Impact of digital marketing on the aviation industry

Mehmet Emin Keke[1*]

[1] Istanbul Gelisim University, 34310 İstanbul, Turkey

Abstract. It is very important for businesses to follow technological developments closely. They also need to develop themselves in the field of digitalization. In this way, they will be able to protect themselves in an intense competitive environment. Aviation is a very dynamic industry. This business uses the latest technologies, but the technology used is constantly changing. Therefore, states and entrepreneurs need to invest heavily in aviation. The aviation sector is of great importance in terms of the policies and strategies of states. Regardless of profit or loss, the aviation industry is given special importance. Digitalization is seen as a very important factor in terms of economy in the globalizing world. With the digital age, new employment areas are created. Since digitalization has become universal, all countries of the world are trying to keep up with this situation more or less. With digitalization, the workload of employees is reduced. Firms fulfill the demands of their customers more easily and increase the satisfaction of their customers. On the other hand, thanks to digital marketing, more consumers are reached than traditional marketing. The aviation industry arouses curiosity in consumers with its digital marketing strategies. In this study, the aviation industry and its digitalization, digital marketing, the effects of digital marketing strategies on the aviation industry were examined.

1 Introduction

Technological innovations and digitalization take place in all areas of life. People can easily access technological devices such as mobile phones, computers and smart tablets. Thanks to technological tools, individuals can easily handle their daily work. For example, it can make transactions such as food order, shopping, or reservation in a short time [1]. Thanks to smart device applications, it has become possible to buy plane tickets in a very short time. However, it is also a reality when digitalization, technological developments and the way people benefit from technology are not the same in every country in the world. To benefit from technological innovations and increase digitalization, businesses as well as countries need to make high investments [2].

It is known that businesses around the world are in constant competition. Technological developments and digitalization provide important strategic opportunities to businesses. In the era of developing technology, digitalization has gained importance in almost all sectors.

* Corresponding author: emikail@turansam.org

© The Authors, published by EDP Sciences. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/).

It is not possible for companies working with old systems to maintain their continuity in today's technology age. Because the operation of companies working with old methods is slower than companies that are good at technology and digital systems. Digital systems make the process easier for both the customer and the employee.

High-tech products are used in the aviation industry. Therefore, it is characterized as a sector that requires large investments [3]. According to Avram (2017) the costs of technology and aviation products used in the aviation industry are quite high [4].

Companies that digitize their systems can compete more easily in the market by providing customer satisfaction. Airline companies create a membership card system used in digital environments to gain customer satisfaction and loyalty. Passengers can access airline prices digitally. Airline customers can learn about the services they can benefit from from the beginning to the end of the journey, from the digital environment. Airline companies can offer their customers opportunities such as food and shopping, apart from air services. In addition, passengers can be provided with facilities such as transportation to the airport, renting a car, purchasing tourism services and hotel services. Airline companies provide these opportunities to their customers through their websites and smartphone applications. It is possible for companies to reach customers anytime and easily by using technology and digitalization. They also earn side income from their websites and applications.

2 Literature review

2.1 Digital marketing

Digital marketing is the use of digital technology by businesses to market their products and services to their customers in a virtual environment [5].

Technological products such as internet, telephone and computer occupy an important place in the daily life of individuals. Thanks to digital platforms, consumers can reach a large number of products. Companies provide many conveniences to customers by using digital marketing. Digital marketing has developed some strategies by going beyond internet marketing. For example, advertisements on television, advertising messages sent to mobile phones, billboard visual advertisements, various posters can be shown as digital marketing elements.

The number of people shopping online is increasing day by day [6]. In the field of digital marketing, companies create an economic market by creating their own common values. It is very important for customers to advertise the product they buy. Telling the customer about the product ensures customer satisfaction and trust of the company. In this way, the firm's digital marketing takes place as a customer-customer relationship [7].

With digital marketing, businesses can ensure that their products are purchased from digital media at affordable prices. Since there are no payments such as store expenses (rent, shipping, attendant fee, etc.) in digital marketing, products can be sold at a more affordable price. With digital marketing, sellers can find the opportunity to sell outside of their cities. With digital marketing, it has the opportunity to sell to different cities and countries of the world. In this way, companies can increase customer diversity. Companies also promote their companies and products in a virtual environment with digital marketing. With digital marketing, traditional sales patterns have been broken and a new era has been started in shopping. The digital marketing industry continues to develop rapidly.

