THE CONTRIBUTION OF SOCIAL MEDIA ON THE POST-PANDEMIC RECOVERY OF AVIATION AND TOURISM

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Abstract After almost two years of the global pandemic, it is time to understand how the aviation and tourism sectors are recovering. The context of this post-pandemic period could result in being one of the most complex scenarios in terms of attracting customers, hence it is a huge challenge. Therefore, the authors of this paper seek to discover whether the internet can help business to return to normal, and, if so, how social media can have an influence. The aim of this paper is thus to study whether – and if so, how – airlines are using social media to engage with customers to promote tourism. The methodologies used are a content analysis of Facebook and Instagram over a period of six months together with analyses of the posts. Only airlines that engaged with these two types of social media were considered in the study. Additionally, the authors analysed the monthly traffic reports during the same period to check the eventual influence of social media. In addition, the authors made a comparison between the post results and the air traffic evolution in order to understand whether there are any relationships between them

1   Introduction

In December 2019 the first cases of coronavirus (COVID-19) in humans were reported in China. On 11 March 2020, the World Health Organization (WHO) declared that the world was facing a global pandemic, with more than 1,301,021 reported as having died from COVID-19 and more than 53,281,350 reported cases in more than 219 countries throughout the world (Giantari *et al*, 2022). Various restrictions were implemented to try to minimise the impact of the pandemic. The aviation and tourism sectors were particularly affected. In fact, according to a report published in June 2020 by the International Air Transport Association (IATA), 32 million jobs supported by aviation, which includes tourism, were at risk. In the report, it is clear that airlines had negative income and 2020 was considered the worst year in airline history. It is therefore important to understand whether airline companies are using social media to promote business to recover from the pandemic, in particular by considering the Portuguese context, namely Lisbon Airport.

In terms of organisation, this paper contains a literature review introducing a brief overview of COVID-19 in order to conceptualise what was happening worldwide. Some literature on social media, mostly its use during the pandemic, is also included. The authors also illustrate some literature review in relation to social media in the context of aviation and tourism.

The paper continues with an explanation of the methodology, followed by the main results and conclusions, the limitation of the research, and suggestions for future research.

2   LITERATURE REVIEW

2.1   The Portuguese COVID-19 context and social media

Statically speaking, the use of the internet and social media increased during the pandemic, most likely due to people working at home. In fact, according to Datareportal statistics, at the beginning of 2022, 85% of the Portuguese population had access to the internet, which represents an increase of 2.9% compared to 2021. The figure for 2022 indicates that today 83.7% of the population of Portugal use

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social media, which is 9% more than in 2021. In 2020, 69% of the country's population were social media users.

COVID-19 can be considered as a crisis. During a crisis, social media can help in various ways. Social media can be used as a communication tool but can also be a way to collect information about the public (Arora et al, 2022).

2.2   The role of social media in aviation and tourism in times of crises

According to Pasquinelli et al. (2022), post-pandemic city branding must consider and intensify communication, mostly about brand values. This communication also implies social media. In the tourism sector, Li et al. (2022) proved that during a public health crisis, social media is an important tool in creating positive consumer emotions. Chung et al. (2020) reinforce that using big data collected from social media can be important in the context of crisis management.

Videos on social media are important in helping to sustain relationships between tourists and places and to create destination branding (Moin et al., 2020; Kim & Youn, 2017; Lund et al., 2020; Alegro & Turnsek, 2020; Li & Liu, 2020).

The concept of engagement is also important in the context of social media. This was researched by Dijkmans et al. (2015), who defined engagement as a certain familiarity and relationship between customers and companies' social media activities during a certain period, which implies emotion and expression of interest in some way – whether online or through interaction and/or participation. Airlines must view social media as a way of potentially attracting passengers as well as a way of advertising. In addition, social media can be used to minimise damages in a crisis context through effective online relationship management with users (Bartos & Badánik, 2019).

