

Insights into user engagement on social media: an application for the promotion of urban tourism

Abstract

Interactions between tourism and social networks are among the most notable phenomena of recent times, generating new approaches, in terms of both analyses of and policies for tourism promotion. Public authorities have been forced to become involved in these new realities, adapting their promotion channels to tourists' new behaviour patterns and carefully cultivating interactions with them. It is becoming ever more important to create and transmit an image capable of stimulating high levels of engagement. This article analyses the role of one of the most booming social networks, Instagram, applied to the case of Berlin, a leading tourist city. All posts generated over the course of a year on the German capital's official Instagram account were coded, and the characteristics of those that generated the most interaction with users in the shape of likes and comments were analysed. Our study reveals that posts more directly intended as advertising generate more negative results, while there are differences between the variables capable of generating more likes and more comments, respectively: likes are more general in nature, while comments are more specifically linked to the Berlin brand. These findings suggest important conclusions for the more efficient development of strategies to promote interaction with users.

Keywords: Engagement, Social Media, Destination Marketing Organisations, Instagram, Berlin, Bandwagon effect

1. Introduction

The capacity of the social networks to generate interest in a tourist destination and the consequent use of these networks to promote tourism is one of the most interesting phenomena of recent times, giving rise to new approaches in analyses and policies. From the perspective of consumers, information prior to tourists' travel and sightseeing is increasingly available on Internet and the social networks. Both during and after the experience, the use of social media – posting photos, comments, etc. – has become a powerful dimension for generating satisfaction/experience, and makes relevant information and advice available to other potential users (Minazzi 2015; Huertas and Marine-Roig 2016; Nilashi et al. 2018; Kim et al. 2019).

The social networks have revolutionised the way in which the tourism industry communicates with tourists, as well as how tourists seek, obtain, share and experience their trips (Xiang and Gretzel 2010; Barbe et al. 2020). And, needless to say, the public authorities have also been forced to engage with these new realities, adapting their promotion channels and methods to people's new patterns of behaviour (Dogra and Cale 2020; Yi et al. 2020; Iglesias-Sánchez et. al. 2020). Since public authorities increasingly use social media as a way of generating engagement with potential tourists, it seems necessary to analyse how (and how effectively) digital platforms are being used. That is why this study aims to determine the elements that make posts attractive, a useful quality for generating interaction among followers of cities' official Instagram accounts.

In this, the initial dimension of the main research question that this paper addresses concerns how to quantify these user responses in the form of interactions that reflect, in one way or another, that posts have captured or attracted their attention. This question is considered in greater detail than is the case in the prior literature, as we focus on statistical analysis of the interactions generated by all posts published over the course of a year on the official Instagram account of the city of Berlin. We should immediately add the caveat that the capacity to generate interactions does not guarantee that these necessarily translate into more sales. However, they can be considered as a significant initial barometer of their ability to "arouse interest". Our analysis enables us to evaluate the effectiveness of different strategies for the selection of content, with future implications regard how the powers that be should go about shaping the image and personality of the tourist destination. Besides a more in-depth study of the different types of content in posts, our paper also explores two additional dimensions. Firstly, the use of posts as more explicitly advertising elements (not just providing information about the city or promoting its image). And, secondly, an aspect that is acquiring ever greater importance on the social networks: the role of interactions with users. Our study examines this second aspect both through the prism of a more traditional indicator (the capacity of posts containing images made by other users to generate more responses) and a more novel approach: whether the number of followers of users whose posts are reused on the official account has any effect or not on the interactions generated, what we call the bandwagon effect. The implications of these two additional dimensions analysed in our paper are also significant with regard to strategies for "selling" the city's tourist attractions and communication strategies aimed at optimising interconnections with social network users as a whole. In short, this paper takes an integral approach, based on statistical analysis of all posts published on the official Instagram account of the city

of Berlin in 2018 to suggest new ways of evaluating the effectiveness and impact of this key channel of communication for tourist attractions, with relevant findings for profiling and improving their effects.

