

Aviation Services in Tourism during the COVID-19 Pandemic

Aneta Blazheva, Tasho Tashev, Ivo Draganov

Abstract — In this paper an investigation is being made over the tendency of air flights rate around the world due to the COVID-19 pandemic in 2020 considering all the negative effects in limiting tourist mobility. There is an attempt to support the customer activities in tourism through travel information portals with suitably extended marketing strategies some of which are being effectively applied in this study. These include but are not limited to active maintenance of Facebook page, weekly Newsletters and others which prove to be stimulating the user's interests as some of the presented statistics show.

Index Terms – flight reduction, travel, tourism, aviation, COVID-19 pandemic.

I. INTRODUCTION

Before COVID-19 pandemic air transport was in upward position with increasing number of flights, passengers, and revenue. This fact is due to globalization where air transport is one of the primary means for logistics on a world scale [1]. It is very important for the tourist industry which is linked to air transport. Air transportation puts us closer to travel for leisure or business to explore new destinations. Based on the analysis of Tadini and Pivo [2] there is strong connection between world tourism and air travel. Globalization and economic processes and increased travelling can be considered as one of the main reasons of the high number of COVID-19 infected people in the world.

IATA states, that COVID-19 led the air travel globally to one of its biggest crises [3]. Suau-Sanchez [4] confirms that observation, evaluating the affection degree on the air travel sector as probably the highest among all other industries.

In March-April 2020 most of the passenger flights have been cancelled and airlines continue to carry out mainly cargo flights, containing most often medications and food. There are also flights for repatriation. Due to decreasing number of flights, aviation companies are working with minimum number of employees [5]. Tourism itself entered in a deep regress with almost a complete halt of the flights in April and

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May. Some of the air directions remain under regular service with the explicit aim of preserving their positions. The overall situation in Europe points toward the limit of 80% of the usual capacity the airlines should operate at [6], which causes the costs to rise.

According to Wang and Su [16] the influence of the spread of COVID-19 on tourist related services is a result of the following reasons: travel restrictions around the world, reduction of events and travelers' fear to be infected. According to Gössling [17] these factors lead from over tourism to non-tourism.

During the COVID-19 travel platforms should review their marketing strategy and start to offer new services that can help them to survive. The benefit of online travel platform is that they can have a multichannel strategy which mean that they can offer online and offline services which results in better source of income Melis [18] and higher revenues [19]. All online platforms are in better condition during the pandemic because the online services are already available and are ready to meet the new customer's needs according to Lemon and Verhoef [20].

During the pandemic travel companies should reduce the cost for advertising. According to Deleersnyder [21] the cost for advertisements is more sensitive to business changes than the economy. To stay on the market travel and leisure online platforms started to offer new services. There are companies which started to offer additional services – Airbnb has launched Online Experiences where you can enjoy several activities without leaving your home. Several airline companies started to offer a "flight" on the ground where passengers can have the same experience as a real flight. Another interesting and useful approach is a newsletter with important COVID-19 updates. The implementation of new products and services during the pandemic is observed in the other sectors as well.

The aim of the presented research is to analyze the situation with the aviation industry and to identify ways to improve the service offered in a pandemic. This would allow the survival of the business by proper means, some of which have been successfully applied in the marketing strategy of the travel information platform Travel Wow.

In Section 2 of the paper analysis on the air transport during the COVID-19 pandemic is presented, followed by a newly developed marketing strategy for air tickets offering in Section 3. It is then compared to the new marketing trends from around the world along with marketing mix offered by analyzed company Travel Wow in Section 4 and Section 5, respectively. The conclusions are gathered in Section 6.

II. AIR TRANSPORT DURING COVID-19 PANDEMIC

COVID-19 pandemic affected aviation service in a negative way. Thousands of cancelled flights in 2020 year compared to 2019 led to significant reduction of the overall logistic ability on international level.

Reductions are highest in a period of April-May with -65% - 68% reduction we can say that this was the critical period in air transport which gives negative impact on tourism as well. The situation in Bulgaria is similar.

To make a more in-depth analysis of situation in different continents that will give the full picture, considering the varying dynamics of COVID-19 spread in different countries, is the first step towards finding measures to support future air travel. This would have a huge negative effect over the aviation sector.

Fig. 1 is showing the dynamic of reduced flights in 2020 year [7], where months March and April are showing highest flight reduction due to pandemic.