According to current reports, it is thought that digital sales will develop much more [8]. A new era of technology has begun with digital marketing. Customers have the opportunity to bargain in the digital environment. Customers can bid for the products they want to buy

and participate in the auction. When individuals want to shop digitally, they want to reach the product directly by using a phone or computer. Businesses should use digital marketing strategically to survive and increase their sales in an intensely competitive environment [9].

According to McKinsey's (2019) report, well-established businesses in the competitive market hold 80% of the revenue in the digital marketing sector [10].

As seen in all sectors, investments should be made in talented people in the field of digital marketing. Chief in all companies that are successful in the field of digital marketing digital Officer (CDO) and Chief Analytics Officer (CAO) is located. The task of these experts is to innovate in the field of digital marketing and maintain progress by making accurate analysis [11].

According to the research conducted by Baltes (2016), digital marketing has been trying to keep customer satisfaction and customer interest high since it entered the job market. According to him, it is possible to acquire customers who are accustomed to traditional marketing with digital marketing strategies. In addition, Baltes stated that 80% of shoppers do not pay attention to the product description, and generally pay more attention to the product title and product image. An important point of digital marketing is to build trust and brand loyalty with the customer [12].

2.2 Digital marketing strategy

Digital marketing is very important in intensely competitive markets. Firms create strategies to maintain their position in the market and to rise. Digital marketing strategy is very important in this field. Businesses can promote with digital marketing and sell their products all over the world. It can easily announce campaign and promotion announcements to the whole world.

Globally competing businesses follow technological developments to strengthen their sales strategies. The development of goods and services plays an important role in this technological process. It is very important for companies to train their employees so that they can use the developing technology well. Therefore, they need to create new methods to make complex processes easy to understand. Companies can reduce the workload of their employees with digital technology. For example, it is possible to reach more accurate sales and earnings figures by integrating the products with the digital environment. This will reduce the workload of the employees [13].

Digital marketing leads to a change process for many companies. In this process, the strategies of the sectors change. It is not correct to rank digital marketing strategies in a single area [14].

Digital marketing methods

Parallel to the increase in the use of the Internet, the rate of using the Internet to meet the needs of individuals such as accessing information and shopping is also increasing. People can reach all over the world thanks to the internet. The Internet is a tool that can serve around the clock. People have to pay a certain amount of money to access the internet service. On the other hand, in many countries of the world, free internet is offered in public areas and people can access free internet in areas such as cafes, subways and squares.

New formations have started with digital marketing. Digital marketing can complement the situations where traditional marketing is insufficient and can make a significant contribution to the economy by creating new job opportunities for people. Digital marketing operates through the virtual environment and provides the opportunity to reach the sellers all over the world.

Digital marketing is of great importance for airline companies. Through digital marketing, airline companies can increase customer satisfaction. Customers can purchase their flight tickets with devices such as mobile phones, computers and tablets, and can pay for their flight tickets online with a credit card and can follow all the processes related to their ticket from the digital application. Airline companies can offer promotions and campaign services to their frequent flyers and announce them through digital media. With digital marketing, companies can increase their profits.

2.3 Aviation industry

One of the most important results of the industrial revolution is the advancement of technology and digitalization [15]. Technology and digitalization are closely related to the aviation industry [4].

The first commercial step in the aviation industry was the use of airplanes as "cargo aircraft". In the following years, people began to be transported by placing passenger seats in the place where cargoes are carried on airplanes and the concept of "human aircraft" emerged [15].

The aviation industry has led to the creation of many employment areas. The aviation sector is seen as an influential sector in the international arena in the twenty-first century.

The aviation industry needs the use of the latest technologies. Therefore, high investments are required in the aviation sector.

As in most sectors, the aviation industry also creates its own market and competition area. Since the latest products of technology are used in the aviation sector, the technology and digitalization used in this sector are also a matter of competition.

Although there are some difficulties in the aviation sector, it brings many advantages. Aviation is also seen as prestige for countries [16].

Today, people can travel to all parts of the world by aviation transportation. Air transportation, which has become popular in the twenty-first century, has led to the mobilization of the economy and tourism. The growth of the tourism and aviation sector has taken a rapid path from many sectors [17].