In recent years, analyses of the impact of digital platforms has generated a flow of research focusing on different types of social networks: Facebook (e.g., Schultz 2016; Narangajavana et al. 2017), Twitter (Kursuncu et al. 2019), Instagram (Na and Kim 2019), YouTube (Kouokam and Dirik 2019), Pinterest (Youn and Jin 2017) and combinations of several social networks (Hsiao et al. 2020; Nash 2019).

Of all the social networks, this study focuses on Instagram, because this is a platform that is acquiring more and more followers every day and has a very high growth rate. In 2018, nearly 714 million users accessed the platform monthly, and this figure is expected to reach over 988 million by 2023 (Statista 2020). What is more, Instagram is a social network where image plays a central role, and image is also an essential axis element in the tourist trade (Paül 2018; Balomenou and Garrod 2019; Huerta-Álvarez et al. 2020). In a 2018 WeSwap (2018) survey of 2,000 people between the ages of 18 and 34, some 37% of respondents stated that their choice of holiday destination was influenced by social media, and 31% claimed that posting holiday photos on Instagram was just as important as the holiday itself.

The study analyses engagement levels generated on the official Instagram account of the city of Berlin (@visitBerlin). The German capital occupies a prominent position in rankings of most visited destinations (Lonely Planet 2020), and there were 13,486,202 arrivals at tourist establishments in the city in 2018 (Knoema 2019). Ease of access to city destinations provided by low-cost airlines, improved infrastructure and the provision of attractive products and experiences for visitors has generated exponential growth in visits to cities (Fyall and Garrod 2019), including, of course, Berlin.

The initial choice of Berlin for a visit is explained by the attraction that this destination has exercised in recent decades for a variety of reasons, among which emotional and symbolic motivations occupy an important place. The changes that the city has seen since 1989 have given it particular significance and appeal, and a personality that combines specific features of recent changes with the status of a traditional European capital. Berlin occupies a leading position in all the main rankings of European cities' attraction to tourists and can well be considered one of the cities with the highest communication capacity (de Rosa et al. 2019).

This paper is organised as follows: the Literature Review section examines the existing literature, studying both cities' e-branding and user engagement in the tourism industry; the second section

describes the research procedure and the hypotheses posited; the third section provides details on the method used to collect and encode the data and the model developed to analyse it; the fourth section contains a discussion of the hypotheses put forward; and, finally, the paper closes with conclusions, theoretical and practical implications, and proposals for new lines of research.

2. Literature Review

2.1. Cities' e-branding as a tool for tourism promotion

The meteoric rise of the social media and its many implications for tourism is so obvious that it hardly requires further explanation. Lu et al. (2018) document both the use of social networks and an increased focus on this phenomenon in research activities. The dimensions are multiple from the perspective of users, and obtaining information before choosing a tourist destination has become an essential activity, as has taking the opportunity provided by trips to narrate experiences in text and graphic messages on the social networks (Kiráľová and Pavlíček 2015; Klosterman 2018; Capolupo et al. 2020). Studies have focused on the key role played by user visions in certain areas of tourism management and planning (Balomenou and Garrod 2014). From the perspective of tourist destination managers, creating an image necessarily involves the use of social networks. This image has become an integral and influential part of travellers' decision-making processes (Choi et al. 2007) or, to cite Vinyals-Mirabent et al. (2019), one of the ways that destinations "talk" about themselves. That is why destination marketing organisations (DMOs) should make these communication and promotion tools a top priority.

The need to optimise the use of the social networks has become more pronounced as competition among tourist destinations intensifies. Mariani et al. (2018) note that this is especially important for a Europe that, despite maintaining a leading position in the statistics, is beginning to note that the powerful emergence of alternatives has globalised competition in the sector.

The theoretical rationale that establishes the importance of these mechanisms combines several elements. At a more general level, in a circular and dialogic process, these include analysis of both the creation of a brand image with specific, differentiating elements of personality or identity, and of interactions between brand identity generated by those responsible for promoting each destination and the image perceived by users/customers (de Rosa et al. 2019). At a more specific level, research into these

areas focuses on analysing content created by both DMOs and users and, particularly, content generated with some type of interaction between the two.

Indeed, consumer-to-consumer communication is becoming more and more widespread, while traditional sources of information, including DMOs and the media, are declining in popularity (Hays et al. 2013). Although creating the image of destinations has always depended on a combination of organic and seller-induced images (Gunn 1972), the joint creation of destination images is now occurring on a much larger scale (Lim et al. 2012).

