Hospitality & Tourism
Systems

Destination Brand Communication during COVID-19 Pandemic - The Case of Iceland

Ansted Iype Joseph*, Victor Anandkumar**

Abstract   *The existing literature indicates that the COVID-19 pandemic has been disastrous for tourism across the globe and much of the focus now is on tourism recovery. WTTC estimates that destinations would take an average of 21.3 months to recover from a pandemic. Various market reports and research on the impact of COVID-19 on tourism have issued bleak forecasts regarding the future of global tourism but Iceland has disregarded this prediction. The European island nation has received much acclaim for its ability to control the spread of the virus without the need for an aggressive lockdown. Iceland holds the distinction of becoming the first European country to open its doors to tourists amid the outbreak when a vast majority of destinations worldwide are still on lockdown. The country has decided to allow tourists from the Schengen area to visit from June 15, 2020 and proposes to allow other tourists to visit from July 1, 2020. In the current scenario, where the state of public health is a barometer of destination attractiveness, a COVID free environment would be alluring to tourists who had postponed their travel plans due to the crisis. The Iceland DMO (Destination Marketing Organization) provides prospective tourists with general travel-related information, links to government notifications and also has an official website for Iceland and COVID-19. It has also established its social media presence on Facebook, Instagram, Twitter, YouTube and Pinterest. We propose to evaluate the brand communication strategy of Iceland tourism using the PESO (Paid, Earned, Owned and Shared) framework. This evaluation will yield insights into platforms and types of media employed by the DMO with the intention of addressing the concerns of tourists. The strategies implemented by Iceland may be adopted by other destination DMOs to restart their tourism industry.*

Keywords: *COVID-19 Pandemic, Tourism Recovery, Destination Brand Communication, PESO Framework, Iceland Tourism*

INTRODUCTION

The COVID-19 crisis declared as a pandemic by the World Health Organization (WHO, 2020) has severely impacted every facet of life across the globe. It has caused worldwide turmoil by pushing political, economic and socio-cultural systems into chaos. The governments of virtually every nation have been forced to implement measures to contain the spread of the virus. This has resulted in lockdowns, social-distancing, travel bans, voluntary or mandatory quarantine and restrictions on crowding.

In 2019, travel and tourism accounted for 10.3 % of the global GDP and 330 million jobs worldwide (WTTC, 2020a). The tourism industry is vital to many economies across the globe but is also very vulnerable to crisis and disasters (Nian et al., 2019). According to Gurtner (2016), management of tourism

crises is a continuous process which consists of strategies for prevention, preparation, mitigation, adaptation and recovery.

The average recovery time from crisis for the travel and tourism sector has decreased from 26 months in 2001 to 10 months in 2018 but the economic impacts caused by various crises have increased (WTTC, 2020a). Tourism is a critical part of numerous national economies and the sudden shock that has been caused to the sector has affected multiple stakeholders. According to Novelli et al. (2018) health related crisis has a very negative effect on tourism. COVID-19 is estimated to cause a 60% decline in international tourism in 2020 and is expected to reach 80% if tourism recovery efforts are delayed till the month of December (OECD, 2020). There is a need to maintain a balance between safeguarding the health of individuals and that of economies in addition to managing the fear, panic and stigma associated with

*   Amity Global Business School, Kochi, Skyline Platinum, Rajaji Road, Kochi, Kerala, India. Email: ansted2000@yahoo.com (Corresponding Author)
** Department of Management Studies, Pondicherry University, Pondicherry, India.

COVID-19 (WTTC, 2020a). Tuclea et al. (2020) and Rosen (2020) maintain that the pandemic has forced tourists to take into account health related concerns when choosing a travel destination. Governments and the tourism industry will focus on lifting travel restrictions, restoring tourist confidence and designing tourism recovery plans (OECD, 2020).

The tourism recovery process of attracting visitors will be difficult because of the negative image of the destination (Séraphin, 2016). Destination perception of tourists is negatively affected by perceived risk and these risks refer to issues concerning safety, security and health (Khan et al., 2017; Loureiro & Jesus, 2019). There must be a focus on reducing the perceptions of risk and uncertainty with respect to health security at the destination (Novelli et al., 2018). Wen et al. (2020) points out that tourists will prefer destinations that have excellent infrastructure and medical facilities in the context of the COVID-19 pandemic. Tourists are ready to forego some facilities, pay more money and prefer destinations where additional hygiene rules are visible (Tuclea et al., 2020). Okuyama (2018) claims that safety information has the greatest impact on tourism demand recovery. Destinations must publicize their readiness to protect visitors from public health issues during travel by communicating the availability and locations of medical facilities (Kravchenko, 2020). Social media is a strongly recommended tool for communicating the actions undertaken by tourism providers to reduce health risks for tourists (Tuclea et al., 2020).

According to PATA (2020), paid media consists of those channels of communication where payment is made to place the message and control its distribution while earned media constitutes the third-party coverage of the message, for example, by a journalist. Shared media is made up of the sharing and comments on content that is posted on social media channels while owned media is that content which is published by the organization on channels that it owns.

The image of Iceland is highlighted as a scenic nature destination that tourist consider as ideal for adventure and a friendly, hospitable destination (Kazakova et al., 2017) and for well-being (Boorsma, 2020). Nature is the primary motive behind tourists' visits to the destination (Sæþórsdóttir, 2020). Iceland offers tourists access to a variety of natural phenomena such as the northern lights, volcanoes, waterfalls, glaciers and geothermal areas (Óladóttir, 2018). The travel and tourism sector contributed 22.8% of Iceland's GDP and 21.9 % of the total employment (WTTC, 2020b).

'Inspired by Iceland' is the official destination brand for Iceland and the website for the DMO (Visit Iceland) is https://visiticeland.com/. The Icelandic tourist board is an independent entity under the Ministry of Industries and Innovation with functions such as development of Destination Management Plans and acquiring tourism data. One of the goals of 'Promote Iceland', a public-private partnership is to promote the image of Iceland as a tourist destination. Promote Iceland had chosen M&C Saatchi Group and Reykjavik-based agency Peel to revive the tourism sector in Iceland in response to the COVID-19 crisis (Faw, 2020; McAteer, 2020). They launched a website (https://lookslikeyouneediceland.com/) as part of the $12m campaign where users could record and upload their screams which would be played through speakers in seven different locations across Iceland (Spary, 2020).

REVIEW OF LITERATURE

The tourism industry has had to deal with a variety of crises both natural and man-made over the years. These crises result in decreased numbers of visitors and their consequent expenditures and have a negative impact on a destination's image and safety perceptions (Jurdana et al., 2020). The effects of different types of crises on the tourism industry has been explored from a wide range of perspectives in previous studies (Amir et al., 2018; Avraham & Ketter, 2017a; Barbe & Pennington-Gray, 2018; Fong et al., 2020; Gani & Singh, 2019; Jurdana et al., 2020; Ketter, 2016; Liu et al., 2016; Mair et al., 2016; Mason et al., 2020; Möller et al., 2018; Nguyen & Imamura, 2017; Nian et al., 2019; Novelli et al., 2018, Okuyama, 2018; Oliveira & Huertas, 2019; Park et al., 2019; Rodriguez-Toubes & Dominguez-Lopez, 2017; Tuclea et al., 2020; Yu et al., 2020).

Destination Crisis Communication

It is critical for DMOs to engage in public relations and crisis communication in the event of a crisis (Huertas & Oliveira, 2019; Séraphin & Gowreesunkar, 2017). Studies by Andronikidis et al. (2020), Blasquez-Resino et al. (2016) and, Nugraha and Sudirman (2019) point out that the content that is posted on DMO websites has the ability to impact destination image. An effective crisis communications strategy requires the involvement of the DMOs and a focus on the channels employed along with the content that is included (Capriello & Splendiani, 2019). Janeš & ČendoMetzinger (2018) underlines that communication before, during and after a crisis must have a focus on high-quality communication with all target groups.

