

Smart Airline Strategies: Innovations in Passenger service in Global Markets: A Qualitative Comparison among Low-Cost Carriers*

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Abstract

Based on the dynamic development of the aviation market and the increasing implementation of modern technologies, digitalization, and AI-supported passenger service systems in air transport, the article examines the evolution of the low-cost carrier model and its transformation towards more flexible and customer-oriented airline business models. The study addresses a significant research gap in the literature, as existing studies continue to rely on the traditional division between low-cost, hybrid, and full-service carriers, without adequately reflecting the convergence of airline models, the role of smart technologies, and changing passenger expectations in the global aviation industry. The research aims to determine whether contemporary changes in airline operations justify the creation of a new operational model beyond the classic low-cost carrier framework.

The study applies a qualitative research approach based on critical literature analysis, comparative multi-criteria analysis, and case study methodology. Airlines operating in Europe, North America, and Asia were examined with regard to tariff structures, onboard services, travel classes, ancillary revenues, technological innovations, fleet strategies, passenger experience, and additional digital services. The analysis also included a comparison of airline ticket prices on selected routes of approximately 1000 km.

The findings demonstrate significant diversification of low-cost airline models across global markets and confirm the progressive convergence between low-cost and hybrid carriers. Airlines in North America and Asia increasingly offer premium services, loyalty programs, onboard entertainment, internet access, and business-class solutions, while European low-cost airlines remain more limited in service innovation. The study concludes that contemporary airline models can no longer be clearly classified within traditional categories and proposes the concept of a new SMART airline model characterized by flexibility, technological integration, service personalization, and passenger-centered travel experience.

Keywords: smart technologies, aviation innovation, customer-centric air transport

Introduction

The development of the aviation market allows for the functioning and development of many air carriers, operating on the basis of various models of air carriers. Market events such as an increase in the number of passengers or market crises, increased competition, the inability to limit operating costs, affect the need to adapt market models

to the expectations of the market and passengers. Modern technologies implemented in other sectors of the economy are quickly and effectively implemented in air transport, giving the possibility of a slight reduction in passenger service costs. The universality of technology through the use of applications, for example, by users, makes it possible to reach the customer with an offer, and above all, to enable customers to create their travel needs. If you want to gain new groups of customers, and thus increase your market share, you should offer a wider range of offers tailored to the needs of much more demanding customers. Therefore, there has been convergence in the aviation market, making it difficult to clearly define the different models of air carriers. The biggest changes concern the low-cost model.

The main objective of the article is to analyze the low-cost model and try to answer the question whether the currently observed changes in the functioning of air carriers lead to the development of a new model of operation, or whether it can still be unambiguously classified as a low-cost model.

To achieve this goal, it was necessary to formulate several research questions relating to key aspects of the airline's operation. These included: the differentiation of the low-cost model in different parts of the world, the identification of the dominant model in the modern air transport market, and the assessment of whether the changes taking place justify the need for a new division of carriers at the international level.

The study uses research methods based on analysis and critical evaluation of literature, as well as a multi-criteria comparison, which made it possible to compare the offer of carriers operating in different regions of the world. This was complemented by a case study involving three carriers representing different geographical areas. This approach made it possible to capture the specificity of local conditions and broader development trends. In the final part of the article, the conclusions resulting from the analysis are presented and recommendations are formulated.