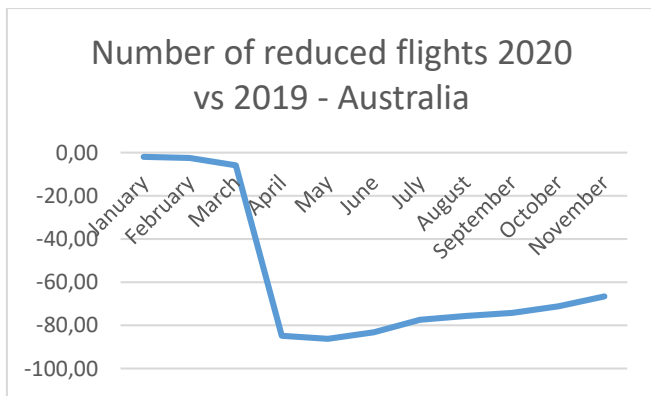


Fig. 1. Number of reduced flights in Australia

Fig. 2 is showing the situation in United Arab Emirates [7] where is one of the largest airports in the worlds with high air traffic. Reduction of the flights for the first month of pandemic is up to 80%. Months after June are showing improvement of the situation which unfortunately cannot bring back the number of flights before pandemic.

Fig. 3 is showing high reduction of the flights for the months March and April in USA [7] with up to 70%, which is better compared to Australia and United Arab Emirates. The reason is that USA has high number of domestic flights which was not so affected from COVID-19 restrictions. This fact also proves faster recovery of the flights in the USA.

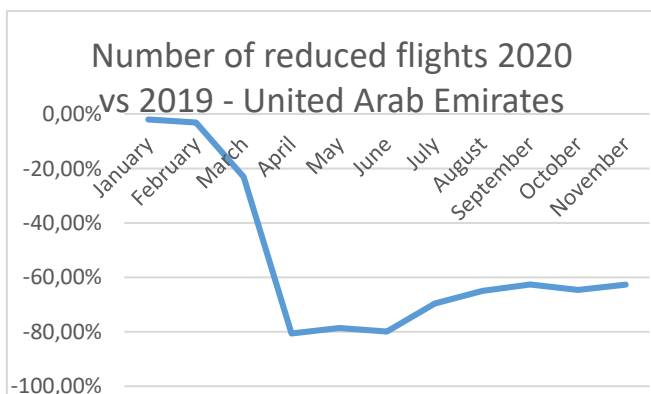


Fig. 2. Number of reduced flights in United Arab Emirates

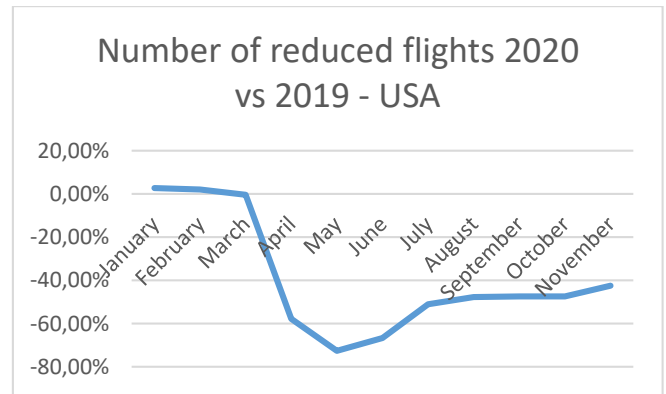


Fig. 3. Number of reduced flights in USA

Europe as a union with similar travel restrictions is showing similar results [7] for the countries Italy, UK, Spain, France, Sweden, and Germany. Flights reduction for the months of March and April is up to 92%. During the summer period the number of people infected with COVID-19 in small, which leads to an increase in the number of flights which is visible in September (Fig. 4).

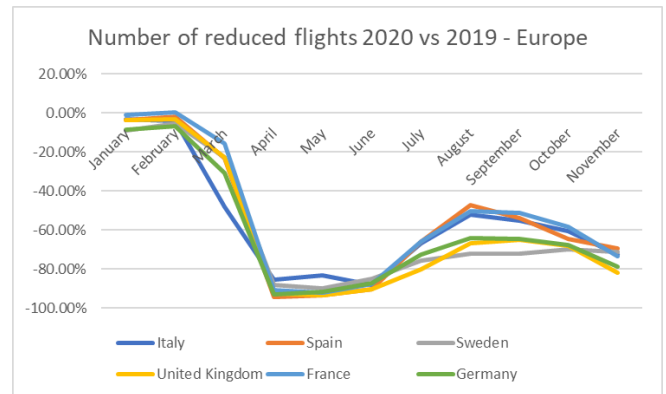


Fig. 4. Number of reduced flights in Europe

Situation in Asia is very dynamic, especially in China (Fig. 5).