The tourism sector and the aviation sector form an interdependent economy. For tourism to develop and become globalized, the aviation industry needs to develop [18].

The tourism sector is very important for the economy of countries. Thanks to the tourism sector, money inflows into the country. Tourism and aviation industry are very related to each other. Thanks to the aviation service, it can make tourism movements between countries. In this way, the aviation industry is seen not only as a means of transportation, but also as a means of entertainment.

Civil aviation

In developed countries, the aviation sector is given great importance. Aviation is an industry where a lot of money is used as an industry. For example, if the aviation industry were a country, it would be the world's 17th largest economy by GDP [19].

The development of the aviation industry is mostly based on the defense industry. After the Second World War, states started to privatize the aviation sector in order to develop their economy and demonstrate their power in foreign policies. Civil aviation first started with the use of private cargo planes. Later, passenger planes emerged [20].

Since the civil aviation sector needed large investments, investors refrained from the sector. Most states have given incentives to investors who decide to enter the aviation industry and created various funds [21].

The civil aviation sector varies according to the country's economy. Therefore, the economy is very important in the aviation industry. The ratio of employees in the aviation sector is generally higher than in other sectors. There is a need for many employees who will take part in ground handling services at the airport and the use and maintenance of aircraft [22].

In the global world, the job market is shaped by adapting to technology. Due to the development of technology, many competing companies have gone digital. Companies have made savings in many areas thanks to digitalization and technology. With the benefits of technology, new employment doors have begun to open. In Table-1 [19], the contribution of the aviation industry to the world economy is given.

Digitalization is extremely important in the aviation and civil aviation industry. All information in old systems is transferred to digital media. The digitalization process in this area requires high investments and long processes. The digitalization process may also be prolonged due to human factor and technological reasons. With the technology used in the aviation sector, the damage to the environment is tried to be reduced to a minimum. For example, toxic gases released from the engines of airplanes to the atmosphere are tried to be minimized. In Table-2 [19], the contribution of the aviation industry to the environment is given.

Table 1. Contribution of the aviation sector to the World's economy

Employment support	87.7 million employees
Value contribution to the economy	3.5 trillion USD (4.1%)
Future (2038) employment contribution	143 million employees
Value contribution to future (2038) economy	6.3 trillion USD

Table 2. Environmental contribution of aviation sector and technology

Fuel efficiency	2% reduction
Reduction of environmental noise	50% -75%
Carbon monoxide	50% reduction
Contribution to recycling	85% -95%

3 Aviation Sector and Digital Marketing

In the aviation sector, companies apply campaigns and promotions to attract customer satisfaction and attention. They often use digital marketing methods to announce these to customers. Businesses aim to reach more consumers with their digital marketing strategies. Current news, announcements, social events, campaigns and various sweepstakes made through digital platforms create bilateral interaction between the company and the customer.

In the civil aviation sector, the competitive market shows a dynamic structure according to the way companies work and the services they provide. Digital marketing makes the "employee" factor in the aviation industry more advantageous. Since digital marketing activities are carried out in the virtual environment, they encounter fewer problems than the old systems [22].

Digitalization and digital marketing have a very important place in civil aviation [4]. Youtube and Instagram are very effective in this area. Companies can shoot their ads and

broadcast them on their own digital channels. It can translate its ads into many languages and have it watched all over the world. In addition to the advertisements and sponsorships made and published by the company, Youtuber advertisements are also important. For example, a Youtuber might mention airline companies in their travel videos. Youtuber can get their attention by sharing travel videos with followers.

The websites of aviation companies generally give a corporate and professional impression. Website service, which is an important branch of digital marketing, provides convenience for customers. Website content should be user-friendly. For example; A customer who wants to buy a ticket from the airline's website should be able to do his/her own business without assistance. In particular, airline companies should make their websites in a way that attracts the attention of their customers. It should ensure that the consumer who used the website before comes to this website again [23].

In the civil aviation sector, sales of services and goods are carried out together with digital marketing and traditional marketing. Although the latest products of technology have been used since the aviation industry started, it has also gone through the analogue period. Thanks to the benefits of the technology age, digitalization has been achieved over time.