Low-cost carriers in the literature on the subject

Low-cost carriers have been a concept present on the market and in the literature of the subject since the sixties of the twentieth century. However, the available scientific publications standardize the topic to the classic definition, not paying attention to market changes and thus changes in the functioning of air carriers. The classic division into traditional, low-cost and hybrid carriers is no longer correct, due to the universalization of services offered by air carriers. (Pijot – Migoń, 2012). Originally, in the literature on the subject, hard boundaries were set between carriers, e.g. a traditional carrier offers tickets containing luggage, meals, on-board service, and a low-cost carrier is a carrier that does not have facilities in the ticket price, additionally does not operate connections to major airports. (Tłoczyński, 2012). The market war that took place between carriers, in which different models of carriers' operation were tried, ended in numerous bankruptcies. However, it allowed to develop a hybrid concept – which was used by traditional carriers of the time. (Radomyski, 2018). Growing competition on the hybrid model market has forced low-cost carriers to make numerous changes in their operating model. The evolution of the low-cost model to the hybrid model is not to be found in studies. For example, Pisarek Bartoszevska notices the evolution of air carrier models on the market, but in the end she makes the same mischaracterization of models. (Pisarek – Bartoszevska, 2020).

In the current market situation, it is possible to distinguish carriers that operate according to the model of the so-called traditional carriers – i.e. offering check-in, luggage, meals, service and drinks, as well as travel classes in the ticket price. (Tłoczyński, 2016) However, due to the fact that it is a high-cost model of operation, it is mainly used by carriers from the Persian Gulf, such as Emirates, Qatar, Etihad, or Turkish Airlines. Carriers such as Lufthansa, LOT, British Airways, Delta and United, which after 2012 introduced a hybrid model of operation, i.e. the low-cost tariff, are erroneously classified as traditional carriers.

Research on quality and on-board service was undertaken, for example, by Kustra M, Płaczaj J, Żmigrodzka M, who attempted to assess the quality of services offered by carriers in a model perspective, without attempting to assess the operating models. Kustra, Płaczaj, Żmigrodzka, 2023). Tłoczyński D, in his research on competition on the aviation market, also failed to analyse and assess the functioning of the existing carrier models. (Tłoczyński, 2016)

However, a publication appeared in the literature on the subject that signaled the functioning of two low-cost models – pure and hybrid. (Majerová, Jirásek, 2023). This confirms the author's research assumptions and the legitimacy of the conducted research, who, based on a comparison of carriers on three continents, i.e. Asia, North America and Europe, will attempt to redefine carrier models.

Principles of operation of the classic low-cost operating model of air carriers

In the 1960s, a model of air carriers was created, based on new paradigms to reduce the cost of operating connections and introducing a new quality of passenger service. People and Southwest were the first to implement the model. The model was supposed to offer passengers the opportunity to travel cheaply in exchange for giving up amenities. The low-cost offer included only the flight, for all additional services such as airport check-in, luggage, meals and drinks on board, newspapers, you had to pay an additional fee. The passenger could therefore adapt the services included in the ticket to his needs. For the carrier, these were additional costs that it did not have to bear from then on.

The core of the low-cost model is the reduction of operating costs. The first change was the airports to which connections were operated, in order to reduce costs, connections to smaller, often distant airports were operated. The maximum use of the fleet was also crucial – in order for the aircraft to be in the air as long as possible, and thus the service period of the aircraft had to be shortened to 25 minutes. Not without significance was the universalization of the fleet – one aircraft model – always the same number of seats on board, unified technical service of aircraft, universal training of pilots and cabin crews. It is obvious to resign from travel classes, as well as to board planes with the maximum number of passengers allowed by the door limit. A big problem at the time of the creation of the model was the lack of aircraft models to choose from, All the models we know today as the Boeing 737 was just created, and the Airbus A320 had to wait another 20 years.

The network of low-cost carriers includes connections not only to popular cities and regions, but also included popular tourist destinations. The flights were direct connections, there was no possibility of transfers.

Many services have been outsourced, e.g. aircraft services, catering deliveries, or the ticketing system. The use of classic agents, which was characteristic of other carriers, was abandoned.

