumer's satisfaction (Prentice and Kadan, 2019; Kaczmarczyk, 2016).

In passenger air transport, the service is characterized by simultaneous production and consumption, including both the quality of service provided and executed (Zhu et al., 2018; Whitelegg, 2003). In this approach, quality must fulfill the function of continuously satisfying the growing needs and expectations of clients (Exboro, 2015; Sadilek, 2015; Grönroos, 1984). Technical elements are material resources, operating systems and procedures, while functional ones include the attitude of the stuff to the customer, manner of employees' behavior and communication skills. Each element of this structure has a significant impact on shaping the comprehensive level of service quality, but functional quality is more important in the customer's mind than the technical one, because it usually determines the one-off or several-times purchase of the service. It also determines to change the service provider, creating a key requirement, in which the sphere of consumer service is the most important and the most difficult to implement (Mazurek-Kusiak, 2011).

Without improving the quality, air transport would be unattractive and low effective. In this activity, improving the quality is a difficult but necessary process. It can be underestimated or carried out partially, but then there is a lack of added value.

The concept of quality is extremely spacious and roomy and is characterized by an almost infinite range of meaning and scope of inter-disciplinarity. Scientific analysis

of this concept includes economics, philosophy, technical sciences etc. Such a broad concept is difficult to grasp in one universal and exemplary definition. Such attempts have failed by many scientists.

The concept of quality was defined in a general and universally understandable way in the Encyklopedia Powszechna by PWN. According to this source, quality is a category that means "in a general sense – ownership, type, species, value of a given object, and in a more strict sense – a trait or set of features that differentiate a given item from others or the overall features of a given item, important due to its structure internal and because of its relations, interactions and relationships with the environment". In common understanding, the quality of air service also corresponds to similar norms, requirements, properties and parameters, with particular emphasis on the properties expected by the customer in terms of service excellence.

For the first time we meet with the definition of quality in Plato's considerations (428-348 BC), by which he understood the degree of perfection of things. Already in this simple statement, its essence was included as the degree of perfection of a set of features that differentiate a service or object from others of the same type. Chinese scholar Lao Tsu (6th century AD) similarly understood the quality, indicating that it is something that can be constantly improved. A significant change in its perception was introduced by J. Kant (1724-1804) as a distinction between "the thing in itself and the thing for me". This approach has widened the spectrum of recognition of the area and its operating conditions. A novelty is the statement that the actual knowledge about an object is obtained at the moment of its presentation, considering it the most important phase of consumption, which indicates that it is basically subjective (Roszak, 2014).

Although this way of identifying the quality is very similar to the contemporary one, the year 1920 is considered a breakthrough in the approach to the perception of the quality essence. During this period, the American company Western Electric applied a new system of comprehensive assessment of manufacturing processes based on analytical conclusions resulting from the statistical method of controlling the company with the need to respect the close relationship between the quality level and the client's expectations. This activity created the foundation and set out the directions, scope and form of shaping the quality adopted in the work of many scholars. In the considerations of W.E. Deming (2012), quality is defined as the degree of comfort, reliability and homogeneity of offering, while maintaining the criterion of relatively low costs and matching the offer with market requirements. In many other definitions, we find the same paradigm, but also often extended with autonomous features, criteria and expectations related to a specific group of recipients, branch or the requirements of science.

Analysis of symptoms and trends in the development of the passenger services market indicates that the next stages of shaping a higher level of quality require the improvement of comprehensive quality control systems (Total Quality Control) and comprehensive quality management systems (Total Quality Management). The aim of these activities is to transfer entities to a higher level of quality service provision. In designing and implementing these assumptions, the current position and significance for the potential client's service provider, mainly his expectations and how to meet them, and their existence and development, depend on the degree of loyalty and the belief that they are the most important part of this organization should be identified as accurately as possible. Their needs and wishes should be met with the utmost care and possibly in the highest quality standard, because in the absence of their interest, even a significant enterprise can be eliminated from the market. The tenderer must find answers to relevant questions, including whether the specification of the service meets the expectations of the consumer, whether the declared features are consistent with his requirements, whether the service meets the criterion of product reliability and whether the recipient will feel satisfaction from the price-to-service ratio (Bugdol, 2011; Yean et al., 2018). Only such perception of the quality essence enables effective use of determinants and features to the greatest satisfaction of the customer.