A crucial communication channel for tourism marketers during times of crisis is social media (Ketter, 2016; Möller, 2018; Park et al., 2019; Rodriguez-Toubes & Dominguez-Lopez, 2017). Tuclea et al. (2020) and Tham et al. (2020) state that social media will have considerable influence on tourists in conditions where complex decision making is involved. DMOs should use social media as a tool to facilitate decision making and trip planning. Strategic management of social media communication becomes more critical in a scenario where user-generated communication is considered more

effective than traditional communication (Huerta-Álvarez et al., 2020; Teclea et al., 2020; Zhang et al., 2020).

Ketter (2016) draws our attention to how Facebook can be employed to restore the image of a destination and is capable of a wide range of uses; for having both formal and informal interactions with a variety of audiences and as an additional distribution channel.

For destinations engaging in tourism recovery efforts, communicating disaster-related information using Twitter has a negative effect on tourist arrival (Fukui & Ohe, 2020). In certain instances, DMOs have failed to capitalize on the speed and interactivity of social media for crisis communication by focusing more on the crisis and less on the destination image recovery (Oliveira & Huertas, 2019). A study of destination crisis communication using Twitter indicated that messages of support are effective during the recovery stage (Barbe et al., 2018).

Recent studies on tourism communication during the COVID-19 pandemic indicates that social media has a very prominent part to play in disaster and health-related crisis communication (Tuclea et al., 2020; Yu et al., 2020). The COVID-19 pandemic has enhanced the significance of health safety of a tourism destination for tourists. Tuclea et al. (2020) reports that in situations where the health safety of destination is a critical deciding factor, social media acquires the prominent role of trust builder by providing information about sanitary safety.

PESO Framework

Dietrich (2020a) recently updated the PESO Model to reflect changes after the model was first developed eight years ago. The PESO model rests on a four cornered pyramid structure that has four overlapping media components; Paid, Earned, Shared and Owned. The model describes an integrated framework for organizations to employ public relations and marketing strategies to reach targeted audiences and influence their perspectives about their brand. The strategies and tools to be employed in each of the four key areas are detailed in figure 1.

The usefulness of the PESO model in enabling communicators to simultaneously engage with multiple channels to drive campaigns that can increase brand loyalty and revenue of customers has been highlighted by multiple researchers (Andersen, 2018; Bailey, 2019; Petrolino, 2020; Rehkopf, 2018; Schwartzman, 2020;)

Rehkopf (2018) maintains that only an integrated approach to communication strategy will yield the maximum value and this can be achieved using the PESO model. The PESO model is used to establish and enhance brand authority in the field of public relations while it allows for the categorization and organization of content in marketing (Campaign Monitor, 2020).
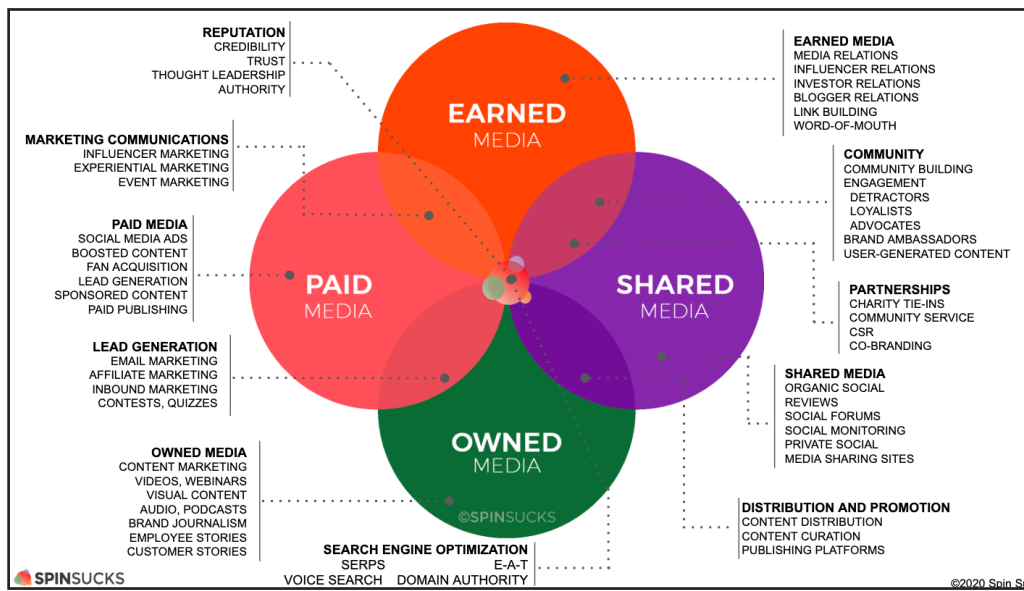
Source: Dietrich (2020b)

Fig. 1. PESO Model

In the context of the COVID-19 pandemic, communication campaigns by DMOs need to work across all media channels

(PATA, 2020). They advocate the use of the PESO model for maximum impact of the communication campaign.

RESEARCH METHODOLOGY

The aim of the study is to assess how Iceland DMOs have planned and executed their digital communications plan in the context of the COVID-19 pandemic. This is a descriptive study. The primary data has been obtained by collecting data in text, images and video formats from the official website of the DMO https://visiticeland.com/, the campaign website https://lookslikeyouneediceland.com/, official social media webpages on the Facebook, Twitter, Instagram and YouTube platforms and travel blogs. For the purpose of the study, only that content which was created or posted during the time period from March 11, 2020 (when WHO declared COVID-19 as a pandemic) till August 31, 2020 was used.

The communications strategy adopted by the DMO, Visit Iceland in response to COVID-19 is evaluated on the basis of the PESO model composed of four media components (paid, earned, shared and owned) that constitute the framework. Publicly available data is collected on the basis of the different types of tactics used under each media component.

Paid Media: The paid media component was evaluated by performing content analysis of the text on the campaign website https://lookslikeyouneediceland.com/. Text-based content as well as the only 1 video present on the website were extracted from the website for content analysis.

Earned Media: In order to evaluate earned media, the posts from the top travel blogs pertaining to Iceland were analysed. Google's PageRank algorithm ranks pages by providing each page a relative score of importance and authority (Niechai, 2019). A Google search using the keyword "travel blog" was used to identify the 15 most popular travel blog websites (Mak, 2017). The blogs were searched for posts about Iceland which met our criteria regarding the time of posting. Only 7 blogs which contained posts about Iceland were included in the study; 'Nomadic Matt', 'Young Adventuress', 'Earth Trekkers' 'A Luxury Travel Blog', 'Miss Tourist', 'Exploring Kiwis' and 'A Broken Back Pack'. A total of 40 blog posts were extracted for content analysis. Textual content as well as a total of 688 images were extracted from the blog posts for content analysis.

Shared Media: The content (text, images, video) posted on the official social media webpages of Visit Iceland on Facebook (@inspiredbyiceland), Twitter (@iceland), Instagram (#inspiredbyiceland) and YouTube (inspiredbyiceland) was extracted and evaluated. The Pinterest page (icelandinspired) had not been updated with content during the period of study and was hence excluded from the analysis. In addition to the textual content from the posts on social media platforms, a total of 142 images and 26 videos from Facebook, 160 images and 18 videos from twitter and 157 images and 22 videos from Instagram were content analysed.