Originally, the model was not successful, People Airlines went bankrupt, and Southwest has been operating to this day, despite market difficulties. Not without significance was the fact that People operated flights with Jumboates – Boeing 747 – which took 360 people on board, and Southwest with Boeing 737-200 taking 130 passengers on board. This translated into operational capabilities, as well as a cost calculation that was not successful in the case of the powerful Jumbojet. Another logical error was the mistake in thinking that if a passenger buys additional services and thus the carrier earns money – it turned out to be a wrong assumption

The change that took place after 2000, when both the aviation market and the economy enabled further opportunities to reduce costs. The first factor was deregulation and liberalization of the aviation market, which made it possible to make the network of connections more flexible, and the development of the idea of open skies made it possible to open air connections without additional consents and agreements. (Olipra, 2011) Migration has become a big stimulus for air travel, and thus the intensification of travel in many new destinations. This has given the opportunity to develop low-cost carriers such as Ryanair, Wizzair, SkyEurop offering attractive prices. Until the appearance of the hybrid model in 2012, the position of low-cost carriers was not threatened, especially on short routes, e.g. in Europe. However, this does not mean that many carriers have not been successful, such as SkyEurop, Centralwings, Germanwings, BMIfly, Spanair.

The development of modern technologies and the Internet has made it possible to significantly reduce the costs of selling and handling tickets, as well as to introduce a new SMART marketing model, which allows the passenger to choose services. Moving ticket check-in to the app limited the possibility of airport check-in, and in a broader perspective, enabled the introduction of independent check-in desks.

The development of the low-cost model has rapidly increased the number of passengers, air travel has become a common mode of transportation, and thus the demand for services offered as well as the quality of service both at airports and on board aircraft has increased. In this respect, competition has intensified against the popular hybrid model used by the largest and most popular carriers such as Lufthansa, British Airways, LOT, KLM and Delta. The entry into the market of tourist connections to popular holiday destinations has additionally caused competition with charter carriers and a market that has unique specifics, such as hand luggage included in the price.

Changes in the market vary between different regions of the world, as well as transport demands depend on the financial capabilities of passengers. It is necessary to take into account the economic potential of countries and regions, earnings, the ability of passengers to consume, or the popularity of air travel. A significant group of passengers has appeared who want to pay extra for additional amenities during the flight or the comfort of travel. Low-cost carriers had to meet the transport demand, increasingly operating connections to major airports. Carriers

have diversified their tariff offer by introducing, in addition to the basic tariff, also fares containing luggage, seats, or the possibility of changing tickets. This is where the philosophy of low-cost carrier models depending on the region of the world is changing.

Low-cost model in different regions of the world – a multi-criteria study

The multi-criteria study of carrier models attempts to analyze carriers in different areas of the world using the low-cost carrier model, carried out in March and April 2026. A broad approach to the analysis of the same model in 3 different areas allows us to draw universal conclusions about the entire model as well as the entire aviation market. The analysis included the division of carriers according to the area/region of occurrence – Europe, Asia, North America. Then the characteristics of individual tariff options - basic, additional fares, travel classes, on-board service, additional services, as well as the size and type of fleet. In order to show the cost relationship, the price of a ticket in the basic fare over a distance of 1000 km was analysed.

The research analysis of the European market (Table with the summary and data is available on the LinkedIn) included the leading carriers, such as Ryanair and Wizzair, which are not only the largest carriers in the low-cost sector. Ryanair is the largest carrier in Europe – over 200 million passengers in 2025, and also having the largest fleet – 640 aircraft. (Ryanair, 2026) Within European carriers, the low-cost model has been expanded to include baggage fares or those offering, for example, seats on board. The Basic fares offer only personal items in the ticket price. (Diaconu Maxim, 2012) Websites and booking systems have become a place for the promotion of external services in related services such as hotel offers – booking.com, car search engines, or the sale of insurance offers. Through applications at selected airports, it is possible to book a parking lot or a fast track service (accelerated security check). It should also be noted that airports are implementing modern passenger service technologies using IOT, which allow to reduce the cost of handling at airports, as well as offer passengers an offer of airport services as an option. (Paksoy, Demir, 2024) Great opportunities to increase operating profits resulted from the offer of aircraft manufacturers, which offered existing models in new configurations adapted to low-cost carriers – e.g. instead of Boeing 737-800s, Boeing 737 Max200 was offered, taking 11 more passengers, and Airbus A321 in the Neo version, taking 50 more passengers on board than the previously used A320. This significantly influenced the decisions to replace the fleet. Increasing the number of people on board allows you to reduce the unit cost calculated per passenger, with fixed operating costs. The aircraft are in a single-class configuration, with rows with more legroom spacing resulting from the cabin configuration. (Wizz, 2026)