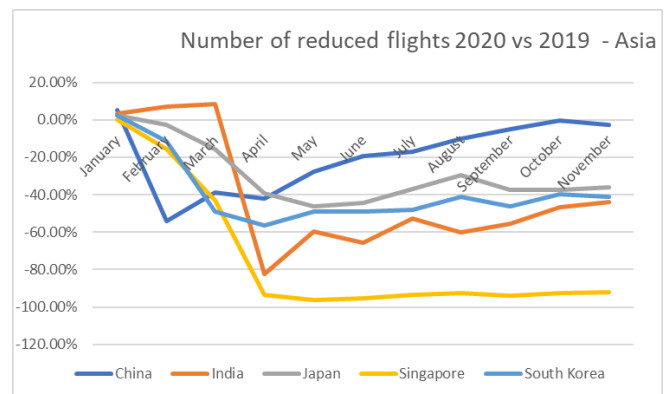


Fig. 5. Number of reduced flights in Asia

The trends are showing the flight reduction in China [7] as visible in February because China was the first infected country to introduce travel restrictions. The coming months are showing a significant improvement in air traffic and the month of October shows that China is the only country in the world that has almost recovered its number of flights since 2019 (-0.40%).

As it is shown on Fig. 6 there is significant decrease on passengers for the period March – December [8], which is because of COVID-19 pandemic. The month April, May and June have the largest declines up to -94% in April due to lockdown and closed boundaries in different countries.

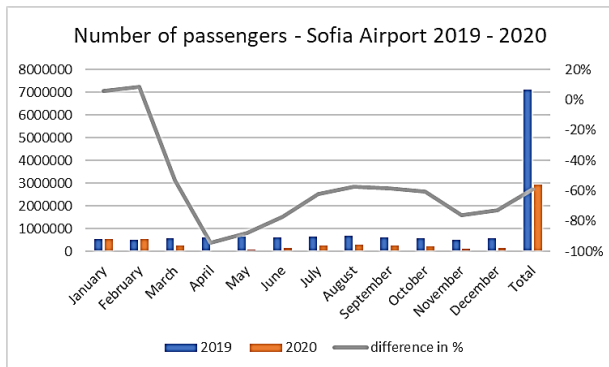


Fig. 6. Number of passengers on Sofia airport 2019 – 2020

Based on the result and decreasing number of flight and passengers the situation in tourism is similar. Our own developed website for cheap flights Travel Wow [9] is highly impacted by COVID-19 pandemic (Fig. 7).

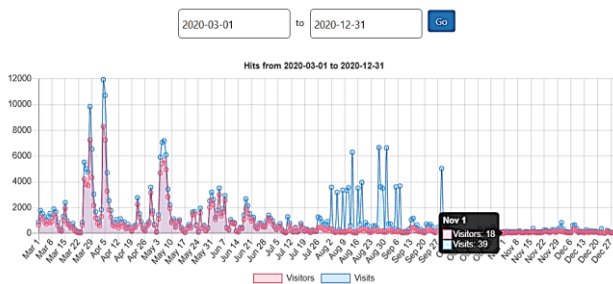


Fig. 7. Traffic on Travel Wow website for 2020

Based on the data from Travel Wow website the number of visits and visitors should be analyzed for 2019 and 2020 year. As a new platform created in 2019-year Fig 8 is showing increasing number of visits and visitors Cher'21 [15] which is showing increasing interest from the customers. The data for 2020 is showing decreasing visitors and visits which is because of pandemic. Interesting fact should be noted that the number of visits and visitors in 2019 is almost the same. Those result for 2020 are different where there is double difference between number of visits and number of real visitors in favor of number of visits which mean that one user in opening more than one page on the website. Even though that the number of visitors is small in 2020 the increasing number of visits is showing the positive influence of implementing new content resulting in increasing numbers of visits.



Fig. 8. Traffic on Travel Wow website for 2019

III. TRAVEL WOW MARKETING STRATEGY

Developing appropriate marketing strategy require a deep understanding of customer behavior. Customer wishes bringing high value to the way that companies can present their products and services bring benefits for all of them. Studying consumer behavior must be a continuous process because yesterday's decisions cannot be used today to solve the same problems. The situation with COVID-19 is a real example how the aviation and tourism sectors were impacted by pandemic and companies should change their marketing strategy to survive. One of the company's most important goals is to offer a product/service that meets the needs of its potential customers. To analyze Travel Wow customers on website we are going to use Google Analytics which will helps us to realize what are the most efficient tools on the web platform. It is expected for the maintainer to conduct ongoing tests in order the web address of the portal to come in the top search results by certain key words in various search engines. Google AdWords in a key part of Travel Wow marketing strategy. The tool will increase the efficiency by monitoring visitors' behavior on the website, while it registers the web origin from where the users come, which pages are then being opened, what is the period of browsing that content, and what is the destination of their next visit. This information in very useful for future steps. The analysis of that information provides hints on which pages need updates, how they actually could become more attractive, and what are the means to withhold users longer on the platform.