Descriptive metrics that describe the social media presence of Visit Iceland relevant to the various kinds of social media being studied were identified. The metrics being used for various kinds of social media are described below:

Facebook: '# of Posts', '# of Images', '# of Videos', '# of Reactions per post', '# of Comments per post', '# of Shares per post', '# of Views per video'

Twitter: '# of Posts', '# of Images', '# of Videos', '# of Comments per post', '# of Retweets per post', '# of Likes per post', '# of Views per video'

Instagram: '# of Posts', '# of Images', '# of Videos', '# of Likes per post', '# of Comments per post', '# of Views per video'

YouTube: '# of Posts', '# of Videos', '# of Views per video', '# of Likes per video', '# of Dislikes per video', '# of Comments per video', 'Duration per video'

A total of 424 posts from Facebook (n = 149), Twitter (n = 137) and Instagram (n = 138) were used to perform a multivariate analysis of variance (MANOVA) to understand the influence of social media platforms on likes and comments metrics.

Owned Media: The owned component of the PESO model was evaluated after obtaining content from the official DMO website which had a separate webpage for tourists seeking COVID-19 related information (https://visiticeland.com/article/iceland-and-covid19-coronavirus). Textual content was extracted from the website for content analysis.

The text data from the DMOs websites, campaign website, travel blogs, YouTube and Instagram were obtained through a manual scraping technique while the textual component of the posts on Facebook, Twitter, were web scraped using NCapture, a web browser extension of NVivo. The image and video content from the social media websites were downloaded manually from the respective websites.

Bauer (2000) contends that content analysis offers a systematic technique for coding symbolic content such as text and images in communication in terms of structural content (length of message, frequency of words or image components etc.) and semantic themes. According to Weare and Lin (2000), websites and webpages which are tools for communication are ideal for content analysis. Content analysis is a very popular technique that lends itself to the analysis of content on the Internet (Herring, 2009).

Content analysis was used to analyse the text format data that was scraped from various publicly available online data sources. The frequency distribution of individual words is present in most content analysis (Dicle & Dicle, 2018). Word cloud analysis was used to content analyse the data in the text format. Word clouds provide a simple and straightforward visualization technique for text data. Word

cloud analysis has been used previously in tourism research (Akay, 2020; Cherapanukorn & Charoenkwan, 2017; Moro & Rita, 2018; Kizanlikli & Civgin, 2019). NVivo 1.3 was used to draw a word cloud of the most frequently occurring words on the text content on the websites and social media pages of Inspired by Iceland.

The photos that were extracted from the various sources were examined using content analysis. According to Krippendorff (2018) each photo could be considered an unit. Some content analysis studies (Çakici et al., 2017; Stepchenkova & Zhan, 2013) have classified images into 20 different categories. However, we use a more accurate classification of pictures as suggested by Song and Kim (2016) which developed 13 categories of images; (1) Modern Architecture, (2) Art Object/Statue, (3) Festival/Ritual, (4) Food/Restaurant, (5) Leisure Activity/Facility, (6) Nature/Nature Landscape, (7) Ordinary Scene, (8) Other, (9) Religious Building/Object, (10) Traditional Art Work/Object, (11) Traditional or Historic Building, (12) Transport/Infrastructure, and (13) Urban/Urban Landscape. An additional category 'COVID-19 crisis related' was added in order to categorize any images that might possibly refer to the crisis. Each photo analysed was classified into one of the 14 categories.

The videos downloaded from the different online sources were investigated using content analysis. This technique has been used to analyse touristic videos in previous studies (Amir et al., 2018; Huertas et al., 2017; Hou et al., 2016; Pan et al., 2011; Stoleriu & Ibanescu, 2015). The shot which is a sequence of frames captured from a single camera operation is the unit of analysis for the video (Iedema, 2001; Porter et al., 2001). The shots were identified manually and coded thematically according to a scheme adapted from Stoleriu & Ibanescu (2015). A shot is capable of communicating multiple attributes. Hence, content analysis was employed to extract various destination features from the shots.

The following attributes (adapted from Stoleriu & Ibanescu, 2015) were used to evaluate the thematic content of videos; (1) Natural resources, (2) General infrastructure, (3) Tourist infrastructure, (4) Tourist activities, (5) Hosts' activities, (6) Architecture, art, (7) History, (8) Traditions, (9) Social environment; hosts attitude, (10) Interactions hosts-tourists, (11) Natural environment and (12) General atmosphere.

Orientation analysis of the video (Hou et al., 2016) has been included as a variable to describe the perspective from which the story is told in the video. This variable had three attributes; (1) Tourists, (2) Local residents and (3) Government.

The study deals with communication during the COVID-19 crisis and hence included categories and sub-categories (adapted from Amir et al., 2018) pertaining to communication about safety and security at the destination; (1) Types of safety and security risks featured in video (Health-related disasters, Other risks and Not presented/unidentified), (2) Types of safety and security measures featured in video (Self-protection recommendation, Health/medical assistance, Insurance, Mixed type measures and Not presented/unidentified), (3) Message Framing (Gain, Loss, Neutral/unidentified and Mixed approaches) (4) Message Appeal (Economic, Psychological/Fear, Social, Physical and Not presented/unidentified), (5) Message Valence (Positive, Negative and Not presented/unidentified) and (6) Types of Safety Information Cues (Self-protection recommendation, Safety measures, Overall destination safety, Possible risks at the destination, Personal stories/testimony on safety, Safety procedures, Mixed themes and Other).

DATA ANALYSIS

The data analysis follows the structure of the PESO model and is presented in terms of the four media components.

Paid Media

Figure 2 depicts the word cloud drawn on text extracted from the campaign website https://lookslikeyouneediceland.com/. The most frequently occurring words were "scream", "amygdala", "need" and "release".
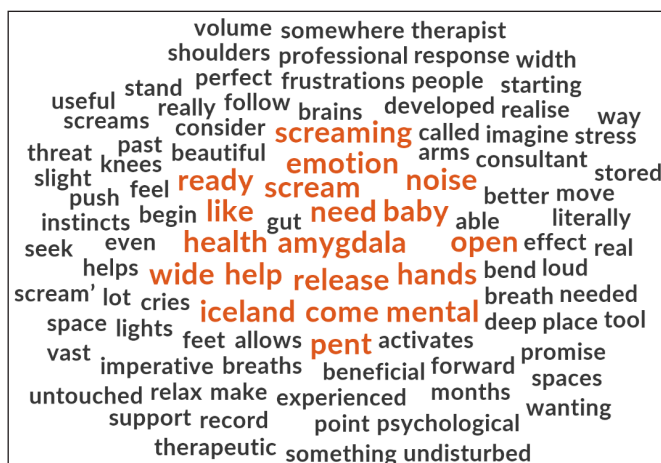
Fig. 2. Word cloud for 'LookslikeyouneedIceland' campaign website

There was only one video on the campaign website and it was oriented from the perspective of the tourist. The thematic content of the video included the natural resources, natural environment and the tourist activities in Iceland.

Earned Media

Among the 688 images extracted from the travel blogs (Table 1), the category of Nature/Nature Landscape ranked first (n = 385, 56%) followed by Leisure Activity/Facility (n= 249, 36.2%) and Transport/Infrastructure (n=14, 2%) . The travel

bloggers had focused exclusively on just two categories of images.