While Ryanair maintains its offer as a low-cost carrier with a basic fare offer, Wizzair is the only carrier that has attempted to implement new services. The first solution was to create a loyalty system – e.g. WizzDiscount Club, which gives tariff preferences to passengers who use the airline frequently. A WizzClass travel class offer has also appeared on board, including an additional drink, a snack, and a preferential seat on board in the first row and a free seat between passengers. (Materna, Slynz, Kužníčková, 2024) The most daring plans of the carrier are plans for medium and long-haul flights, e.g. to Abu Dhabi, which were very popular. However, attempts to fly to the Maldives, Sri Lanka and Thailand turned out to be a fiasco due to the low interest of passengers in long flights with a change in Abu Dhabi, problems with the delivery of Airbus A321 LR aircraft. Not without significance was the offer of carriers from the Middle East, including low-cost ones, whose service offer was much more attractive. The sale of additional services by Ryanair and Wizzair accounted for 34% of revenues in 2025, only the sale of luggage brought Ryanair almost 5 trillion euros, and in the case of Wizzair, nearly 3 million euros. (The Times, 2026)

In order to properly assess the market of low-cost carriers, an analysis (Research Tables) of carriers operating on other markets was undertaken, e.g.:

- North America line Volaris from Mexico, Southwest – serial model from the USA, Frontier from the USA, JetBlue from the USA,
- Azji – AirAsia, Vitejet, Air Arabia, FlyDubai.

North America (Table with the summary and data is available on the LinkedIn)) is a strong market with a lot of competition due to the large number of airlines. The long distances that have to be covered between destinations due to high mobility and highly developed tourism, result in the great popularity of air travel and potential passengers to be taken. Therefore, this forces carriers to take strong care of the breadth of their offer and the services offered. In the case of North American countries, we encounter two models of low-cost carriers – based on the classic definition – Frontier, as well as models offering a wider range of services, such as Southwest, Jet Blue or Volaris (Mexico). The oldest carrier in the world, Southwest, which is one of the 3 largest carriers in the

United States, with a 16.3% market share, and Frontier and Jet Blue, which each generate 4% of traffic, were taken. (Visualcapitalist,2026) Frontier has a modern offer similar to that of a classic low-cost carrier, while JetBlue has the widest range of services in the package. (Mertens, Voves, 2012) For comparison, Volaris airlines were also selected, also operating routes within North America, showing the evolution of the low-cost carrier model. The surveyed carriers from the United States differ from each other, e.g. the basic fare, where the passenger can take only a personal item with him, as in Frontier or Volaris, as well as those offering a personal item and cabin luggage in the basic fare, which gives the possibility of free air travel. Significant differences occur in the next – higher tariff options – where, in addition to options related to luggage or the possibility of changing the reservation, there are travel classes. Low-cost carriers are therefore trying to take over another group of passengers looking for a comfortable flight from hybrid carriers. (Kaffash, KRhoadesTiernan,2024)