Selected spectrum of implementation of the main objectives shows that no unambiguous definition of the quality concept has been developed so far. Most often it is defined by various forms of the effects caused, which in a variety of areas and types of activity, have specific degree of dissimilarity and one common feature, which is the striving to improve individual product characteristics. This way of perceiving and managing the quality exists in passenger air transport, in which it occupies a key position as the main determinant of seeking a competitive advantage (Das, 2004).

The pressure resulting from the need to improve the quality of service provision results from the desire to gain dominance, greater market benefits and more effective relationships. The nature of air transport has resulted in faster implementation of innovative mechanisms and higher quality solutions than in other sectors. Dynamics of these is a kind of phenomenon, due to which the technical level, safety and the possibility of effective development of aviation companies is in a constant upward trend (Andersen and Poulfelt, 2006; Horbaczewski, 2006).

### 3. Stimulators of Air Services Demand

Effective use of market stimulators of demand growth is largely dependent on the delivery of a service with the correct operational parameters to the market. Effective implementation of this task requires systematic and in-depth studies of their level of quality, especially new services, in order to reduce the number of unsuccessful or unfinished offers on the market. Their appearance does not only lower the quality level of the service, but may in extreme conditions lead to the company's bankruptcy. An in-depth analysis of service creation process enables faster and more effective adjustment of its features to specific conditions and expectations of recipients in a given market. A professionally organized process of constructing a

service reduces the risk of making wrong decisions during the design phase and prevents from significant consequences related to the appearance of an underspecified offer on the market (Holloway, 2008). Such a concept of constructing a service should find wide acceptance in every service sector, however, for many reasons, it is often not implemented. To bring the essence of this problem to light, a model was presented illustrating the subsequent stages of the process of choosing the optimal service, both in terms of intra-sector, intersegmental and inter-branch competition, the qualitative parameters of which can satisfy a significant range of recipients' expectations (Figure 1).

Passenger services market Consumers Tenderers Carriers of other transport branches Determinants of service selection Carriers of air transport Distance Traditional Low-cost Intra-industry competition Price Competition in the segment Competition in the segment Comfort Intra-industry competition Information Inter-industry competition Analysis process of service features Around-offer services Elements of competition Quality Competitive advantage of the offer Price Choosing the optimal offer Service delivery

Figure 1. Model of air service selection

Source: Hawlena (2012a).

Based on the use of the possibilities resulting from the proposed model, it can be concluded that professional correlation of the presented processes of competitive verification of qualitative features and market attractiveness of the offer is not only a

potential source of improvement of the economic position of tenderers and unification of the service, but also a mechanism to increase the level of satisfaction of the widest range of customer expectations. This is particularly important in the conditions of global competition, in which the acquisition of a passenger requires broader knowledge of his preferences, expectations and motivations regarding the selection of the offer. Versatility of the presented model allows to use it in practice to analyze the most important stimulators, determinants and features necessary to construct a service in any type of activity. Its advantage is the simplicity of making an assessment allowing to base the research on various autonomous criteria, specific features and characteristic types of competition regarding the selected entity and type of activity.

The choice of each service is a process of competitive market confrontation, in which verification of specific consumer expectations with the possibility of satisfying them at the appropriate quality level takes place. Its effectiveness consists in determining the suitability of the qualitative features of the offer, already in the construction phase. Professional level of implementation of the subsequent phases of this process is crucial for both the tenderers and customers, because result of such verification enables correct construction of the expected service, identifying the recipient's motives and expectations, determining its buying or resigning.

Selection of the optimal offer is therefore an analytical process, in which all elements of its attractiveness from the point of view of the client, are assessed. However, consumer decisions related to the selection of higher quality services are usually limited by financial possibilities of recipients, which reduce the scope of free consumption (Stonehouse *et al.*, 2001; Doganis, 2012).

Practical use of the discussed model consists in the continuous assessment of all market offers, their competitive features existing in individual transport segments and on each serviced market. This process can be implemented in every service segment, in different conditions and the level of economic prosperity. The combination of determinants and expectations analysis regarding the optimal choice of service in one schematic diagram is a logical construction ensuring high final efficiency. These elements are closely related and determine the business success of service providers, provided they are synchronized correctly. Although every change in consumer preferences causes a specific reaction of producers, and the emergence of a new competitive offer changing the preferences in the sphere of demand, it is possible, due to such analysis, to precisely verify the features that determine the attractiveness of offers already in the design phase (Wiktor *et al.*, 2008). Such a dependence of feedback links creates a system of effective cooperation of tenderers and clients necessary to create the highest quality offer in competitive market conditions.