Table 1: Summary of Image Categories on Travel Blogs

Category	Travel Blogs	
	N	%
Modern Architecture	1	0.1
Art Object/Statue	3	0.4
Festival/Ritual	0	0.0
Food/Restaurant	0	0.0
Leisure Activity/Facility	249	36.2
Nature/Nature Landscape	385	56.0
Ordinary Scene	20	2.9
Religious Building/Object	2	0.3
Traditional Art Work/Object	1	0.1
Traditional or Historic Building	3	0.4
Transport/Infrastructure	14	2.0
Urban/Urban Landscape	9	1.3
COVID-19 crisis related	0	0.0
Other	1	0.1

The word cloud drawn on the textual content of the blogs (Figure 3) that were analysed revealed the most frequently occurring words were "Iceland", "hike", "waterfall", "visit"' "glacier", "trail" and "time".

Fig. 3. Word Cloud for Travel Blogs

The textual content of the communication by the bloggers focuses on the natural landscape as well as the various activities that can be undertaken at the destination.

Shared Media

The word cloud analysis of the textual content of the posts by Visit Iceland on Facebook (Figure 4) , Twitter (Figure 5), Instagram (Figure 6) and YouTube (Figure 7) revealed the most frequently occurring words used on those platforms.

Fig. 4. Word Cloud for Facebook

The most frequently observed words were "Iceland", "beautiful", "love", "visit", "Icelandic" and "back".

Fig. 5. Word Cloud for Twitter

The words that occur most frequently in the posts on Twitter were "Iceland", "Icelandic", "world", "time", "like" and "beautiful".

Fig. 6. Word Cloud for Instagram

The following words were observed to have the highest frequency on Instagram; "Iceland". "Icelandic", "country", "like", "beautiful" and "time".

Fig. 7. Word Cloud for YouTube

On YouTube the most frequently used words were "Iceland", "dream", "share", "locations", "inspiration" and "like".

The communication on the various social media platforms are very similar in terms of the theme of the posts.

A summary of the frequencies of the various categories of images across social media platforms such as Facebook, Twitter and Instagram is presented in table 2.

Table 2: Summary of Image Categories on Social Media Platforms (Facebook, Twitter and Instagram)

Category	Facebook		Twitter		Instagram	
	N	%	N	%	N	%
Art Object/Statue	7	4.9	6	3.8	6	3.8
Festival/Ritual	0	0.0	0	0.0	0	0.0
Food/Restaurant	4	2.8	2	1.3	5	3.2
Leisure Activity/Facility	9	6.3	15	9.4	11	7.0
Nature/Nature Landscape	67	47.2	80	50.0	71	45.2
Ordinary Scene	3	2.1	2	1.3	2	1.3

Category	Facebook		Twitter		Instagram	
Religious Building/Object	4	2.8	2	1.3	5	3.2
Traditional Art Work/Object	7	4.9	2	1.3	8	5.1
Traditional or Historic Building	21	14.8	13	8.1	23	14.6
Transport/Infrastructure	8	5.6	17	10.6	13	8.3
Urban/Urban Landscape	7	4.9	5	3.1	8	5.1
COVID-19 crisis related	0	0.0	1	0.6	0	0.0
Other	2	1.4	13	8.13	3	1.9

Of the 142 images extracted from Facebook, Nature/Nature Landscape ranked first (n = 67, 47.2 %) followed by Traditional or Historic Building (n = 21, 14.8%) and Leisure Activity/Facility (n = 9, 6.3%). The categorization of 160 images from twitter revealed that Nature/Nature Landscape ranked first (n = 80, 50%) followed by Transport/ Infrastructure (n = 17, 10.6%) and Leisure Activity/ Facility (n = 15, 9.4%). The 157 images extracted from Instagram were categorised and it was found that Nature/ Nature Landscape ranked first (n = 71, 45.2%) followed by Traditional or Historic Building (n = 23, 14.6%) and Transport/Infrastructure (n = 13, 8.3%).

The summarised analysis of the videos extracted from Facebook (26 videos), Twitter (18 videos), Instagram (22 videos) and YouTube (9 videos) is presented in table 3.

Table 3: Summary of Video Categories on Social Media Platforms

Categories		Facebook		Twitter		Instagram		YouTube	
		N	%	N	%	N	%	N	%
Orientation Analysis									
	Tourists	17	65.4	10	55.6	16	72.7	4	44.4
	Local residents	7	26.9	6	33.3	5	22.7	4	44.4
	Government	6	23.1	3	16.7	1	4.5	1	11.1
Thematic Content									
	Natural resources	22	84.6	16	88.9	19	86.4	9	100.0
	General infrastructure	6	23.1	3	16.7	4	18.2	2	22.2

Categories		Facebook		Twitter		Instagram		YouTube	
		N	%	N	%	N	%	N	%
	Tourist infrastructure	9	34.6	7	38.9	8	36.4	5	55.6
	Tourist activities	18	69.2	11	61.1	15	68.2	9	100.0
	Hosts' activities	6	23.1	5	27.8	4	18.2	3	33.3
	Architecture, art	1	3.8	0	0.0	1	4.5	0	0.0
	History	2	7.7	1	5.6	0	0.0	0	0.0
	Traditions	2	7.7	1	5.6	0	0.0	0	0.0
	Social environment; hosts attitude	7	26.9	4	22.2	3	13.6	3	33.3
	Interactions hosts-tourists	4	15.4	3	16.7	3	13.6	3	33.3
	Natural environment	24	92.3	17	94.4	21	95.5	9	100.0
	General atmosphere	7	26.9	5	27.8	6	27.3	4	44.4
Crisis Content									
Types of safety and security risks featured in video									
	Health-related disasters	0	0.0	0	0.0	0	0.0	0	0.0
	Other risks	0	0.0	0	0.0	0	0.0	0	0.0
	Not presented/unidentified	26	**100.0**	18	**100.0**	22	**100.0**	9	**100.0**
Types of safety and security measures featured in video									
	Self-protection recommendation	0	0.0	0	0.0	0	0.0	0	0.0
	Health/medical assistance	0	0.0	0	0.0	0	0.0	0	0.0
	Insurance	0	0.0	0	0.0	0	0.0	0	0.0
	Mixed type measures	0	0.0	0	0.0	0	0.0	0	0.0
	Not presented/unidentified	26	100.0	18	100.0	22	100.0	9	100.0
Message Framing									
	Gain	0	0.0	0	0.0	0	0.0	0	0.0
	Loss	0	0.0	0	0.0	0	0.0	0	0.0
	Neutral/unidentified	26	100.0	18	100.0	22	100.0	9	100.0
	Mixed approaches	0	0.0	0	0.0	0	0.0	0	0.0
Message Appeal									
	Economic	0	0.0	0	0.0	0	0.0	0	0.0
	Psychological/Fear	0	0.0	0	0.0	0	0.0	0	0.0
	Social	1	3.8	0	0.0	0	0.0	1	11.1
	Physical	0	0.0	0	0.0	0	0.0	0	0.0
	Not presented/unidentified	25	96.2	18	100.0	22	100.0	8	88.9
Message Valence									
	Positive	3	11.5	1	5.6	1	4.5	2	22.2
	Negative	0	0.0	0	0.0	0	0.0	0	0.0
	Not presented/unidentified	23	88.5	17	94.4	21	95.5	7	77.8
Types of Safety Information Cues									
	Self-protection recommendation	0	0.0	0	0.0	0	0.0	0	0.0

Categories		Facebook		Twitter		Instagram		YouTube	
		N	%	N	%	N	%	N	%
	Safety measures	0	0.0	0	0.0	0	0.0	0	0.0
	Overall destination safety	2	7.7	1	5.6	1	4.5	1	11.1
	Possible risks at the destination	0	0.0	0	0.0	0	0.0	0	0.0
	Personal stories/testimony on safety	0	0.0	0	0.0	0	0.0	0	0.0
	Safety procedures	0	0.0	0	0.0	0	0.0	0	0.0
	Mixed themes	0	0.0	0	0.0	0	0.0	0	0.0
	Other	0	0.0	0	0.0	0	0.0	0	0.0
	Not presented/unidentified	24	92.3	17	94.4	21	95.5	8	88.9

A majority of videos posted on Facebook (n = 17, 65.4%), Twitter (n = 10, 55.6%) and Instagram (n = 16, 72.7%) are

presented for the perspective of the tourists. The next dominant perspective on Facebook (n = 7, 26.9%), Twitter (n = 6, 33.3%) and Instagram (n = 5, 22.7%) is that of the local residents. The orientation analysis for YouTube videos shows that there are similar number of videos from the perspective of tourists and the perspective of the local residents (n = 4, 44.4%).