Studies which are now considered classics, such as that by Choi et al. (2007), focus on both the textual and visual ways in which users characterise their tourist experiences, highlighting the similarity between the two formats: Stepchenkova-Zhan (2013), Michaleidou et al. (2013) and Mak (2017) make interesting comparisons between tourists' posts on social networks and the images of the official accounts, and their implications. As explained below, the present practice reposing users' photos on official accounts establishes a "bridge" between both sources (user and official). To cite just one additional study referring to each social network, Giglio et al. (2019) focus on elements photographed by tourists on Flickr; De Rosa et al. (2019) base their analysis on institutional tourism websites and TripAdvisor; and Villamediana et al. (2019) based their research on Facebook. Finally, like this article, Acuti et al. (2018) centre their work on Instagram. Our analysis focuses on Instagram due to the fact that this social network is being used increasingly by the official tourism agencies of countries, regions and cities. Other aspects of interest include the prominent role played by interactions between DMOs and user-generated content (UGC). UGC is sometimes used by public authorities in their own posts, giving an added dimension to followers' comments and likes.

Similarly, there has been a growth in the number of detailed analyses of interactions. Here, a key element is the description of types of content included in each message or post. Taking into account the various dimensions that may influence users' decisions to visit (or not) a destination, the literature emphasises both the role of symbolic factors, which help to shape the personality or uniqueness of a place, including explicit references to their authenticity (Michaleidou et al. 2013; Kim et al. 2019; Chen et al. 2020), with others of a more functional or practical nature. Listings of traditional elements applied to cities include those formulated by Kladou and Mavragani (2016), Choi et al. (2007), Stepchenkova-Zhen (2013), Mak (2017) and de Rosa et al. (2019).

2.2. Consumer engagement with tourism social network accounts

The capacity to generate consumer engagement is, of course, another key area of research. This concept is examined in such diverse fields as psychology (i.e., task engagement), organisational behaviour (i.e., employee engagement), sociology (i.e., civic engagement) and marketing (i.e., customer engagement; Ahn and Back 2018; Hollebeek et al. 2019). However, as Bravo et al. (2019), Harrigan et al. (2018), Kanje et al. (2020), Moro and Rita (2018), Rather et al. (2019) and Taheri et al. (2014), among others, have pointed out, the dynamics of consumer engagement in specific environments such as tourism is a field of research that remains very much open. Certain studies measure consumer engagement by numbers of likes, comments and (on certain social networks) shares. However, many of the references mentioned in previous section highlight the visual dimension. Vivek et al. (2014) define consumer engagement as a multidimensional construct composed of three dimensions – cognitive, emotional and behavioural – while others prefer to see it as one-dimensional or two-dimensional. Table 1 shows the dimensions used by various authors to describe consumer engagement, and helps to identify the common characteristics and most significant differences in the way these dimensions are presented.

[Insert Table 1]

Our approach is based on the important contributions made to date in the literature, and takes as its starting-point a series of variables already used in the same. However, we present an integrated framework aimed at fluidly connecting with statistical analysis to propose a strategy that, to a certain extent, suits the "let data speak" approach, complementary and, in some sense parallel, to that in which "destinations speak for themselves", describing the power of images, particularly Instagram images, on the social networks. Accordingly, we might describe our paper's contribution as promoting the potential of "images and data speaking for themselves".

Our paper focuses on Instagram, a social network that highlights, precisely, the visual dimension. The aim of the study is to determine, apart from aggregate numbers of interactions (likes and comments), those elements whose presence in posts most induce such interactions, establishing a statistically significant difference for the presence of each element compared to its absence. Accordingly, an initial specific dimension in this paper is that it combines the line of study described in the previous paragraph (classification of the attributes of each post) with the line described in this paragraph (generation of

interactions). Additionally, since comments and likes indicate different degrees of engagement, the two categories are differentiated throughout the entire paper.