### 4. Determinants of Choosing a Travel Segment

Research on the determinants governing the choice of the air travel segment is based on available literature, statistical documentation, IATA and ULC, Airbus and Boeing, and mainly based on own empirical research. The tests carried out using the diagnostic survey method included two comparable periods in 2011 and 2018. They were carried out on a group of 321 passengers, who started their journey at Katowice-Pyrzowice, Kraków-Balice, Rzeszów-Jasionka and Lublin-Świdnik airports. The aim was to demonstrate the impact of the most important determinants on the selection of the best quality variant of the air service level, depending on the proposed price, standard, comfort, service quality, loyalty, scope of additional services and other criteria. Technique of conducted research has shown that passengers are familiar with the comprehensive range of advantages of most offers on the market. Statistical documentation of the results of the conducted source research was collected in Table 1 covering the main determinants of carrier selection in the segment of traditional services and in Table 2 determinants of carrier selection in the low-cost services segment.

**Table 1.** Determinants of choosing a traditional carrier

No.	Determinants of choosing a traditional carrier	Resul	Results [%]	
		2011	2018	
1	Higher travel comfort	23	15	
2	Punctuality and security	19	19	
3	Transfer to the central airport	14	16	
4	Good level of connection synchronization	13	16	
5	Continuity of baggage handling in transit ports	12	14	
6	Confidence in the carrier	7	8	
7	Provision of free additional services	5	4	
8	Participation in the <i>frequent flyer</i> program	4	6	
9	National carrier	3	2	

Source: Hawlena (2012a) and own study (2018).

**Table 2.** Determinants of choosing a low-cost carrier

No.	Determinants of choosing a low-cost carrier	Results [%]	
No.		2011	2018
1	Ticket price	37	40
2	More connections	28	30
3	Departure from the regional port (close to the place of residence)	13	14
4	Opportunity to take advantage of the promotion	7	5
5	Opportunity to purchase additional services on the carrier's website	6	5
6	Departures in the early morning hours	5	3
7	Arrival at the regional port (close to the destination)	4	3

Source: Hawlena (2012b) and own study (2018).

Research conducted in both periods showed a varied range of causes and changes in the effects of their impact on the choice of carrier and passenger class of travel in traditional and low-cost transports. Diversity of motivation is caused by the demand of a specific group of recipients for a service with higher level of comfort, and another for a low price of travel, which determines the choice of the transport segment. Hierarchy of basic determinants importance in the selection of traditional carrier in 2011 and 2018 showed that the highest rank was achieved by features and advantages ensuring: higher travel comfort, punctuality and safety, delivery to the central airport and efficient synchronization of connections.

Configuration of these features indicates that the level of travel quality is dominant, but passengers also attach great importance to the efficiency of transit connections, degree of trust creating stronger loyalty links and opportunity to gain benefits from joining the frequent flyer program. It happens that passengers, who do not speak foreign languages, who value the possibility of communicating freely at the airport and on board in their mother tongue, choose a national carrier.

The importance of the main determinants in the selection of a low-cost carrier presented in Table 2 shows that among travelers declaring more frequent or exclusive use of low-cost carriers, the low price, a greater number of regional connections, and a near-home departure, are of the greatest importance, and, to a lesser extent, departure and reaching peripheral ports often closer to interesting tourist facilities and natural environments. Passengers of the low-cost segment also appreciate the use of attractive price promotions that are not available in traditional lines and the ability to comprehensively plan the entire trip on the carrier's website. Some passengers, for the significant qualitative value of low-cost services, consider the departure in the early morning hours, as well as the possibility of landing at a convenient time in regional ports, so that they gain more time for sightseeing or other activities on the destinations. This is important in short (weekend) tourist stays and commuting to work outside areas of large agglomerations.

This scope of research shows that also accessibility to the airport and departure time have become an important factor in the quality of passenger service, reducing the burden of air transport in relation to other branches, as well as to trips by own car.