Model of Customer's behavior include [10]:

- Marketing incentives – Product, Price, Placement and Promotion
- Other incentives – Economic, Technological, Politically and Cultural
- Customer Characteristics – Cultural, Social, Personal and Psychological
- Other incentives - Identifying the Problem, Finding Information, Purchase decision, and Behavior after purchase
- Customer decision making process - Product Selection, Brand selection, Choosing a Dealer (Intermediary), Purchase time and Purchase volume decision.

IV. TRAVEL WOW MARKETING MIX

A. Principles of marketing mix

The marketing mix is one of the most important marketing definitions. The marketing mix is the tactical or operational part of a marketing plan. The marketing mix is also called the 4Ps and the 7Ps. The 4Ps are price, place, product, and promotion. The services marketing mix is also called the 7Ps and includes the addition of process, people, and physical evidence. The marketing mix is a set of marketing tools – product, price, place, and promotion – that the company blends to produce the response it wants in the target market according to Kotler, Armstrong, Wong, and Saunders [11].

The main principle behind the marketing is to be the unifying mean for ever increasing groups of customers, from proper geographical locations and over predictable time periods [11]. The web is common place for such vast amounts of users, which are also potential customers [11]. Key understanding in the marketing process is to know their

expectations [11], especially during the COVID-19 pandemic. As we analyzed that the number of flights and passengers have been reduced due to COVID-19 that affects the traffic on website as well, we decided to change the approach of our business and to start offering new services.

B. New marketing trend in COVID-19 pandemic

Travel Wow as a digital platform is visible in internet with its website, Facebook page and Instagram profile. With the force of social media, we will build relationships with our customers. Businesses should not be limited to the time frames of particular promo periods. The connection with the users should become more and more tight. Wide and intense interaction with the customers is the precursor to have Travel Wow as a successful company. The main goal is to be trusted company on Bulgarian market. Travel Wow will treat our customers with honesty and respect.

Based on marketing research that have been made in middle of March Travel Wow started offering new services:

- Travel Wow created a new feature in website where people can find useful information How to travel in COVID-19 pandemic where customers can find information about cancelled flight, refund for cancelled flight, regulations, and travel restrictions etc.

- Useful information about online events and virtual trips. For the first 3 months of the pandemic people were closed at home and all online events and virtual trips were more than welcome. Statistic data from website (Fig. 9) is showing that top 10 pages are:

ID	Title	Link
1	Гледайте онлайн "Цирк до Солей" напълно безплатно!	/gledajte-czirk-dyu-solej-bezplatno-onlajn/
2	Home Page	/
3	Онлайн разходка в Еримитажа	/on-lajn-razhodka-v-ermitazha/
4	Онлайн разходка в Еримитажа	/on-lajn-razhodka-v-ermitazha/?fbclid=IwAR0vLWjvzblgraug1MMhtzKlgxnDtlLke6TU2a7-NFLRqWIBQUMHIBuY
5	Wizz Air с нова дестинация от София през септември!	/wizz-air-s-nova-destinacziya-ot-sofiya-prez-septemvri/
6	Ryanair с последни новини как ще възстановява пари за отменени полети	/ryanair-s-posledni-novini-kak-shte-vazstanovyava-pari-za-otmeneni-poleti/
7	Wizz Air с три нови бази и много нови маршрути от това лято	/wizz-air-s-tri-novi-bazi-i-mnogo-novi-marshruti-ot-tova-lyato/
8	WizzAir планира навлизане на нови пазари след кризата	/wizzair-planira-navlizane-na-novi-pazari-sled-krizata/
9	Wizz Air с две нови линии от България	/wizz-air-s-dve-novi-linii-ot-balgariya/
10	Wizz Air въвежда засилени мерки за безопасност на здравето на пътниците	/wizz-air-uvvezhda-zasileni-merki-za-bezopasnost-na-zdraveto-na-patnicizite/

Fig. 9. Top Pages on Travel Wow website

Fig. 10 is showing that during the pandemic women continue to be the main visitors on the website. An interesting fact is that the younger population 13-24 years is also interested in Travel Wow website. A comparison between 2019 and 2020 year is showing that the main visitors in 2019 were women 25+ year. During the pandemic in 2020 small portion of visitors are younger than 25 year. As a conclusion it can be said that the new content and new features of the website attract new visitors.

Fig. 11 is showing that the top platforms on Travel Wow websites are mobile platforms with 68% of Android users. This result is significant for future action on Travel Wow. Mobile app implementation will be a good step for future success.