In terms of thematic content, natural environment is presented the most on Facebook (n = 24, 92.3%), Twitter (n = 17, 94.4%) and Instagram (n = 21, 95.5%). The second most exhibited theme is natural resources for Facebook (n = 22, 84.6%), Twitter (n = 16, 88.9%) and Instagram (n = 19, 86.4%). Tourist activities is third in the most depicted theme in videos on Facebook (n = 18, 69.2%), Twitter (n = 16, 88.9%) and Instagram (n = 19, 86.4%). All videos on YouTube (n = 9, 100%) exhibit the themes of natural environment, natural resources and tourist activities.

None of the social media platforms studied had any videos which featured the following crisis content; Safety and security risks, safety and security measures and hence content with respect to message framing.

In the case of message appeal, the same video was featured on Facebook (n = 1, 3.8%) and YouTube (n = 1, 11.1%) which had a social appeal to it.

As far as message valence was concerned, a positive perspective was observed in only a few videos on Facebook (n = 3, 11.5%), Twitter (n = 1, 5.6%), Instagram (n = 1, 4.5%) and YouTube (n = 2, 22.2%).

Among the different types of safety information cues, only the aspect of overall destination safety was depicted but in a very limited number of videos on Facebook (n = 2, 7.7%), Twitter (n = 1, 5.6%), Instagram (n = 1, 4.5%) and YouTube (n = 1, 11.1%).

The descriptive social media metrics were summarized for Facebook, Twitter, Instagram and YouTube (Table 4).

Table 4: Summary of Social Media Metrics

Platform	Metric	
Facebook		
	# of Posts	149.0
	# of Images	142.0
	# of Videos	26.0
	# of Reactions per post	1835.6
	# of Comments per post	44.8
	# of Shares per post	135.2
	# of Views per video	131215.4
	Duration per video (in sec)	66.1
Twitter		
	# of Posts	137.0
	# of Images	160.0
	# of Videos	18.0
	# of Comments per post	7.7
	# of Retweets per post	96.1
	# of Likes per post	268.3
	# of Views per video	98472.2
	Duration per video (in sec)	50.9
Instagram		
	# of Posts	138.0
	# of Images	157.0
	# of Videos	22.0
	# of Likes per post	3972.7

Platform	Metric	
	# of Comments per post	35.3
	# of Views per video	14983.0
	Duration per video (in sec)	47.7
YouTube		
	# of Posts	9.0
	# of Videos	9.0
	# of Views per video	890597.3
	# of Likes per video	240.4
	# of Dislikes per video	11.3
	# of Comments per video	28.2
	Duration per video (in sec)	76.9

Compared to the other platforms, Facebook scored the highest in terms of the number of posts (n = 149.0), number of videos (n = 26) and the number of comments per post (n = 44.8). Twitter scored the highest with regard to the number of images (n = 160.0) while Instagram is the best out of the four platforms with respect to the number of likes per post (n = 3972.7). YouTube had the best score in the number of views per video metric (n = 890597.3) and for the duration per video (n = 76.9).

A multivariate analysis of variance (MANOVA) was performed to assess whether significant differences existed among social media platforms Facebook, Twitter and Instagram on likes and comments. YouTube was not included in the analysis because unlike the other three platforms which had textual, image and video content, YouTube only had video content. The summary of the MANOVA is presented in table 5.

Table 5: Summary of Multivariate Analysis of Variance (MANOVA) – Social Media Platforms

Dependent Variable	F	Sig.	df	Partial Eta Squared
Likes	77.31	.000	2	.27
Comments	30.99	.000	2	.13

There was a significant difference among the different platforms Facebook, Twitter and Instagram on the variables likes and comments, Wilk's Lambda = .661, $F_{(4, 840)}$ = 48.393, p = .000, partial Eta Squared = .19. A separate ANOVA was conducted for each dependent variable, with each ANOVA evaluated at an alpha level of .025 . Levene's test revealed a significant result for both the likes and comments, signifying that the homogeneity of variance assumption for these two variables has been violated. Allen and Bennet (2008) however, indicate that ANOVA is not sensitive to the violations of the equality of variances assumption in cases where the group sizes are moderate to

large and approximately equal which is the case in this study. There was a significant difference among Facebook, Twitter and Instagram on likes, $F_{(2, 421)}$ = 77.31, p = .000, partial Eta squared = .27, with Instagram (M = 3972.73) scoring higher than Facebook (M = 1835.61) and Twitter (M = 268.29).

There was a significant difference among Facebook, Twitter and Instagram on comments, $F_{(2, 421)}$ = 30.99, p = .000, partial Eta squared = .13, with Facebook (M = 44.81) scoring higher than Instagram (M = 35.25) and Twitter (M = 7.68).

Owned Media

A word cloud (Fig. 8) analysis of the textual content on the DMO web page https://visiticeland.com/article/iceland-and-covid19-coronavirus shows the most frequently occurring words with respect to information provided to tourists by Visit Iceland on COVID-19.

Fig. 8: Word Cloud for DMO Website

The most frequently occurring words were identified were "Iceland", "quarantine", "testing", "covid", "individuals" and "travel".

FINDINGS

Paid Media

The frequency of the words used indicates the congruence with the theme of the campaign where visitors to the website are asked to record their screams which will be released through speakers across Iceland. In terms of crisis content of the only video on the website, there were no mentions of risks but the present COVID-19 situation was referenced and the need for people to get out was highlighted. The video focused on providing an outlet to those who were stuck at home by enabling them to record their screams and let it out in Iceland.

Earned Media

The majority of images on travel blogs were in the categories of 'Leisure Activity/Facility'

and 'Nature/Nature Landscape'. This is definitely in line with the image that the DMO projects to visitors. The word cloud analysis revealed the focus on terms pertaining to natural attractions and leisure activities.

Shared Media

The word cloud analysis of the four social media platforms Facebook, Twitter, Instagram and YouTube indicates that the textual content is relatively similar. The terms focus on creating a positive image among visitors.

The majority of images on Facebook, Twitter and Instagram fall in the category of 'Nature/Nature Landscape'. The other categories of images on these platforms 'Leisure Activity/Facility', 'Traditional or Historic Building' and 'Transport/Infrastructure'. There was only one image on Twitter which was related to the COVID-19 pandemic. The other platforms did not have any COVID-19 crisis related content.

In the case of videos on the four social media platforms, the majority were portrayed from the perspective of the tourists and local residents. The dominating themes of the videos were 'Natural resources', 'Tourist infrastructure', 'Tourist activities' and 'Natural environment'. There was a total absence of crisis related content; safety and security risks, safety and security measures and therefore content with respect to message framing in the videos posted on all social media platforms. Only very few videos had a positive standpoint while the message valence was unidentified in the other videos. In the case of safety information cues, the 'overall destination safety' was showcased only in a handful of videos.

Facebook has the most number of posts, videos and highest score for number of comments per post. In terms of engagement, Facebook performs the best of the four platforms. Twitter has the most number of images while Instagram does the best in the number of likes per post metric. YouTube however outscores the other platforms in terms of views per video. The multivariate analysis of variance reveals significant differences among the three platforms in terms of likes and comments with Instagram having the highest number of likes and Facebook having the highest number of comments.