Carriers from the USA – Southwest, JetBlue and Volaris have implemented new standards of in-flight services that are not to be found in other network or hybrid carriers, such as in-flight entertainment (free), wi-fi, 2024 Internet depending on the booking tariff additionally paid or free. Snacks and drinks are available on flights, free of charge like JetBlue or free sweets over an hour like Southwest. The largest carrier in terms of fleet size is Southwest – over 600 machines – Boeing 737s in various configurations. (Southwest, 2026) Other Users also use Airbus A320/A321. (JetBlue, 2026) The on-board product also includes improving deck comfort by introducing premium economy or Business class seats, especially for long-haul routes. Customers is crucial, because with a large offer of carriers, it is necessary to create marketing tools that keep the passenger with a given carrier, which is why loyalty programs such as True Blue, RapidWords are popular among carriers. In the USA, connecting flights are standard, which gives passengers more opportunity to travel. Transatlantic flights and their popularity are also a feature that can be found among low-cost carriers – for example, JetBlue operates flights to London, Paris, London, Amsterdam, i.e. on routes with the highest air connections. Carriers in North America are eager to enter into partnership agreements between different carriers, which increases operational capabilities – reduces the cost of many connections, as well as gives passengers the opportunity to reach many remote destinations. (JetBlue, 2026) Therefore, it can be considered that low-cost carriers in the US are increasingly converting their model to a hybrid model.

A characteristic feature of the market is the sale of tourist packages in the form of an agent and intermediary by carriers offering cruises on cruises or holiday stays in resorts and hotels. For example, in Europe, all such services are outsourced. Often, low-cost carriers transport and handle freight – cargo.

The Asian market (Table with the summery and data is available on the LinkedIn) of carriers should be divided into the Middle East and Far Eastern markets. On the Far Eastern market, Air Asia and Viet Jet were analyzed. Air Asia generates traffic for 35% of the traffic share of the entire Central and Eastern Asia, (ICAO 2026), while Viet Jet accounts for more than 55% of flights in Vietnam, and nearly 20% in the region as a whole. (SimpliFlying, 2026) Air Asia is a carrier with an established position on the transport market, with subsidiaries in several countries in the region, such as Thailand and Cambodia, as well as an extensive fleet of single-aisle aircraft – A320/A321 and wide-body – A330. The network of connections includes the countries of Central and East Asia, but the carrier's aircraft reach Australia, as well as Europe – as the only carrier from this region. VietJet also has a strong position on the market, which operates connections within the region, generating high traffic. (Oliviera, 2025)

Low-cost carriers in the Asian region are geared towards two extreme groups of passengers, on the one hand typically looking for a low-cost fare (the basic one includes cabin baggage), on the other hand, it offers business fares and business class (e.g. reclining seats). (AirAsia, 2026) The in-flight product has in-flight entertainment, Wi-Fi and Internet access paid or free depending on the tariff group. Apart from low-cost fares, they have drinks and meals. The carriers' offer includes a wide range of travel packages, and they also carry air freight. Due to the wide range of connections, carriers enter into partnership agreements and alliances, as well as operate cruises as part of code shares. (Vietjet, 2026)

An interesting solution is the marketing of carriers from Asia, based on promotions for influencers promoting carriers, but passengers also receive marketing promotions from companies cooperating with the carrier. (AirAsia, 2026)

A special group of carriers are carriers from the countries of the Arabian Peninsula, i.e. AlR Arabia, and FLY Dubai. (Morison, Mason, 2016) (Table n.4) The carriers complement the offer of traditional carriers – network carriers such as Emirates, but offer much more attractive fares. Low-cost carriers in this region offer a basic fare with cabin luggage and personal items. However, in addition to tariff differentiation, aircraft decks have a separate class and business service. Both Economy and Business Class have full on-board service, depending on the fare

class. The carriers also operate connections in Europe, which is a strong accent of competition, and also caused the collapse of the long-haul concept of Wizzair, whose in-flight offer turned out to be too weak. (FLyDubai, 2026)

The conducted study clearly showed that the weakest market offer is offered by carriers from Europe, avoiding the development trends of the low-cost model. Carriers from both America and Asia have made an attempt to make the low-cost model more flexible in order to gain a wider clientele and thus a larger market share. European carriers continue to maintain in-flight service at a low economic level.