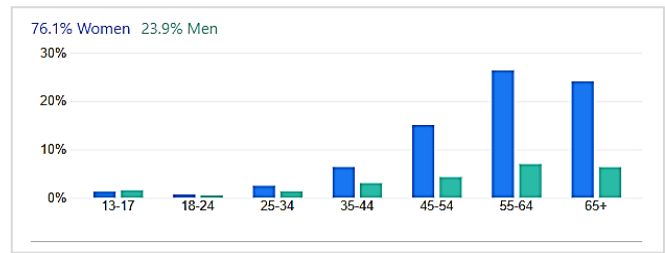


Fig. 10. Travel Wow's customer by age and gender

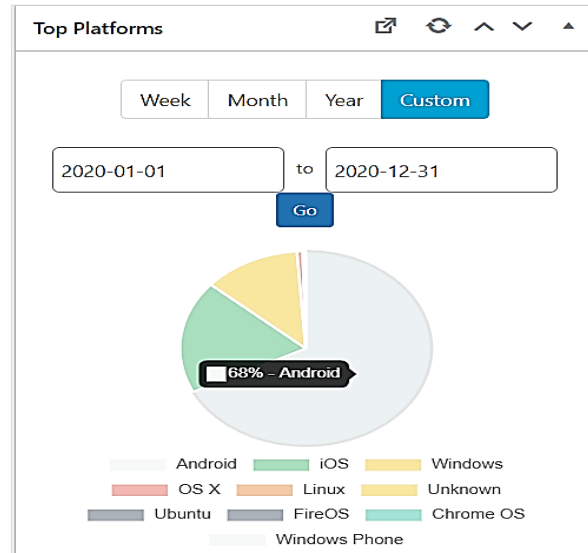


Fig. 11. Top Platforms on Travel Wow website 2020 year

C. Facebook group

<https://www.facebook.com/groups/531855484069728>

People can ask questions and share information about destination and their own experience. The benefits of having Facebook group can be having the right audience, get honest feedbacks, become a part of community, share your experience, build trust in your audience etc. That information can be used to manage your future blog posts and give you the possibility to increase customer attention. Travel Wow will stimulate People to Share Content. Customers can share their travel pictures. Others, potential new customers, could be fetched by such personal albums. Also, people can ask questions about current restriction in different countries which is beneficial in this situation. By tracking visitor's interaction Travel Wow collects and analyzes all the information which help us to plan our future posts. All our customers can follow Travel Wow in Twitter and Instagram as well.

D. Email marketing

Collecting and analyzing data on various users' features - demographics, undertaken routes, use-case scenarios within the web platform and others, reveal the actual needs for most of them and give leads as to what direction the marketing strategy should change. E-mail content and survey results, sent by customers, will give us a change where the marketing strategy shapes in segmented fashion relative to the e-mail lists for further offering. This is one of the most effective means to answer the clients needs.

Email is efficient to generate leads and keep people informed of the news and updates about your hot offers for tickets. Travel Wow’s email newsletter as a showcase for everything Travel Wow can offer to customers. Travel Wow has an integration with MailChimp subscription. Customers can leave their email address to receive Newsletters:

- Twice per week newsletter with information about travel information and current restrictions in different countries.

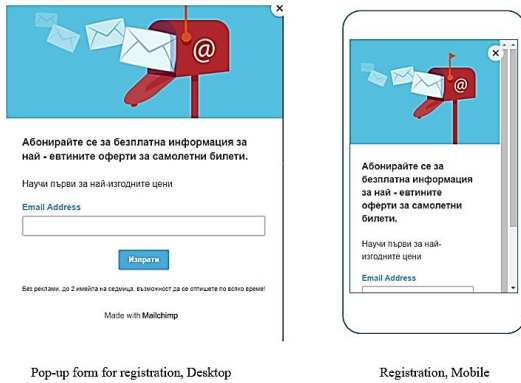


Fig. 12. Newsletter

As a result of Travel Wow new services website is still on the market with significant number of users from Bulgaria. As a proof of that, the number of customers visiting the website in the first weeks of the pandemic could be seen with growing flow (Fig. 7).

Fig. 13 is showing that most of the visitors on Travel Wow website are from Bulgaria which is expected because most of the content on the website refers to Bulgaria. Other popular countries are Germany, United States, Spain, Macedonia, Italy, where lots of Bulgarians live as well.

Rank	Flag	Country	Visitor Count
1		Bulgaria	180,932
2		Germany	11,803
3		United States	6,906
4		United Kingdom	5,176
5		Spain	4,250
6		Macedonia (the former Yugoslav Republic of)	3,756
7		Italy	2,970
8		Ireland	2,141
9		Belgium	2,116
10		Austria	1,953

Fig. 13. Top 10 visitors by country on Travel Wow website

V. AIR TRANSPORT – RECOVERY EXPECTATIONS AND CUSTOMER BEHAVIOR

According to the International Air Transport Association (IATA) [12] the number of travelers on a worldwide scale is not expected to reach its pre-pandemic levels, not until at least 2024. Short-distance flights will be recovered faster than long-distance flights. In June 2020, passenger traffic predicts a slower recovery from expected. Traffic decreased by 86.5% compared to a year ago. The situation in China is positive where the number of domestic flights is increasing. IATA expectations are showing that short distance flights will be recovered before 2024 year. An interesting fact are business

trips. Corporate travel budgets are expected to be reduced for a long time as companies continue to feel the financial stress and they used to work online using making conference calls. Due to COVID-19 and work from home 35% of companies plan to continue working from home after COVID-19, while 35% of companies consider flexible work that also will reflect on business trips in a negative way. Air traffic between Europe and the USA has decreased because of all COVID-19 restrictions.