This hierarchy of preferences shows that quality is not a priority for low-cost customers. Passengers declaring frequent or exclusive use of services of these entities recognized that a low price is the most important advantage of the offer, as well as an attractive price promotion, although only to a small extent available in the first-minute formula. Research conducted at airports has shown a greater number of low-cost destinations compared to traditional carriers and have been recognized as a significant qualitative value of the offer. This was particularly evident at the Katowice-Pyrzowice airport, where its low-cost carrier Wizzair has its base, and offera an extremely wide range of air connections. A significant advantage of these

lines is the service of regional airports, which not only increases the availability of air services, but also minimizes the amount of airport charges.

# 5. Change of the Travel Segment Selection Preferences

The determinants of choosing a travel segment presented in previous considerations have their sources in evolutionary changes in preferences. As a result of the process of making qualitative changes in the supply of passenger air services, the importance of research into the effects of global air service unification is growing (Wensveen, 2012). In this problem, the source research on the preferences of choosing the travel class is of significant value. They constitute a fundamental resource of important empirical information concerning the motivation of specific consumer groups, who prefer autonomous service quality standards corresponding to their individual needs. Effectiveness and configuration of these elements is variable, hence the study of their evaluation direction requires systematic and long-term observation not only of consumer behavior, but also of competitors and recipients of services.

Source research conducted in current market conditions takes into account both the instability of the global economy, politics and changes in the air services sector, which increases the value and comprehensiveness of this scope of analyses. In the passenger transport traffic, there is a greater dynamics of passenger transport to the LCC segment than in the opposite direction. The change in the preferences of the recipients of air services is to a large extent a result of the economic downturn in the crisis years, creating unfavorable conditions for traditional tenderers. This met with their quick response to the price level and improving the attractiveness of customer service. Research has shown that the dynamics and scope of displacements are influenced not only by economic reasons, but also by preferences regarding the quality of service in ports, on board and travel distance.

The effectiveness of preference impact was particularly evident during periods of economic slowdown, when for financial reasons, a growing group of passengers changed from traditional to low-cost lines on short and medium distances. In this case, the highest level of preferences has gained a low price and no need to use paid additional services (e.g. meals on the plane). Significant group of researchers noted that the low price still constitutes a significant preference, but sometimes the strong advantage of low-cost service has been the expanding network of connections and expansion into new markets. Development of this range of preferences was also influenced by the decrease in income of some social groups and decisions of the growing number of companies that do not agree to more expensive business trips with traditional lines.

The change in preferences, which is unavoidable in the long term, leads to the reevaluation of motivation as a result of the impact of changing conditions. It results in movements between the segments of the air services provision, the causes of which occurred in 2011 are shown in Figure 2, and in 2018 in Figure 3.

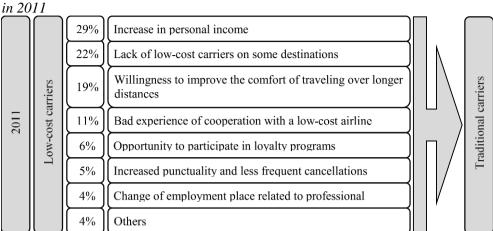
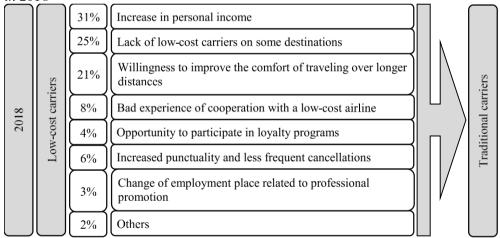


Figure 2. Reasons for moving passengers from the low-cost to traditional segment in 2011

Source: Based on own research carried out in 2011.

**Figure 3.** Reasons for moving passengers from the low-cost to traditional segment in 2018



Source: Based on own research carried out in 2018.

Analysis of the obtained data shows that the flow of passengers from the low-cost segment to traditional carriers is mainly a result of increased income of part of society, the lack of supply in some regions of such services, the need to travel in a higher standard of comfort over longer distances and improve punctuality and a less frequent flight recall. A comparison of results obtained in 2011 and in 2018 shows that this range of preferences and reasons for displacements retain an almost stable structure and hierarchy. It is worth, however, to show changes in the impact of particular causes, which are illustrated as deviations defining the direction and their dimension in particular positions of the study (Figure 4).