With digital marketing, aviation companies can advertise. In addition, it can provide price and service information to its customers through the intermediary site and its own website. It creates a competitive market according to the service and price opportunities they offer in digital marketing. In addition, it can provide services such as campaigns and promotions with digital marketing. Passengers can purchase a cheap service by taking advantage of the campaign and promotion service. The goods or services sold with the campaign and promotion must be of high quality. Companies gain customer satisfaction and customer loyalty with such service opportunities. At the same time, it can attract more customers and increase the profit rate. It also provides the company advertisement with the sale of promotional products and services.

The advantages of digital marketing in the aviation industry are [24]:

- To make the user more active.
- Providing rich content to the customer.
- Increased productivity.
- To present the airport facilities to the customer's information in digital environment.
- To ensure that passengers can perform their transactions easily and quickly.
- To reduce the workload.
- Increasing customer satisfaction.

It is known that the workload of employees is alleviated thanks to digitalization in civil aviation. On the other hand, it is possible for airline companies to increase their revenues and efficiency thanks to digital marketing.

Digitization in the aviation industry benefits employees and customers. When a company employee needs to take action regarding the customer, that employee can access the customer's information in a short time. In this way, the customer does not have to fill in time-consuming forms and does not deal with long procedural processes. In this case, the workload of the officers is also reduced. At the same time, information is stored in the digital environment, allowing the authorities to examine this data from the digital environment [25].

Turkish Airlines (THY), one of the oldest civil aviation organizations, is very active in digital marketing. THY uses the promotion and privileges of different cultures in the world as a digital marketing strategy. Consumers can benefit from the company's corporate site,

corporate application and services provided on other sites. Its corporate website explains the services and procedures applied during the flight. It also provides ticket service, hotel reservation service, car rental service and travel insurance service to the customer.

In addition to campaigns, promotions and different language options, THY also informs its customers about current events on its corporate website. For example, THY informed its customers about the effects of the Covid-19 outbreak that occurred in 2019, and published the precautions and rules taken during the flight on its website and other digital channels. THY has announced the management of this crisis to its customers during the Covid-19 pandemic and conveyed up-to-date information about the measures taken at the airport, the measures taken by the employees, the measures taken for passengers, and government restrictions to its customers via digital platforms.

In the digital platforms used by THY, it is stated that there is a corporate account belonging to the company. THY uses its social media accounts in different areas. For example, current innovations on THY's Instagram account are decorated with visuals and conveyed to their followers. Social responsibility projects and aid campaigns are shared on social media. The company advertises the tourism and entertainment industry in digital media. At the same time, the regions it provides transportation and the features of these areas that may arouse interest in the customer are shared. THY uses its Twitter account more formally than the Instagram application. The company usually announces its current news on this social media network. In addition, it provides feedback on customer complaints. Looking at THY's Facebook application, it is seen that Instagram and Twitter applications are blended. The company shares only official news in the LinkedIn application. In addition, it provides up-to-date job postings for open positions via LinkedIn. The company uses its Youtube account similar to the Instagram application, but unlike the Instagram application, it also promotes with long-term videos. THY uses the companies it sponsors or partners within its videos. In the videos that the company puts on Youtube; situations such as interviews, news, product and service promotion are discussed.

Apart from its website, THY also serves its customers with its own mobile application. It has put various applications into service under the name of “Turkish Airlines” developer. For example, it offers services such as ticket purchase, hotel reservation, car rental, identification of touristic areas, membership card.

Another well-established institution of civil aviation is British Airways (BA). Among the digital marketing tools used by this company are Instagram, Twitter, Youtube, mobile application and website. BA shares social and sometimes emotional posts on Instagram. BA announces official and current news on its Twitter account. As in THY, BA shared the innovations and the information about the restrictions applied during the Covid-19 process on its Twitter account. The company's LinkedIn application includes official announcements, as well as job postings.

American, one of the world's leading aviation companies Airlines (AA) is an airline that uses social media platforms extensively. The company makes good use of social media to reach large customer bases, increase engagement with them and improve brand awareness. AA has official accounts on popular social media platforms such as Facebook, Twitter, Instagram, LinkedIn and YouTube. Through these platforms, the company shares travel news, special offers, new destination announcements and other information to customers. In addition, by using social media in an interactive way, it responds to comments from its followers, answers questions and gives importance to customer feedback. It also organizes hashtag campaigns, contests and special events to engage users . AA shares quality content by giving importance to visuality in its social media accounts. These include travel photos, flight experiences, destinations and interesting content related to the airline industry. A variety of content is also shared, such as videos, interviews, and customer stories.