The recovery of the industry depends on the new and active COVID-19 cases. These statements are visible in Tables I-IV where there is a correlation between visitors of the site and new COVID-19 cases on a monthly basis [13, 14].

According to the trends in Fig. 5, China is expected to remain mostly closed for international travel through much of the first half of 2022. Those numbers are only predictions and can vary because of different factors:

- Depends on the new COVID-19 stains that will potentially ban the travel that will reflect in a negative way to the airline industry;
- Depends on efficiency of vaccination and % of vaccinated people.

Depends on COVID-19 restrictions between countries especially between different continents which reflect to long-distance flights.

A linear regression (Fig. 14 and 15) is applied, which is related to the number of new cases and number of visits during the months (Table I and II). The resulting linear relationship can be used to predict the number of visits by country depending on the number of newly registered cases in the current month.

In addition, the straight lines are defined as $Y = M.X + C$, where M is the coefficient of proportion to the number of the newly discovered COVID-19 cases X each month and C is free member, which together allow the prediction of the number of visitors Y of Travel Wow per month.

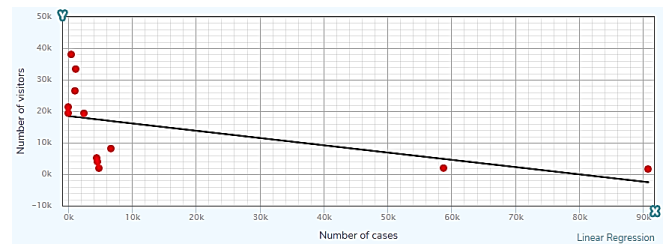


Fig. 14. Linear approximation of the number of visits of Travel Wow as a function to the number of new COVID-19 cases per month for Bulgaria

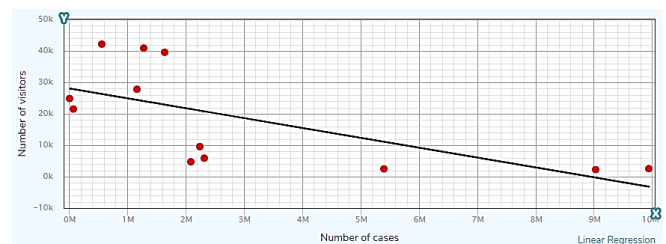


Fig. 15. Linear approximation of the number of visits of Travel Wow as a function to the number of new COVID-19 cases on a monthly basis for all countries

TABLE I
VISITORS AND VISITS ON TRAVEL WOW WEBSITE COMPARED TO NUMBER OF NEW MONTHLY COVID-19 CASES – JANUARY-JUNE 2020

Total Visitor Count 2020							
Country	Total Visitor Count 2020	Jan	Feb	March	April	May	June
Bulgaria	180932	21356	19392	38045	33400	26496	19348
Germany	11803	212	171	740	1445	5122	3439
United States	6344	710	531	955	1515	0	645
United Kingdom	5176	248	212	791	995	1658	799
Spain	4132	0	64	383	654	2052	914
North Macedonia	3281	1836	807	503	0	0	0
Italy	2954	62	66	196	372	1479	668
Belgium	1762	0	0	0	0	970	741
Ireland	1717	198	145	189	0	706	0
France	1587	68	51	0	251	640	439
Austria	1542	95	77	185	260	902	0
Cyprus	1428	76	0	0	212	877	339
Netherlands	704	0	0	0	0	0	487
Canada	469	0	0	0	453	0	0
Greece	280	0	0	167	0	0	0
Russian Federation	98	0	0	0	0	0	0
China	37	0	0	0	0	0	0
Total	224246	24861	21516	42154	39557	40902	27819