3. Hypotheses Development

Multimedia content is important on all social networks but, obviously, much more so on Instagram, because the image is the main element shared on this platform, making it a decisive element in generating engagement with users. Consequently, developing content on Instagram that can connect with the motivations that persuade Instagram users to follow an account is a key consideration when the goal is to increase both numbers of followers and online impact (Barbe et al. 2020; Rietveld et al. 2020). Providing useful, pleasant, enjoyable content that is perceived as entertaining can be crucial to generating engagement. To analyse the impact on engagement of the content variables in this study, thirteen such variables were defined (see Table 2) based on our adaptation of earlier studies by Choi et al. (2007), Stephenkova-Zhen (2013) and Mak (2017).

To evaluate the extent to which the selection of these characteristics generates (or not) more interactions, Table 1/2 includes a selection of variables that takes into account many accredited previous studies and which we have used to categorise the posts on the official account (however, this is neither a sample nor a selection of posts by private users).

[Insert Table 2]

Analysis of the content of posts enables us to formulate the following hypothesis:

H1. Different content of posts generates significant differences in interactions.

Another important aspect of posts on the official account of a DMO is the introduction of explicit advertising elements, including publicity for specific establishments in the city, directly and explicitly for commercial purposes (see Table 3).

[Insert Table 3]

This enables us to formulate a second hypothesis:

H2. Including advertising elements influences user interactions.

This study is aimed at making a first attempt in the literature to analyse the bandwagon effect in engagement, that is to say, the capacity to generate more likes and comments of posts that explicitly request feedback from users or in those in which the photos of users with larger or smaller numbers of followers are posted. To this end, all the posts published by the account were encoded according to the presence or absence of the following variables: feedback and users' photos, as defined in Table 4.

[Insert Table 4]

Our third hypothesis is therefore,

H3. The presence of interaction variables generates greater engagement.

These variables are the ones that most explicitly involve or appeal to interactions between users and the official account, generating what we call the bandwagon effect between users with varying degrees of presence on the network and the overall engagement of others. This gives rise to two new hypotheses:

H4 a) Re-posts of users' post on official accounts generates a bandwagon effect on engagement in the form of likes.

H4 b) Re-posts of users' posts on official accounts generates a bandwagon effect on engagement in the form of comments.

The user interactions analysed in this study are likes (which reflect, generally speaking, a more impulsive response) and comments (which require a certain degree of elaboration and/or thought). Based on this, we formulate our final two hypotheses:

H5a) Certain of the variables described (content, advertising, interaction) generate more likes.

H5b) Certain of the variables described (content, advertising, interaction) generate more comments.

The series of hypotheses proposed enables us to describe relevant aspects that have potential effects, thereby helping to guide strategies for presence on the social networks implemented by tourist destinations. Figure 1 summarises the proposed research model.

[Insert Figure 1]

4. Methodology

For the purposes of our research, the *total* number (279) of posts published by the official Instagram account of the City of Berlin for a full year (2018), was encoded, from January 1 to December 31, including comments and likes linked to each post, was encoded. Posts were classified according to different features, grouped in the categories described in the previous section. The encoding of posts began on 1 September 2019 so that sufficient time had passed between the time of publication of each and its collection and encoding to reflect the maximum number of interactions possible, and that patterns of time or order of publication during the day did not influence the values observed.

In this paper, we will focus on the two simplest interactions that Instagram permits: numbers of likes and comments generated by the different posts. In the study of social networks, likes and comments are the variables most commonly used to measure levels of user engagement by observing the numbers of each (Lee et al. 2018). Although Instagram also allows other interactions (shares, etc.), in this paper we will focus on the two most basic interactions as the starting point for meeting the objectives of identifying aspects of posts that generate differences in them. This approach will allow us to extend our analysis to other social networks in future research work. These two interactions have complementary dimensions, as likes reflect a more immediate response, expressing initial sensations, whereas comments imply a somewhat greater degree of elaboration and engagement (John et al. 2017).

As mentioned in the previous section, the posts were classified according to three non-exclusive dimensions: Content, Advertising, and Interaction. The number of reactions that posts generated in the

form of likes and comments was also counted. In the latter case, we should note that comments were counted numerically.