☐ Increase in personal income 2% □ Lack of low-cost carriers on some destinations 3% ■ Willingness to improve the comfort of traveling over 2% longer distances ■ Bad experience of cooperation with a low-cost airline ■ Opportunity to participate in loyalty programs 1% ■ Increased punctuality and less frequent cancellations -1% ■ Change of employment place related to professional promotion -2% ■ Others

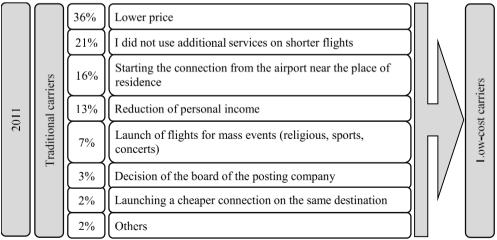
**Figure 4.** Change in the reasons for passenger transfer from the low-cost to traditional segment in 2018 compared to 2011

Source: Based on own research carried out in 2011 and 2018.

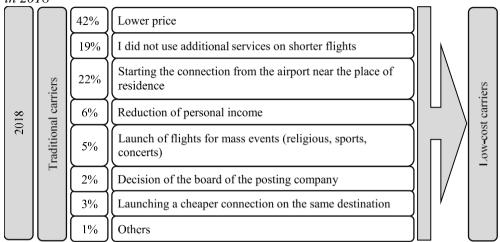
In the range from 1 to 3%, the increase of displacements in the discussed direction was influenced by reasons specified in the first three and sixth positions. In the other four, the rate of displacement was reduced (from -1 to -3%).

Using the same method, research was conducted on the causes of passenger transport, previously used by traditional carriers to low-cost carriers. The results of these tests are presented in Figure 5 (for 2011) and Figure 6 (for 2018).

Figure 5. Reasons for moving passengers from traditional to the low-cost segment in 2011



**Source:** Based on own research carried out in 2011.

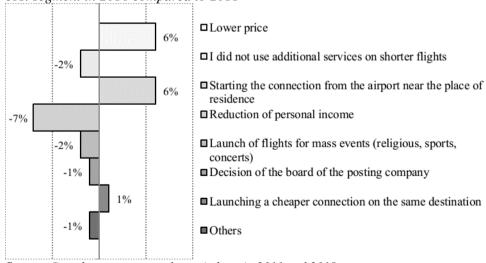


**Figure 6.** Reasons for moving passengers from traditional to the low-cost segment in 2018

**Source:** Based on own research carried out in 2018.

Comparing data from both research periods shows that both in 2011 and 2018, the main source of displacements are the same causes, however, interacting in different directions and dimensions of the effects of their impact (Figure 7).

Figure 7. Change in the reasons for passenger transfer from traditional to the low-cost segment in 2018 compared to 2011



Source: Based on own research carried out in 2011 and 2018.

Activity in this direction of transport results mainly from relatively decreasing prices in this segment of services, growing wealth of a part of the society, launching new connections from local airports and cheaper connections on the same destination. The asymmetry in shaping the wealth of the society shows that the largest obstacle

in this direction of displacement is the reduction in the level of personal income and other causes, the negative dimension of which is in the range of -1 to -2%.

Level of currently developing efficiency of a significant part of traditional carriers shows that they have made an effective restructuring related to the cost reduction. The effect of this process is to lower prices and re-acquire some customers of low-cost lines (Hawlena and Dudek, 2017).

It should be noted that in the operational strategy of these carriers, the higher importance was gained by instruments concerning:

- cost and price reductions;
- increasing the average distance per passenger (mobility factor);
- increasing the comfort of airplane equipment and passenger service;
- improving punctuality and less frequent cancellations;
- participation in the frequent flyer program (free flights);
- access to the VIP lounge (Hawlena, 2012b).

There is also a change in preferences on the market in choosing the class of travel. The number of displacements between business and economic and tourist classes is increasing (Teviana *et al.*, 2017). This type of displacement shows that the stable group on long distances, carried out by traditional carriers, are business class passengers, for whom the ticket price is not a determining factor, while the quality of service or certain luxury symptoms are the elements most expected by them. Likewise, low-cost carriers gained a growing group of loyal clients, mainly on short distances, because in this case, the basic factor of preferences is low airfare price, significant for the majority of this group of travelers. Higher displacement dynamics occurs on medium distances, where the terms of offering are available to the largest group of average-income recipients. In this range, there is a clear tendency for some LCC passengers to shift to the economy class of traditional carriers, gaining better comfort with moderate price increase, but also for economic reasons, a significant reverse movement is observed.