Owned Media

The DMO website has a dedicated webpage with updated information related to the COVID-19 crisis. This website details the policies and procedures of the Icelandic government with regard to the pandemic. The word cloud analysis shows that the communication of the DMO clearly indicates the measures taken and the procedures followed with regard to travel in Iceland.

The findings indicate that the earned and shared platforms do not feature any content with respect to the COVID-19 crisis

and project a 'business as usual' image at the destination. The DMO communicates its initiatives regarding the COVID-19 pandemic primarily through the DMO website. The paid media component represented by the campaign website is a creative effort by the DMO to enable those who cannot travel right now to release stress by screaming.

DISCUSSION OF RESULTS

Capriell and Splendiani (2019) highlight the function that DMOs play in crisis communication with a focus on the channels used and content included. Such communication must be disseminated using multiple online channels. This study describes the specific use of various channels by the Iceland DMO across different components of the PESO model. Andronikidis et al. (2020) and Blasquez-Resino et al. (2016) agree that the tourists' image of a destination and future behaviour is influenced by digital web-based content on the DMO website. DMOs and the tourism industry must develop messaging strategies by utilizing different communication channels to reduce tourists' perceived risks (Cui, 2020). The DMO, Visit Iceland utilizes a broad strategy to communicate with tourists which incorporates paid, earned, shared and owned media. A study by Okuyama (2018) claims that tourism recovery can be greatly impacted by communicating destination safety. Avraham and Ketter (2017b) state that one strategy to repair destination image is to acknowledge the negative image. The DMO interestingly uses only one channel (DMO website) to disseminate content on the COVID-19 pandemic. It is however, on a separate webpage on the DMO website. Perhaps, this is to facilitate the easy removal of the link once the crisis is over without disrupting the structure of the website. There is no pandemic focused content on the social media webpages. This can be seen as a strategy to project an image of the destination that is consistent with that depicted prior to the pandemic. Ignoring the crisis is a message-based strategy suggested by Avraham and Ketter (2017b). Fukui and Ohe (2020) point out that communicating disaster related information using social media tends to have a adverse effect on tourist arrivals. However, Tuclea et al. (2020) indicates that social media can be used by DMOs to communicate their health-crisis mitigation efforts. The study has found that Iceland DMO has not utilized social media to communicate any information related to the pandemic. The theme of the content posted during the crisis, on social media webpages by the DMO and even that of the travel blogs is one of nature, adventure, well-being and natural phenomena. This is consistent with findings by Boorsma (2020), Kazakova et al. (2017), Óladóttir (2018) and Sæþórsdóttir (2020).

Hearn & Schoenhoff (2016) traces the development of social media users from being consumers to content creators to influencers. Gretzel (2018) suggests that tourism marketers

can use influencers to reach targeted audiences. This study reveals that the travel bloggers reflect the same image of the destination as that projected by the DMO through their social media channels. Sano and Sano (2019) conclude that tourists' perception of safety and willingness to travel are equally enhanced by both consumer to consumer and business to consumer crisis communication for tourists with high perceived risk. This implies that communication on the earned media component of the PESO model has the same impact on tourists as the paid, shared and owned components. Andronikidis et al. (2020) draw our attention to a limited number of studies examining the use of social media by DMOs in their communication strategies. This study addresses this gap by analysing the DMOs messaging and engagement strategy implemented on four social media platforms; Facebook, Twitter, Instagram and YouTube.

Novelli et al. (2018) argues that the confidence of travellers is reduced if official travel warnings are issued. The study has not identified any travel warnings issued by the Iceland DMO. Most studies on tourism recovery focus on the use of singular tools such as Facebook, twitter etc. or platforms such as social media (Tuclea et al., 2020). This research is a pioneering study of the tourism recovery initiatives of the DMO from the perspective of the PESO framework.

CONCLUSION

Brouder (2020) suggests that the COVID-19 pandemic is a rare opportunity for a radical transformation for tourism. From the socio-economic perspective, countries that are dependent on tourism will suffer more due to the fall in demand caused by the health related crises (Novelli et al., 2018). Recovery marketing, crisis communication and stakeholder collaboration are three strategies identified for tourism recovery by Ritchie and Jiang (2019). Novelli et al. (2018) insists that crisis and disaster preparation planning are extremely important for destinations. Janeš and ČendoMetzinger (2018) points out that various crises necessitate the use of specific communications strategies and different ways of communication. A vital component of managing tourism recovery for the destination is to restore the image and reputation of the destination (Khazai et al., 2018). The Iceland DMO has a very selective approach in choosing digital communications channels for its crisis communication efforts. Nepal (2020) claims that destinations such as Iceland have always operated with the 'business as usual' mindset but will need to have a rethink on this approach going forward.

A limitation of the study is that the PESO model is investigated from the perspective of digital media channels only and presents findings based on data collected from the public domain. Beirman (2018), Cahyanto et al. (2020) and

McCartney (2020) suggest that a public-private partnership is required for efficient disaster response and recovery. Future studies could investigate the efforts of tourism enterprises other than the DMO in developing effective crisis communication strategies for tourism recovery.

REFERENCES

Akay, B. (2020). Examining the rural tourism experiences of tourists in emerging rural tourism destination: Burdur province, Turkey. *GeoJournal of Tourism & Geosites*, *29*(2).

Allen, P., & Bennett, K. (2008). *SPSS for the health & behavioural sciences*.

Amir, A. F., & Pennington-Gray, L. (2017). Optimizing social media functionalities and message format for persuasive crisis communication in tourism.

Amir, A. F., Pennington-cinzento, L., Barbe, D., & Hanafiah, M. H. M. (2018). Exploring national tourism organizations (NTOs): Use of YouTube to communicate information on destination safety and security. *International Journal of Academic Research in Business & Social Sciences*, *8*(16), 247-266.

Andersen, B. (2018). The PESO model: The content distribution super strategy. Retrieved from https://shonaliburke. com/peso-model-content-distribution-super-strategy/

Andronikidis, A., Bellou, V., Stylos, N., & Vassiliadis, C. A. (2020). Commentary: Differences of perceived image generated through the web site: Empirical evidence obtained in Spanish destinations. *Frontiers in Psychology*, *11*.

Avraham, E., & Ketter, E. (2017a). Destination marketing during and following crises: Combating negative images in Asia. *Journal of Travel & Tourism Marketing*, *34*(6), 709-718.

Avraham, E., & Ketter, E. (2017b). Destination image repair while combatting crises: Tourism marketing in Africa. *Tourism Geographies*, *19*(5), 780-800.

Bailey, R. (2019). Briefing: PESO. Retrieved from https:// pracademy.co.uk/insights/briefing-peso/

Barbe, D., & Pennington-Gray, L. (2018). Using situational crisis communication theory to understand Orlando hotels' Twitter response to three crises in the summer of 2016. *Journal of Hospitality and Tourism Insights, 1*(3), 258-275.

Barbe, D., Pennington-Gray, L., & Schroeder, A. (2018). Destinations' response to terrorism on Twitter. *International Journal of Tourism Cities, 4*(4), 495-512.

Bauer, M. W. (2000). Classical content analysis: A review. *Qualitative Researching with Text, Image and Sound*, 131-151.

Beirman, D. (2018). Thailand's approach to destination resilience: An historical perspective of tourism resilience from 2002 to 2018. *Tourism Review International*, *22*(3-4), 277-292.