Tussyadiah (2016) found that tourists who use technology are more open to recommendations and are more influenced during the decision-making process, thus making them an effective marketing audience to consider. This suggests that tourism product managers should focus their efforts on the online environment.

When there are online comments, Liang and Li (2019) argue that companies should respond to them. However, their study proved that tourists who receive a response have high expectations in terms of the content of the response. Managers must therefore be aware of the importance of improving the quality of their answers, which must be informative and personalised rather than standard answers which, as a rule, are the same for all customers.

3   Methodology

In terms of methodology, a mixed approach was taken – a quantitative approach with a post count and a qualitative approach with an analysis of Facebook and Instagram content over a six-month period from May to October 2021. This timeline allows the analysis of summer data, as this is usually the busiest time of the year for tourism and aviation, and the authors of this paper have access to traffic reports from these months. The authors began by making a selective and balanced triage, in which – considering all the airlines operating in Lisbon (the major airport in Portugal) – they excluded those that do not have at least one of the types of social media under consideration. Thereafter, only those airlines were considered that have a minimum of 100 posts on the two types of social media considered during the timeline for the content analysis. The authors finally cross-checked the data with traffic reports to understand if there was a relationship between the online behaviour and the results in a post-pandemic environment.

4   Results

The authors initially identified 45 airlines, however, only 31 of them use Facebook and Instagram. After the Facebook post count, five airlines were excluded from the sample because they only posted one or twice (or not all all) during the considered period or because they used a foreign language in addition to English or Portuguese. Thereafter, the authors did a count of the Instagram posts of the remaining 26 airlines, in which it was found that one of them had not posted since 2015 and another posts in a foreign language. This, therefore, left 24 airlines for the final sample. As can be seen in the results of the final count in Table 1, some of the airlines did not have a considerable number of online posts. Therefore, for the content analysis, the authors only considered those airlines with a minimum of 100

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post on both forms of social media. The 13 airlines considered for this analysis are underlined in blue in Table 1.

From the 13 airline companies, the authors counted the posts directely related to the pandemic, considering terms such as: 'EU COVID Digital Certificate', 'COVID-19', 'pandemic', 'safe/safety', 'PCR-test', 'vaccination', 'isolation/lockdown', 'travel health regulation/rules', 'hygiene', 'prevention', 'opening again/frontiers/reopening', 'reunite/reunion', 'restarting', 'social distancing', 'quarantine', 'virus', 'restrictions', 'coronavirus', 'masks' and 'freedom'. The results can be seen in Table 2.

Table 1: Post count (Authors' own elaboration)

Considered Months: may to ocotber, 2021								
Airline Company	**Facebook**				**Instagram**			
	Followers	**Total posts**	**Videos**	**Videos %**	**Followers**	**Total posts**	**Videos**	**Videos %**
Aegean Airlines	726	39	8	20.5	122,000	35	7	20.0
Air Baltic Corp.	439	195	87	44.6	85,900	114	19	16.7
Air Europa	674	105	27	25.7	247,000	127	32	25.2
Air Hamburg	5,266	103	0	0.0	6,901	85	0	0.0
Azores Airlines	132	224	65	29.0	25,500	118	30	25.4
Azul Linhas Aereas	4.049,633	108	36	33.3	976,000	153	38	24.8
Blue Air	584	302	6	2.0	39,800	165	4	2.4
British Airways	3.319,303	114	32	28.1	1.100,000	119	34	28.6
Brussels Airlines	454	42	13	31.0	104,000	30	3	10.0
Emirates	11.048,832	153	52	34.0	6.000,000	142	45	31.7
Euro Atlantic	10,575	39	2	5.1	2,934	32	0	0.0
Eurowings	979,182	124	20	16.1	323,000	119	12	10.1
HI FLY	20,724	23	2	8.7	27,900	22	3	13.6
Iberia	1.864,558	120	34	28.3	536,000	63	24	38.1
Lufthansa	3.947,512	145	31	21.4	1.400,000	116	36	31.0
Luxair	113,463	117	12	10.3	32,200	54	2	3.7
Ryanair	5.101,530	369	43	11.7	817,000	337	71	21.1
Star Air	18,802	119	4	3.4	16,200	116	2	1.7
TAAG	18,900	14	3	21.4	29,100	35	2	5.7
TAP Portugal	1.430,420	90	14	15.6	563,000	73	12	16.4
Turkish Airlines	10.712,642	143	110	76.9	1.900,000	105	86	81.9
VistaJet	37,328	120	17	14.2	84,700	73	15	20.5
vueling	1.265,549	70	35	50.0	213,000	99	30	30.3
Wizz Air	3.369,008	300	21	7.0	428,000	282	10	3.5