When comparing the determinants of the strategy of increasing demand used by carriers of both service segments, one should emphasize the positive effects of the purchase of a ticket for low-cost transport in the first minute formula. Significant efficiency of this form of sales results from its connection with high, though limited, promotions. There is even annual anticipation. However, research has shown that clients use these possibilities to a different extent (Figure 8).

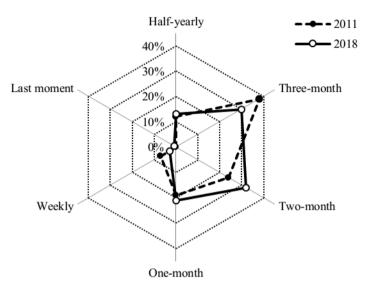
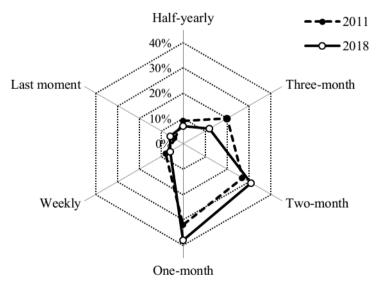


Figure 8. Anticipation of purchasing an airline ticket for low-cost airlines

Source: Based on own research carried out in 2011 and 2018.

It turns out that this method is a very effective instrument for filling the plane's capacity (LF) and changing behavior of recipients shows that in 2011 purchases with three-month anticipation prevailed, and in 2018 – with a two-month period. Similar studies were conducted among passengers of traditional lines (Figure 9).

Figure 9. Anticipation of purchasing an airline ticket for traditional airlines



**Source:** Based on own research carried out in 2011 and 2018.

These studies have shown that the largest group of their clients in 2011 made purchases in monthly advance, similarly in 2018, it was also one month, with a significant reduction in the three-month period. This proves that air tickets for flights with low-cost carriers are bought more in advance than for flights with traditional airlines.

The analysis and assessment of the determinants shaping the quality of air services presented in the study shows that the majority of passengers perceive the improvement of technical and technological quality as a factor and a normal value and a typical process the impact of which is later positioned when making consumer decisions. On the other hand, the quality of passenger service, innovation and usefulness of additional services, as well as continuous and empathetic cooperation with current and former clients, implemented in the whole aviation transport process, are becoming more and more important in the selection of services of a given tenderer. Giving these features a priority character becomes the determinant of the business success of service providers in the competitive conditions of contemporary market.

### 6. Conclusion

The intensity of competition shaping observed on the contemporary market of air services results in the creation of ever higher requirements both in technical functions of airplanes and in broadly understood passenger service. The pursuit to proper implementation of higher standards results in an intensive improvement of quality in all phases of passenger air service, that is in the sphere of construction, marketing and provision of services.

The research conducted by aviation research institutes, transport companies, and also based on empirical studies carried out in the study, shows that the key determinant of obtaining a competitive market advantage by service providers is the improvement of passenger service quality at the departure port, on the aircraft and at the destination port. The skill and effectiveness of this dominant use is demonstrated by the level of elimination of unfavorable features of the service already in the design phase, the dimension of the outflow of loyal passengers to competitors, the number of new increments and the expansion of loyal customers, which is expressed in a synthetic way by the increase in purchases.

The research conducted in the study showed that both the providers of traditional and low-cost services recognized that the most important determinant of the market business success is the improvement of quality in all phases of the passenger service process, which means that it is a universal determinant. The scope of conducted analyses and assessments also shows that the quality improvement process has a specific scope of distinct features and hierarchy of their validity, related to the specificity, scope and form of service provision in a particular transport segment. These features create a significant scope for securing the additional needs of specific

consumer groups and real growth stimulators for the demand for services offered exclusively in a specific supply segment. They also become a source of intensity of passenger replacement between entities of both service segments. It is a process with beneficial effects, because it not only improves the technique and technology of transport means, but above all, development of the highest quality standards in passenger service.

The research also showed that the level of income of the population (determining the level of prices) should be taken into account in the process of shaping the level of quality of offered air services. An erroneous assessment of this determinant may exclude the tenderer not only from the aviation, but also from the inter-industry competitive market of the transport services supply.

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