In general, AA displays an approach that aims to connect with its customers and strengthen its brand image by actively using social media. By constantly sharing up-to-date content on social media platforms, it interacts with its users and contributes to the travel experience.

4 Conclusion

A new era in competition has begun with digital marketing and digital marketing strategies. The areas where traditional marketing is insufficient have been eliminated with digital marketing methods.

Companies have seen that by using digital marketing strategies, it is easier and faster to attract the attention of consumers. The needs of the consumers are analyzed and marketing methods are used accordingly. In addition, at the end of the services used by the customers, surveys are conducted according to the customer's request. According to the results of the surveys, companies make innovations in line with customer requests. Customers have started to integrate digital marketing strategies into their daily lives while shopping. In addition, companies can register their customers using their digital infrastructure. It uses digital marketing methods to its customers through this portfolio.

With digitalized marketing methods, the type of service that the customer will receive is formed within an easier framework. One of the important alternative ways for airline customers to make their transactions is digital platforms. In this way, long loss of time, waiting in line, and the intensity of face-to-face transactions are reduced, and the comfort of the service recipient increases. An example of this is online check -in, baggage service.

People come across new and advanced technological innovations and products at airports every day. One of the most important reasons for this is the high investments made in technology at airports. In parallel, the digitization process always has an upward momentum.

During the Covid-19 process, airline companies transferred their applications to their customers with digital marketing strategies. The pandemic process has been a difficult process for the aviation industry. In this process, airline companies; He used areas such as Instagram, Facebook, Twitter, YouTube, LinkedIn. They tried to overcome the Covid-19 crisis with their digital marketing strategies. Such a situation was seen for the first time in the world and the world was caught unprepared for the pandemic. By learning from this, airline companies will want to be more prepared for other possible pandemics and to reach their customers more easily. Undoubtedly, the biggest helpers in this will be digital channels and tools.

With digitalization, it is possible to vary the service offered according to the profiles of the airline customers. In this context, airline companies apply different digital marketing strategies. The variety of services offered in the field of digital marketing increases in direct proportion to the investment made. Communication sources such as social media, television and mobile applications are the marketing strategies with the fastest response. It is possible to analyze these returns through digital data. In parallel, these data are the most effective parameters used by companies to ensure customer satisfaction.

Digitization is an invaluable asset for airlines as it enables them to diversify their services according to the needs and preferences of their customers. To this end, these companies are increasingly investing in digital marketing strategies such as social media, television and mobile apps. This investment pays off as returns can be measured quickly and data obtained through digital marketing is used to ensure customer satisfaction. Moreover, the more the company invests in digital marketing, the greater the range of services it can offer. Therefore, digital marketing is becoming an important part of the airline industry and its importance is expected to increase further in the coming years.

It is possible to make the following suggestions to airline companies regarding digital marketing:

1. Airlines should carefully consider customer segmentation and personalization when creating digital marketing strategies. Data analytics and artificial intelligence technologies should be used to understand customers' preferences, travel habits and needs. In this way, special offers, recommendations and experiences can be offered to each customer.

2. As the use of mobile devices is increasing day by day, airline companies should turn to mobile-oriented marketing strategies. It is very important to have user-friendly software and mobile applications. Also, offering well-crafted websites and mobile payment options will provide customers with an easier and smoother experience.

3. Social media is an invaluable area where airlines can interact directly with customers. Transactions can share interesting information such as travel offers and campaigns by using their social media accounts effectively. It can provide quick responses to customer feedback.

4. Airlines should invest in big data analytics and artificial intelligence technologies. Thus, it will be possible to use these data to understand customer behaviors, predict their demands and increase operational efficiency. For example, with flight search and booking data, marketing strategies can be optimized and customers can be presented with more accurate and customized offers.

5. Digital marketing can provide an opportunity for airlines to offer innovative experiences to their customers. Using technologies such as virtual reality (VR) and augmented reality (AR), pre-flight experiences can be offered to customers. It can also enable customers to explore destinations virtually before they even go. In-flight entertainment options can be expanded as well.

6. Digital marketing strategies offer airlines the potential to increase customer loyalty and increase conversion rates. Companies can use methods such as loyalty programs, special offers and personalized communications to strengthen customer relationships and build their repeat customer base.