The encoding was conducted by a group of three people who did not form part of the research team. They were first trained for the purpose, and the reliability of the encoded data was subsequently verified by measuring the Scott's Pi and Cohen's Kappa coefficients, which compare the encoded data with the values that would be obtained randomly. Based on the number of likes and comments for each post and their assignment to one (or several) categories, a statistical study was conducted of the results linked to the presence (or absence) of each of the dimensions presented in tables 2 to 4. This analysis showed the degree to which this presence was statistically associated with significant differences in the number of likes and comments generated, and whether this difference was positive (the presence of the characteristic induced more interactions) or negative (fewer interactions). In the following tables, this result is identified by + or - signs, and three levels of statistical significance are distinguished concerning the capacity of the presence of a variable to generate differences with respect to the posts in which that characteristic was absent. The three levels were: the most demanding, with a value of $p < 0.001$ (designated by *** p); an intermediate level with a value of $p < 0.05$ (represented as **p); and a third, weaker but still relevant level, with a value of $p < 0.1$ (denoted as *p).

As there is no standard for the number of cases to be encoded by applying intercoder reliability, this was applied to 50 analysis units, resulting, in all cases, in values of over 0.80, and in most cases a value of 1. However, this was the result expected in all the descriptive categories, with little or no subjective need for evaluation. Figure 2 provides an example of a post that was classified among the support variables as a "photo" and in the content category as "civil architecture", "public way", "nightlife" and "most visited".

[Insert Figure 2]

5. Results and Analysis

To ensure the maximum reliability of the conclusions, the data was initially processed by bivariate analysis of the impact that each variable generated in comments and likes. The data was then processed again by multivariate analysis to obtain maximum information from the encoded data and generate the most reliable responses to the research questions.

Table 5 shows the results from the bivariate analysis for each of the variables included in the category of “content”, as well as indicating the p-value for both comments and likes, that is, whether the presence of each of the variables makes significant differences and, if so, whether in doing so it generates more or fewer interactions (comments or likes).

[Insert Table 5]

Civil and religious architecture and public transport also generate positive impact, as do rainy scenes. On the other hand, significant negative differences (fewer likes) are found in those containing only information and, perhaps surprisingly, those featuring museums and other cultural content.

As for comments, the results are somewhat less clear, with similarly positive impacts generated by other categories that received more likes, such as nightlife, requesting user feedback and most visited places. Alternative art also generates a significant number of comments (significantly more than likes, comparatively speaking). This is an aspect of the bivariate analysis that is reinforced by the multivariate analysis.

Another aspect worth mentioning is that some variables show differences according to whether measurement of their impact is based on the median or the average. An example is “parks and gardens”. This is another variable with insufficient aggregate significance to make a difference, one that generates more likes on average when present than when absent (5,700 compared to 5,602). However the average number of likes is lower when the category is present compared to when it is absent (5,052 compared to 5,430). The presence of a limited number of posts with significant impact, which raises the average higher than the median, is an explanation that argues for research, in such cases, into the specificities of these particularly successful posts.

Table 6 presents the results associated with the advertising variables, which include more explicit elements for the direct advertising of commercial establishments, mainly restaurants. We should note that, although the initial list of variables to be studied included “shopping centres” and “hotel advertising”, this type of content was not found in Berlin’s institutional account.

[Insert Table 6]

One point worth highlighting is what we might call the “penalty” for advertising uses, particularly as regards private activities such as restaurants and other establishments. Although, needless to say, the effect of generating substantially fewer likes (and also, though less significantly, a smaller number of comments) does not necessarily mean that it is not effective as a way of attracting a subgroup of users as customers, it does question the use of the city’s institutional account for private-sector purposes. This issue should be treated with caution, since similar results in terms of generating significantly fewer likes also occurs in the case of “Museums, Exhibitions, Theatres”, with a cultural dimension largely linked to dimensions of “public interest”. This may (still) be a more minority interest, but it is not considered less worthy of promoting for all that (in fact, perhaps, quite the opposite). The positive response (in terms of likes) to posts in which widely used public services, such as public transport, are present, also points to this potential impact of public services.