Total COVID-19 cases 2020							
Country	Total COVID-19 cases 2020	Jan	Feb	March	April	May	June
Bulgaria	174890	0	0	399	1107	1007	2476
Germany	1635405	5	52	61856	97206	21057	12910
United States	19117047	6	60	164554	875289	730475	820168
United Kingdom	2565923	0	30	29651	137469	87240	29151
Spain	1899435	0	54	104213	110916	24246	9842
North Macedonia	77201	0	1	616	969	1569	4246
Italy	1995742	3	885	100851	101852	29073	7772
Belgium	631547	0	1	15301	34655	8978	2972
Ireland	91120	0	0	3447	17386	4229	415
France	2571014	6	51	44493	83892	23054	12764
Austria	337594	0	7	9611	5746	1274	1028
Cyprus	21952	0	0	230	613	100	53
Netherlands	775936	0	2	11748	27052	7455	3966
Canada	550518	3	13	7408	44163	38592	13728
Greece	128359	0	4	1208	1364	339	475
Russian Federation	3045333	0	2	1834	97563	297176	244581
China	94503	9687	69641	2886	1703	184	652
Total	35713519	9710	70803	560306	1638945	1276048	1167199

TABLE II
VISITORS AND VISITS ON TRAVEL WOW WEBSITE COMPARED TO NUMBER OF NEW MONTHLY COVID-19 CASES – JULY-DECEMBER, 2020

Total Visitor Count 2020							
Country	July	Aug	Sept	Oct	Nov	Dec	
Bulgaria	8160	3998	5182	1926	1661	1968	
Germany	293	71	68	55	87	100	
United States	502	330	384	309	229	234	
United Kingdom	166	78	48	40	76	65	
Spain	0	0	0	15	28	22	
North Macedonia	60	29	46	0	0	0	
Italy	48	22	0	0	0	19	
Belgium	51	0	0	0	0	0	
Ireland	146	110	76	59	45	43	
France	0	0	0	19	44	56	
Austria	0	0	23	0	0	0	
Cyprus	0	0	22	0	0	0	
Netherlands	54	19	19	18	23	27	
Canada	0	0	0	0	16	0	
Greece	74	39	0	0	0	0	
Russian Federation	0	27	0	22	29	20	
China	0	0	17	20	0	0	
Total	9554	4723	5885	2483	2238	2554	

Total COVID-19 cases 2020							
Country	July	Aug	Sept	Oct	Nov	Dec	
Bulgaria	6701	4500	4430	4830	90706	58734	
Germany	14928	33946	48123	241208	509770	594344	
United States	1904462	1502149	1193898	1893318	4199224	5833444	
United Kingdom	18760	32166	111689	543589	615427	960751	
Spain	39251	174336	306330	416490	442530	271227	
North Macedonia	4370	3356	4650	19983	20963	16478	
Italy	6722	21060	44793	334663	916858	431210	
Belgium	7706	15816	36970	320021	130767	58360	
Ireland	632	2916	7572	25405	9940	19178	
France	22313	91370	272747	781294	876715	362315	
Austria	3343	6209	17389	56836	172832	63319	
Cyprus	88	403	256	2474	6014	11721	
Netherlands	3740	16108	47349	223554	171721	263241	
Canada	11878	12155	29021	75038	132811	185708	
Greece	1011	5733	7989	19073	65838	25325	
Russian Federation	193343	155827	177479	432171	669340	776017	
China	2709	2406	633	771	497	2734	
Total	2241957	2080456	2311318	5390718	9031953	9934106	

The corresponding parameters of the lines for the accuracy of its presentation are given in Tables III and IV.

TABLE III
FIRST SET OF PARAMETERS FROM THE LINEAR REGRESSION

Country	R ²	aR ²	P	SE	F	AIC	BIC
Bulgaria	0.2656	0.1922	0.08637	11700	3.617	260.7	261.6
Germany	0.09575	0.00532	0.3277	1627	1.059	213.3	214.3
United States	0.1778	0.09555	0.1722	381.1	2.162	178.5	179.5
United Kingdom	0.1271	0.03977	0.2554	505.3	1.456	185.3	186.2
Spain	0.1712	0.0883	0.1812	590.2	2.065	189	190
North Macedonia	0.1758	0.09337	0.1749	528.2	2.133	186.3	187.3
Italy	0.07945	-0.0126	0.3748	440.2	0.8631	182	182.9
Belgium	0.05786	-0.0364	0.4514	341	0.6141	175.8	176.8
Ireland	0.09836	0.0082	0.3209	188.8	1.091	161.6	162.6
France	0.09793	0.00773	0.322	206.6	1.086	163.8	164.8
Austria	0.07223	-0.0206	0.3983	260.7	0.7785	169.4	170.4
Cyprus	0.06259	-0.0312	0.4329	263.6	0.6677	169.7	170.6
Netherlands	0.02589	-0.0715	0.6174	142.2	0.2658	154.8	155.8
Canada	5.412E-05	-0.0999	0.9819	136.8	0.00054	153.9	154.9
Greece	0.05397	-0.0406	0.4675	51.79	0.5704	130.6	131.6
Russian Federation	0.4781	0.4259	0.01275	9.29	9.162	89.36	90.33
China	0.0289	-0.0682	0.5973	7.472	0.2976	84.13	85.1
Total	0.4292	0.3721	0.02076	12740	7.519	262.7	263.7

For all countries from which we have visits on the site, we have found the parameters of the lines and they are completely sufficient to predict visits on the site from the country.