Blazquez-Resino, J. J., Muro-Rodriguez, A. I., & Perez-Jimenez, I. R. (2016). Differences of perceived image generated through the web site: Empirical evidence obtained in Spanish destinations. *Frontiers in Psychology*, *7*, 1861.

Boorsma, E. L. (2020). Iceland: The destination for wellbeing tourism?

Brouder, P. (2020). Reset redux: Possible evolutionary pathways towards the transformation of tourism in a COVID-19 world. *Tourism Geographies*, 1-7.

Cahyanto, I. P., Liu-Lastres, B., & Edwards, C. (2020). Developing a resilience-based adaptive co-management framework: Public sectors' insights on the role of tourism. *Journal of Policy Research in Tourism, Leisure and Events*, 1-18.

Çakici, A. C., Kuhzady, S., & Benli, S. (2017). An image is worth a thousand words: A pictorial analysis of projected destination image of Turkey on Instagram.

Campaign Monitor. (2020). What does it mean? Earned, owned, and paid media in 2020. Retrieved from https://www.campaignmonitor.com/blog/email-marketing/2020/03/what-does-it-mean-earned-owned-and-paid-media-in-2020/

Capriello, A., & Splendiani, S. (2019). E communication in crisis communication best practice for tourism destination management organizations.

Cherapanukorn, V., & Charoenkwan, P. (2017, July). Word cloud of online hotel reviews in Myanmar for customer satisfaction analysis. In *2017 6th IIAI International Congress on Advanced Applied Informatics (IIAI-AAI)* (pp. 447-452). IEEE.

Cui, H. (2020). *Factors influencing travel intention of post-disaster destinations: The case of 2016 Hurricane Matthew* (Doctoral dissertation, University of Georgia).

Dicle, M. F., & Dicle, B. (2018). Content analysis: Frequency distribution of words. *The Stata Journal*, *18*(2), 379-386.

Dietrich, G. (2020a). PR metrics: What to measure in a PESO model program. Retrieved fromhttps://spinsucks.com/communication/pr-metrics/

Dietrich, G. (2020b). The newly refreshed PESO model graphic and process. Retrieved fromhttps://spinsucks.com/communication/refreshed-peso-model/

Faw, L. (2020). M&C Saatchi Lands $12 million Iceland tourism account. Retrieved from
https://www.mediapost.com/publications/article/353008/mc-saatchi-lands-12-million-iceland-tourism-acco.html

Fong, L. H. N., Law, R., & Ye, B. H. (2020). Outlook of tourism recovery amid an epidemic: Importance of outbreak control by the government. *Annals of Tourism Research*, 102951.

Fukui, M., & Ohe, Y. (2020). Assessing the role of social media in tourism recovery in tsunami-hit coastal areas in Tohoku, Japan. *Tourism Economics*, *26*(5), 776-791.

Gani, A., & Singh, R. (2019). Managing disaster and crisis in tourism: A critique of research and a fresh research Agenda. *African Journal of Hospitality, Tourism and Leisure*, *8*(4), 25.

Gretzel, U. (2018). Influencer marketing in travel and tourism. *Advances in Social Media for Travel, Tourism and Hospitality: New perspectives, Practice and Cases*, 147-156.

Gurtner, Y. (2016). Returning to paradise: Investigating issues of tourism crisis and disaster recovery on the island of Bali. *Journal of Hospitality and Tourism Management*, *28*, 11-19.

Hearn, A., & Schoenhoff, S. (2016). From celebrity to influencer. *A Companion to Celebrity* (pp. 194-212)*.* London: Wiley.

Herring, S. C. (2009). Web content analysis: Expanding the paradigm. In *International Handbook of Internet Research* (pp. 233-249). Dordrecht: Springer.

Hingmann, N. M. (2020). *Crisis communication: The role of message type and information processing during a nuclear waste accident* (Master›s thesis). University of Twente.

Hou, Z., Joppe, M., Choi, C., & Lin, Z. (2016). Exploratory study of promotional videos in the 10 major tourist destinations in China: A content analysis.

Huerta-Álvarez, R., Cambra-Fierro, J. J., & Fuentes-Blasco, M. (2020). The interplay between social media communication, brand equity and brand engagement in tourist destinations: An analysis in an emerging economy. *Journal of Destination Marketing & Management*, *16*, 100413.

Huertas, A., & Oliveira, A. (2019). How tourism deals with terrorism from a public relations perspective: A content analysis of communication by destination management organizations in the aftermath of the 2017 terrorist attacks in Catalonia. *Catalan Journal of Communication & Cultural Studies*, *11*(1), 39-58.

Huertas, A., Míguez-González, M. I., & Lozano-Monterrubio, N. (2017). YouTube usage by Spanish tourist destinations as a tool to communicate their identities and brands. *Journal of Brand Management*, *24*(3), 211-229.

Iedema, R. (2001). Analysing film and television: A social semiotic account of hospital: An unhealthy business. *Handbook of Visual Analysis* (pp. 183-204).

Janeš, H. & ČendoMetzinger, T. (2018). Management of communication processes in crisis situations. *Annals of Disaster Risk Sciences, 1*(2), 151-155. Retrieved from https://hrcak.srce.hr/212765

Jurdana, D. S., Frleta, D. S., & Agbaba, R. (2020). Crisis management in tourism - literature review. *Economic and Social Development: Book of Proceedings* (pp. 473-482).

Kazakova, E. A., Rizvanova, A. Y., & Girfanova, L. A. (2017). Tourism in Iceland: Analysis of the development. *ББК 1 Р76*, 223.

Ketter, E. (2016). Destination image restoration on facebook: The case study of Nepal's Gurkha Earthquake. *Journal of Hospitality and Tourism Management*, *28*, 66-72.

Khan, M. J., Chelliah, S., & Ahmed, S. (2017). Factors influencing destination image and visit intention among young women travellers: Role of travel motivation, perceived risks, and travel constraints. *Asia Pacific Journal of Tourism Research*, *22*(11), 1139-1155.

Khazai, B., Mahdavian, F., & Platt, S. (2018). Tourism recovery scorecard (TOURS) - Benchmarking and monitoring progress on disaster recovery in tourism destinations. *International Journal of Disaster Risk Reduction*, *27*, 75-84.

Kizanlikli, M. M., & Civgin, H. (2019). A study on the perceptions of congress and fair organizers on MICE tourism. *City Tourism*, 280.

Kravchenko, A. (2020). The future of tourism Post-COVID-19. Retrieved from https://www.unescap.org/blog/future-tourism-post-covid-19

Krippendorff, K. (2018). *Content analysis: An introduction to its methodology*. Sage Publications.

Liu, B., Pennington-Gray, L., & Krieger, J. (2016). Tourism crisis management: Can the Extended Parallel Process model be used to understand crisis responses in the cruise industry? *Tourism Management*, *55*, 310-321.

Loureiro, S. M. C., & Jesus, S. (2019). How perceived risk and animosity towards a destination may influence destination image and intention to revisit: The case of Rio de Janeiro. *Anatolia*, *30*(4), 497-512.

Mair, J., Ritchie, B. W., & Walters, G. (2016). Towards a research agenda for post-disaster and post-crisis recovery strategies for tourist destinations: A narrative review. *Current Issues in Tourism*, *19*(1), 1-26.

Mak, A. H. (2017). Online destination image: Comparing national tourism organisation's and tourists' perspectives. *Tourism Management*, *60*, 280-297.

Mason, A., Flores, L., Liu, P., Tims, K., Spencer, E., & Gire, T. G. (2019). Disaster communication. *Journal of Hospitality and Tourism Insights, 2*(3), 241-259.