The author analysed the extent to which the offered in-flight services affect the prices of airline tickets. A sample cruise of approx. 1000 km operated by individual carriers, in the basic tariff (the basic cheapest), on 3 May 2026 and return on 9 May 2026, was subjected to a criterion assessment. The prices of carriers depended on the competition on a given market, which can be seen that in the case of the surveyed carriers in a given region, the prices are similar, e.g. in Europe they oscillate around \$80. There are clear differences between carriers offering a higher standard of in-flight service – i.e. oscillating in prices above \$100, and the accident of the investigated flight from JFK Airport in New York – the price exceeded \$240 – JetBlue. (Table 1)

The analysis showed that the market is the main moderator of services provided by air carriers. The hybrid model, which allowed a new opening to new groups of passengers, offered a higher standard at reduced prices. This forced low-cost carriers to improve the quality of their offer. Another factor was to reach a larger group of potential passengers. This resulted in convergence of carrier models, and the inability to unambiguously define individual models.

So are we talking about the promotion of low-cost carriers to the group of hybrid carriers, or has the model by definition been divided into low-cost and low-cost hybrid models? Maybe a new model of carriers' functioning should be created?

Table 1. Price of tickets (1000km flights)

carrier	route	flight time	tickets price
Volaris	Mexico-Merida MEX-MID	01:45	140\$
Frontier	Denver-LasVegas DEN-LAS	02:08	99\$
Southwest	Dallas-Denver DAL-DEN	02:00	248\$
jetBlue	New York - Charlton JFK-CHS	02:15	147\$
Air Arabia	Kair-Rijad RUH-CAI	02:00	295\$
FLyDubai	Dubai-Basra DXB-BSR	02:00	99\$
AirAsia	Kuala Lumpur- Ho Chi Mint KUL-SGN	01:55	111\$
VietJet	Hanoi -Bangkok HAN-DMK	01:50	44\$
Ryanair	Krakow - Brussels KRK-CRL	01:50	88\$
Wizair	Kraków-Eindhoven KRK-EIN	01:50	74\$

Source: own observation +skyscanner.com+ google flight reserch

In answering, it is necessary to refer to the basic demands of passengers, for whom the most important characteristics of an air carrier are the time of the flight, the directness of the connection, and the departure and arrival times. Travel comfort is a decisive condition for half of passengers. (Tłoczyński, 2016). For a group of

passengers looking for convenience and comfort, a hybrid sector has been created. However, this is a large group of potential passengers – who are willing to pay for additional services – often not small amounts. The conducted multi-criteria study shows that none of the carrier models currently have universal standards for a given group of carriers. Therefore, we are talking about mixed models, which, in the minds of new marketing strategies, can be called SMART models. (Rutkowski I, 2020). This model will fully combine both the aspirations of carriers to gain a cost advantage, but above all it will enable passengers to create the quality and comfort of their journey.

The Smart model will fully enable the fulfilment of passenger needs understood as the expected quality. The defense of quality ideas is possible only through the right level of service quality. (Starowicz, 2001) The key to maintaining customer loyalty is the perceived quality, resulting from the feelings during the journey, which determine the perception of a given carrier, and the dominant in the assessment are extreme feelings of evaluation – very bad vs very good. (Marciszewska, 2013) The Smart model distorts the passenger's rating, as it is the passenger who becomes the decision-maker of the choice of services in accordance with his expectations. In addition, the smart model is a universal model that can be used by any of the existing classic carrier models. This builds paradigms for completely new models of service quality assessment.