TABLE IV
SECOND SET OF PARAMETERS FROM THE LINEAR REGRESSION

Country	DWS	DoF	AICc	m	dm	c	dc
Bulgaria	0.7632	10	262	-0.231369	0.1217	18449.68	3814
Germany	2.725	10	214.7	-0.002452747	0.002384	1317.853	571.1
United States	2.416	10	179.8	-9.59637E-05	0.00006526	681.5453	151.4
United Kingdom	2.956	10	186.6	-0.000583691	0.0004838	556.1422	178.8
Spain	1.982	10	190.3	-0.001570216	0.001093	592.8769	242.8
North Macedonia	0.5366	10	187.7	-0.02942023	0.02014	462.6893	200.1
Italy	2.729	10	183.3	-0.000448762	0.0004831	318.9678	150.4
Belgium	2.436	10	177.2	-0.00087668	0.001119	192.972	114.7
Ireland	1.964	10	163	-0.006891685	0.006598	195.4142	74.03
France	3.043	10	165.1	-0.000209818	0.0002014	175.6204	73.61
Austria	2.718	10	170.7	-0.001372545	0.001556	167.1136	87.07
Cyprus	2.683	10	171	-0.01819175	0.02226	160.4454	86.31
Netherlands	2.125	10	156.2	-0.000229468	0.0004451	68.75434	50.13
Canada	2.198	10	155.2	1.64742E-05	0.0007081	38.32756	51.14
Greece	1.711	10	131.9	-0.000613278	0.000812	29.89331	17.29
Russian Federation	2.176	10	90.69	3.32546E-05	0.00001099	-0.2726199	3.869
China	2.491	10	85.47	-6.26513E-05	0.0001148	3.576728	2.339
Total	1.336	10	264.1	-0.003141487	0.001146	28036.63	5016

One of the most accurate used is a coefficient of determination, which shows that the most accurate approximation is made for the Russian Federation, where this coefficient is approximately 0.48, and for Bulgaria it is half at the level of 0.27, and for all other countries it has a lower value, but cumulatively for the whole client flow, the accuracy of representation with the uniform linear dependence of Fig. 15 is approximately 0.43, which is sufficient for the purposes of the study.

It is believed that these are relatively simple research models and not so accurate, but sufficiently representative to assess the potential traffic to the site.

The general trend is that with the number of cases, there is a decrease in attendance, which varies from country to country.

VI. CONCLUSION

The tourism in different continents is highly impacted by the COVID-19 pandemic all over the world.

The registered results in Europe are similar to those of other countries with reduction of more than $\frac{3}{4}$ of the flights in the first quarter of the year when the pandemic outbreak.

Situation in USA is similar in the first quarter of 2020 year where reduction of flights in March is -70%. In the months of August and September there is fast recovery. The reason is that USA has high number of domestic flights which was not so affected from COVID-19 restrictions. This fact also proves faster recovery of the flights in the USA.

The situation in Asia is showing reduction of the flight in January and February with 50% but rapid recovery up to less than $\frac{1}{4}$ at the end of the year mainly due to domestic flights and less COVID-19 restrictions in the country. Bulgaria as a part of EU there is rapid drop in early March by almost 100% which tendency keeps stable for longer time and the number of flights stays below -60% till the end of 2020. All these trends are confirmed by Travel Wow's website hit statistics.

COVID-19 pandemic has a negative impact on the Travel Wow business. In order to survive the company decided to change its marketing strategy. Real examples on a taken actions are given in this paper. All of them has a reflection in a positive way. The most important action is to keep the fresh and interesting information on the website. That's why the company decided to create Facebook group where people can ask questions and share information. Also, powerful action is to implement Google Analytics which will help Travel Wow to realize what works on website and what doesn't.

Travel Wow is using advertising on Internet that helps to reach more customers and earn more money. Advertising in Facebook is implemented where a specific target groups are chosen. New features in the platform are offered to the new customers like online events and virtual trips which lead to higher traffic on the website. Useful information about the current COVID-19 restrictions is being presented through the platform, which supports the company to have higher number of potential customers, increase their confidence and improve the image of the company as a trusted one.

Email marketing, using the Main Chimp plugin is being implemented and customers can subscribe to receive weekly Newsletter from Travel Wow which makes the company more reachable for higher number of customers and allows the collection of their data.

All those actions are being added to mitigate the negative effect of the pandemic. There is necessity of ongoing monitoring of the current COVID-19 situation to adapt the marketing strategy of the travel information platforms of the kind, investigated in this study

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