McAteer, O. (2020). Iceland taps M&C Saatchi Group in first global tourism win since COVID took hold. Retrieved from https://www.campaignlive.com/article/iceland-taps-m-c-saatchi-group-first-global-tourism-win-covid-took-hold/1687771

McCartney, G. (2020). The impact of the coronavirus outbreak on Macao. From tourism lockdown to tourism recovery. *Current Issues in Tourism*, 1-10.

Möller, C., Wang, J., & Nguyen, H. T. (2018). #Strongerthanwinston: Tourism and crisis communication through Facebook following tropical cyclones in Fiji. *Tourism Management*, *69*, 272-284.

Moro, S., & Rita, P. (2018). Brand strategies in social media in hospitality and tourism. *International Journal of Contemporary Hospitality Management, 30*(1), 343-364.

Nepal, S. K. (2020). Travel and tourism after COVID-19 - business as usual or opportunity to reset? *Tourism Geographies*, *22*(3), 1-5.

Nguyen, D. N., & Imamura, F. (2017). Recovering from prolonged negative destination images in post-disaster Northern Japan. In *Recovering from Catastrophic Disaster in Asia*. Emerald Publishing Limited.

Nian, S., Zhang, J., Zhang, H., Zhang, J., Li, D., Wu, K., ... & Yang, L. (2019). Two sides of a coin: A crisis response perspective on tourist community participation in a post-disaster environment. *International Journal of Environmental Research and Public Health*, *16*(12), 2073.

Niechai, V. (2019). Google's PageRank algorithm: Explained and tested. Retrieved from https://www.link-assistant.com/news/google-page-rank-2019.html

Novelli, M., Burgess, L. G., Jones, A., & Ritchie, B. W. (2018). 'No Ebola… still doomed'–The Ebola-induced tourism crisis. *Annals of Tourism Research*, *70*, 76-87.

Nugraha, D. Y., & Sudirman, I. D. (2019). Does the quality of Indonesian tourism website influence foreign tourist decision to visit Indonesia? *International Journal of Recent Technology and Engineering, 8*(4), 5719-5724.

Okuyama, T. (2018). Analysis of optimal timing of tourism demand recovery policies from natural disaster using the contingent behavior method. *Tourism Management*, *64*, 37-54.

Óladóttir, O. Þ., & á Íslandi, E. F. (2019). Lýðfræði, FerðahegðunOgViðhorf.[International Visitors in Iceland 2018. Demography, Travel Behaviour and Attitudes]. *Icelandic Tourist Board: Reykjavík, Iceland*.

Oliveira, A., & Huertas, A. (2019). How do destinations use twitter to recover their images after a terrorist attack? *Journal of Destination Marketing & Management*, *12*, 46-54.

Pan, S., Tsai, H., & Lee, J. (2011). Framing New Zealand: Understanding tourism TV commercials. *Tourism Management*, *32*(3), 596-603.

Park, D., Kim, W. G., & Choi, S. (2019). Application of social media analytics in tourism crisis communication. *Current Issues in Tourism*, *22*(15), 1810-1824.

Peters, K., Peters, J., & Peters, N. (2020). Visit people tourism recovery. Retrieved from http://kppm.com.au/wp-content/uploads/2020/04/KPPM-Tourism-Recovery-Lit-Review-4-4-20.pdf

Petrolino, L. (2020). What is The PESO model? Integration of the four media types. Retrieved from https://spinsucks.com/what-is-the-peso-model/

Porter, S. V., Mirmehdi, M., & Thomas, B. T. (2001, September). Detection and classification of shot transitions. In *BMVC* (pp. 1-10).

Rehkopf, F. (2020). PESO - Drive success across the entire content value chain. Retrieved from https://www.ubermetrics-technologies.com/blog/peso-drive-business-results-across-the-entire-content-value-chain/

Reino, D., & Hay, B. (2016). The use of YouTube as a tourism marketing tool. Retrieved from https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1647&context=ttra

Rodriguez-Toubes, D., & Dominguez-Lopez, Y. (2017). Social media in crisis communication: Germanwings flight 4u9525. In *Media and Metamedia Management* (pp. 243-249). Springer, Cham.

Rosen, E. (2020). Will travel change after coronavirus? Here's what experts have to say. Retrieved from https://www.travelandleisure.com/travel-tips/travel-trends/traveling-after-coronavirus

Sæþórsdóttir, A. D., Hall, C. M., & Wendt, M. (2020). From boiling to frozen? The rise and fall of international tourism to Iceland in the era of overtourism. *Environments, 7*(8), 59.

Sano, K., & Sano, H. (2019). The effect of different crisis communication channels. *Annals of Tourism Research*, *79*, 102804.

Schwartzman, E. (2020). The future of communications is growth stage PR.

Séraphin, H., & Gowreesunkar, V. G. (2017). Conclusion: What marketing strategy for destinations with a negative image? *Worldwide Hospitality and Tourism Themes, 9*(5), 570-576.

Séraphin, H., Butcher, J., & Korstanje, M. (2017). Challenging the negative images of Haiti at a pre-visit stage using visual online learning materials. *Journal of Policy Research in Tourism, Leisure and Events*, *9*(2), 169-181.

Song, S. G., & Kim, D. Y. (2016). A pictorial analysis of destination images on pinterest: The case of Tokyo, Kyoto, and Osaka, Japan. *Journal of Travel & Tourism Marketing*, *33*(5), 687-701.

Spary, S. (2020). Iceland wants to collect your screams and release them into its remote wilderness. Retrieved from https://www.adweek.com/creativity/iceland-wants-to-collect-your-screams-and-release-them-into-its-remote-wilderness/

Stepchenkova, S., & Zhan, F. (2013). Visual destination images of Peru: Comparative content analysis of DMO and user-generated photography. *Tourism Management*, *36*, 590-601.

Stoleriu, O. M., & Ibanescu, B. C. (2015, June). Romania's country image in tourism TV commercials. In *Proceedings of the SGEM 2015 Conference* (pp. 18-24). Albena, Bulgaria.

Teixeira, J. E. M. (2017). The role of promotional touristic videos in the creation of visit intent to Barcelona. *International Journal of Scientific Management and Tourism*, *3*(1), 463-490.

Tham, A., Mair, J., & Croy, G. (2020). Social media influence on tourists' destination choice: importance of context. *Tourism Recreation Research*, *45*(2), 161-175.

Țuclea, C. E., Vrânceanu, D. M., & Năstase, C. E. (2020). The role of social media in health safety evaluation of a tourism destination throughout the travel planning process. *Sustainability*, *12*(16), 6661.

Weare, C., & Lin, W. Y. (2000). Content analysis of the world wide web: Opportunities and challenges. *Social Science Computer Review*, *18*(3), 272-292.

Wen, J., Kozak, M., Yang, S., & Liu, F. (2020). COVID-19: Potential effects on Chinese citizens' lifestyle and travel. *Tourism Review, 76*(1), 74-87.

WHO. (2020). WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020. Retrieved from https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020

Yaxley, H. (2020). Tracing the measurement origins of PESO. Retrieved from https://www.prconversations.com/tracing-the-measurement-origins-of-peso/

Yu, M., Li, Z., Yu, Z., He, J., & Zhou, J. (2020). Communication related health crisis on social media: A case of COVID-19 outbreak. *Current Issues in Tourism*, 1-7.

Zess, C. (2019). Marketing and PR strategy with the PESO model. Retrieved from https://breaktheicemedia.com/marketing-and-pr-strategy-with-the-peso-model/

Zhang, Y., Gao, J., Cole, S., & Ricci, P. (2020). How the spread of user-generated contents (UGC) shapes international tourism distribution: Using agent-based modeling to inform strategic UGC marketing. *Journal of Travel Research*, 0047287520951639.