Summary and conclusions

Low-cost carriers are evolving as the modern economy is evolving. Is the dehumanization of processes resulting from modern technological solutions, more and more often AI-assisted, becoming increasingly important? This gave carriers the opportunity to better adapt their offer to the needs of the individual passenger. However, in order for a passenger to be able to choose from a wide range of services, they must first be offered by the carrier itself, and therefore must implement new services in the offer, often belonging to a different model group of air carriers. An important change is the processes of automation of passenger service processes, and thus – a new model of service and quality of passenger service. (Sivakumar, 2026)

Smart technologies have moved from cost-effective services to customer-centric models and the passenger at the centre of service and offering. Increasing the importance of the passenger and his preferences in the process of organizing services. A new division of passenger groups not only looking for the cheapest tickets, but also for better travel quality. The emergence of business or premium economy classes show that carriers want to take over an additional group of passengers, with a greater tendency to consume. It also shows that passengers perceive the offer of low-cost carriers as attractive, e.g. in terms of flight times and flight frequency. The possibilities offered by modern applications are tracking the use of the Internet and applications, and thus carriers obtain valuable marketing data helpful in preparing an offer for customers. Technology, IOT solutions give enterprises the opportunity to gain a technological advantage. (Beverungen, Muller... 2019)

The 21st century is the entry of modern technologies on board aircraft. Increasingly, on-board entertainment, AI FI and the Internet are appearing on board. In general, these are not services that enter the market dynamically, however, the gradual introduction of IT services on board is taking place among all carriers. In this area, European low-cost carriers lag behind carriers from the studied regions of Asia and North America.

Modern technologies also include the implementation of new aircraft, most often in a technologically rebuilt version, classic Boeing 737 or Airbus A320 models. New larger versions such as A321Neo, Boeing 737 max200, Boeing MAX9, give the possibility of transporting not only a larger number of passengers, as well as new engines, the use of modern composites that reduce the weight of airframes, allow you to save fuel and thus lower flight costs. In addition, modern operational solutions are introduced, such as: getting rid of paper passenger service documentation, electronic flight documentation, lighter seats and deck equipment, taxiing on one engine, using rationalized wing settings during flight, limiting the use of air conditioning, limiting engines during landing. (AirArabia,2026) The development of the idea of ecological transport solutions is becoming a dominant aspect of low-cost carriers from America and Asia, e.g. Air Arabia or Froniter. Despite the implementation of sustainable solutions in Europe, this is not a key marketing aspect of carriers.

The article achieved the research objective, which was: "analysis of the low-cost model and attempting to determine whether it is a new model of operation of air carriers or whether we will continue to define it as a low-cost model" was implemented, putting forward the main conclusion that it is now necessary to introduce a new model, which is the SAMRT model of air carriers.

The key argument is the fact that both low-cost and hybrid models have ceased to be homogeneous, both models have converged, and with the popularization of new solutions, more carriers will have to implement more solutions. An important fact is the inability to assign specific features characteristic of a given carrier model.

Answering the question about the differences between carriers in different parts of the world, it should be confirmed that the models differ in different parts of the world, tariffs, availability of services, including premium, more and more often introducing business class on board – seats, service, etc. Against this background, carriers from Europe look once again the weakest. It should be argued that the range of services offered by carriers depends on the strength of the market in which they operate and the propensity of customers to consume. The fact of the average length of the flight is not without significance, because the longer the flight, the greater the tendency to purchase additional services that increase comfort.

An aspect that should be taken into account when defining a new carrier model are its dependencies, emphasizing the legitimacy of its introduction. In the case of the SMART aircraft model, the flexibility of this solution will allow you to maintain market resilience. The disadvantage of this solution, however, is the fact of low predictability of revenues, which will result in a decrease in revenues and profitability in times of crisis. Therefore, the ratio of tariff bases and profits in this respect to the revenues generated by the sale of additional services is important.

To sum up the study, it is necessary to emphasize the lack of a dominant feature in a given group of carriers, and thus the blurring of the classic division of air carrier models. On the basis of the conducted study of models of carriers from 3 regions of the world, the thesis concerning the blurring of models was shown and proven. Such a situation allows us to clearly draw the main conclusion from the study and publication that the smart model is a phase of development, the next one in an efficiently functioning market economy. The key element in the development of the smart idea has become technology, frequency of travel, the wealth of passengers' wallets and the rationalization of ticket prices and additional services.

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