7. Airline companies should focus on innovative and impressive content in their digital marketing strategies. It is possible to enable customers to establish emotional bonds with their brands by storytelling through visual and written content. Original and engaging content can strengthen the brand image and increase customers' loyalty to the brand.

8. Social media influencers can be turned into an effective marketing tool for airlines. It is possible to have the opportunity to reach the target audience and increase brand awareness by collaborating with relevant travel and lifestyle influencers . Choosing the right influencer ensures that the company can deliver an appropriate and effective message to its target audience.

9. In digital advertising strategies, it is possible to focus more on specific regions or target markets by using geotargeting . Thus, promotions or special offers for certain destinations may be offered.

10. Digital marketing strategies provide an opportunity to interact with customers and get feedback. Airlines can interact with feedback through surveys, comment boxes or social media where customers can evaluate their experience. In line with this feedback, they have the opportunity to continuously improve their services and customer experience.

These recommendations can help airlines improve their digital marketing strategies and support their future success. In our age where digitalization is advancing rapidly, it is of great importance for airline companies to follow current trends in digital marketing in order to interact with their customers, provide personalization and offer innovative experiences.

References

1. Molchanova, K.M., Truskina, N.V., Katerna, O.K., The Electronic Scientifically and Practical Journal **3**, 83-98 (2020)
2. Belais, R., Journal Innovation Economics & Management **2**, 59-78 (2013)
3. Veloso, F., Soto, M.J., Technological Forecasting and Social Change **66(1)**, 87-10 (2001)
4. Avram, B., Expert Journal of Marketing **5(2)**, 53-65 (2017)
5. Kingsnorth, S., Digital Marketing Strategy: An Integrated Approach to Online Marketing. (Kogan Page, New York,2019).
6. Bughin, J., Journal of Brand Strategy **2(4)**, 355-365 (2014)
7. Stone M., Woodcock N., Machtynger L., Customer Relationship Marketing 2nd edn. (Kogan Page Limited, London, 2000)
8. Warokka A., Herman, S., Sriyanto, S., International Journal of Psychosocial Rehabilitation **24(1)**, 1181-1188 (2020)
9. Wind J., Mahajan V., Digital marketing. Symphonya Energing Issues in Management **1**, (2002) 43-54.
10. McKinsey Quarterly, How Covid-19 Has Pushed Companies Over the Technology Tippig Point and Transformed Business Forever, https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-compani es -over-the-technology-tipping-point-and-transformed-business-forever, last accessed 2023/01/03.
11. Bughin J., Deakin J., O'Beirne B., McKinsey Quarterly **22**, 1-5 (2019)
12. Baltes-Patrutiu, L., Bulletin of the Transilvania University of Braşov **9(58)**, 62-68 (2016)
13. Matt C., Hess T, Benlian A., Springer **57(5)**, 339-343 (2015)
14. Schwertner K., Trakia Journal of Sciences **15(1)**, 388-393 (2017).
15. Merritt B., Synthesis Lectures on Emerging Engineering Technologies **2(4)**, 1-109 (2016)
16. Carlsson F., Review of Industrial Organization **24**, 37-49 (2004)
17. Dimitriou D.J., Resilience and Hazards 409-424 (2016)
18. Gössling S., Broderick J., Upham. P., Ceron, J. P., Dubois G., Peeters P., Strasdas W., Journal Sustainable Tourism **15(3)**, 223-248 (2016)
19. ABBB Homepage, https://aviationbenefits.org/economic-growth/, last accessed 2023/01/15.
20. Addepalli S., Pagalday G., Salonitis K., Roy R., *Socio-economic and demographic factors that contribute to the growth of the civil aviation industry*, 6th International Conference on Through-life Engineering Services, TESConf 2017, Bremen (2017).
21. Dai Z, Guo L., Luo Q., Applied Economics **51(34)**, 3758-3769 (2019)
22. Harvey G., Turnbull P., The impact of the financial crisis on labour in the civil aviation industry (No. 994476973402676). International Labour Organization (2009).
23. Kaur G., International Journal of Research Granthaalayah **5(6)**, 72-77 (2017)
24. Todor R. D., Economic Sciences **9(58)**, 51-56 (2016)
25. Sims C., Smith B. A., Murphy M. P., *Enhancing digital services for aviation*. In 15th Conf. on Aviation, Range, and Aerospace Meteorology. (2011).