Table 2: Count of COVID-19-related posts (Authors' own elaboration)

Airline Company	Facebook			Instagram		
	Total posts	Posts COVID -19 related	%	Total posts	Posts COVID -19 related	%
Air Baltic Corp.	195	14	7.2	114	4	3.5
Air Europa	105	11	10.5	127	3	2.4
Azores Airlines	224	10	4.5	118	5	4.2
Azul Linhas Aereas	108	28	25.9	153	32	20.9
Blue Air	302	20	6.6	165	8	4.8
British Airways	114	27	23.7	119	21	17.6
Emirates	153	28	18.3	142	23	16.2
Eurowings	124	20	16.1	119	9	7.6
Lufthansa	145	22	15.2	116	13	11.2
Ryanair	369	19	5.1	337	16	4.7
Star Air	119	13	10.9	116	8	6.9
Turkish Airlines	143	14	9.8	105	6	5.7
Wizz Air	300	13	4.3	282	10	3.5
		Media	12.2		Media	8.4

5 Conclusion

By analysing the results, the authors conclude that all the companies considered publish less on Instagram than on Facebook and also have less Instagram than Facebook followers. This leads to the conclusion that Instagram is perhaps underused given the growing number of users.

In terms of the content analysis, taking in account the type of publication, it can also be concluded that the percentage of videos is lower than the publication of text. In addition, it can be concluded that the aim of posts and videos on Facebook and Instagram is to promote the destinations where the airlines operate, as well as to promote new services and to offer customers insights into the destinations they fly to by encouraging crew members to post photos.

The authors can verify that all the airlines are careful to respond to user comments, which is a positive way of working in the online environment.

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In terms of content, most of the posts are repeated on companies' Facebook and Instagram profiles. Airlines do not refer too much to the topic of COVID-19, other than reminders and updates of the preventative measures, while the other posts had content relating to the promotion of destinations. COVID-19 related posts only accounted for 12.2% of the posts on Facebook during the period under consideration, while this figure is 8.4% for Instagram. This result shows that the focus of social media is to promote destinations and the recovery of aviation and tourism by posting positive messages that are appealing to travellers and that showcase the best of each destination.

The analysis of the monthly traffic reports during the same period led to a number of conclusions, because a relationship can be established between the performance of social media and an increase in the number of passengers when comparing online behaviour and traffic reports. The reports contain a list of TOP 40 airlines whose performance was considered in terms of the number of passengers by comparing the year 2021 to 2020. During May and June 2021, just one of the 13 airlines considered that had a positive online performance also had a positive performance in the reports in the same months. In July, August and September, four airlines from the 13 considered appear in the traffic reports with positive results considering the number of passengers in these months. The October report does not include this part, therefore no conclusions can be reached about that month. From these numbers, it can be concluded that there is a lot to do in terms of social media. While there is clearly a relationship between online behaviour and economic results, the truth is that this relationship is not very solid. There is still a long way to go, and the authors of this paper consider that social media was not used well by most airlines during the considered period.

For future research, the authors propose the same study but in a future context, without the pandemic, to understand if airlines use social media to engage with their customers and if doing so influences traffic. It would also be useful to conduct studies separately; not including Facebook and Instagram in the same study could help to reach some interesting conclusions. In terms of limitations, the authors acknowledge that the number of airlines and the fact that just two forms of two social media were analysed are limits of this research.

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