We should also highlight the dimensions that are most explicitly linked to interactions via the social network. As previously noted, posts containing users’ photos (58 of the total 279 during year 2018) and those that request feedback obtain, overall, very good results in terms of engagement. Given that Instagram users do not form a particularly heterogeneous group, some having many followers while others have fewer, the question raised is whether using the photos of users with more followers on the network can attract more engagement than others. In other words: do photos used on the official network generate more comments/likes if they are reposted from users with more followers?

Adopting the same format at the previous tables, Table 7 summarises the results from responses linked to these dimensions of interactions.

[Insert Table 7]

Particularly noteworthy here is the positive and highly significant impact of the inclusion of users’ photos in generating both comments and likes, and positive effects (although with a lower level of significance to “make a difference”) generated by posts that request feedback. These results reflect the positive dimension of user participation.

It is also worth mentioning the important effect in terms of generating likes and comments of using photographs taken by users (and not from official sources) and the good results achieved by posts that invite feedback. This contrasts with the lower interactions generated by “mere information” posts, probably due to their “one-way” nature.

Table 8 shows the correlations between the interactions generated by users' photos and the followers of each of the authors of these photos posted on the official account. The evidence shows, overall, weak correlations in terms of likes and even negative correlations as regards comments.

[Insert Table 8]

This would appear to show that the intrinsic merit of the photo outweighs its author's popularity on the social network. However, it could be argued that, although the official account has posted the photos of users with large numbers of followers, the presence of superstars/influencers on social networks is not detected, as these probably exert their much-sought-after influence through other channels (Femenia-Serra and Gretzel, 2020). In any case, the number of followers of users whose photos are reposted on the official account neither created a bandwagon effect nor generated more engagement.

Figure 3 shows the weak positive correlation (for likes) and the negative correlation (for comments) between the number of followers of a user whose image is published (ordinate axis) and the number of likes and comments generated.

[Insert Figure 3]

Tables 9 and 10 show the results obtained from the multivariate analysis, which includes the variables with $p < 0.1$ in the bivariate analysis. These results ratify and (in some cases) modulate those obtained in the bivariate analysis. Table 9 focuses on likes, while Table 10 refers to factors that generate comments.

[Insert Table 9]

Overall, as was to be expected, these results ratify the conclusions already presented for the categories with the most impact. We should note that the position of certain aspects, such as alternative art, is reinforced – in this way linking up with one of the features attributed to Berlin – while the role of interactivity items such as users' photos and requesting feedback, and other posts with content such as panoramic views and most visited places, is consolidated. It is also notable that our study ratifies another

of the features attributed to Berlin: the role of its “nightlife”. Posts that refer to this aspect generate significantly larger numbers of comments and likes.

In any case, the importance of fame is noted in the high numbers of interactions with most visited places, reinforcing the idea of focusing on what are considered to be the best-positioned tourist attractions.

[Insert Table 10]

Finally, by way of summary or synthesis, Table 11 shows the main results in terms of the most effective variables for “making a difference”, whether positive or negative, with regard to both comments and likes, with the “stars” denoting the level of significance previously defined (Section 4).

[Insert Table 11]

6. Discussion

The analysis conducted on the posts of the official Instagram account promoting tourism in Berlin enables us to draw some conclusions which suggest answers to the questions raised.

Firstly, as regards the question as to which categories of posts generate the most user engagement, our study identifies those items whose presence significantly affects interactions in the form of likes and comments. H1 is confirmed, as certain content generates significantly more interactions, both some that include general aspects like most visited places and panoramic views, and others that are more specific and closely related to the image of Berlin, such as nightlife and alternative art. In addition, H2 is clearly confirmed by a negative response: more explicit/direct advertising posts generate less engagement.

The confirmation of H3 is also noteworthy: posts generate substantially more interactions when they explicitly “play” with the dimension of interactions on the social network. This “play” includes, for instance, using users’ photos and making requests for feedback. In this regard, we can mention particularly the important role played by users’ photos (not photos from “official sources”) and that, in principle, whatever the number of followers that each user has, exercise a modest (at best) bandwagon effect beyond the intrinsic value of each photo. That is why the responses to H4a (modest but positive for

likes) and H4b (modest and negative for comments) carry the caveat that, while it is true that the photos of other users have significant impact on both likes and comments, the number of followers that the authors of photos posted have does not seem to generate a clear significant bandwagon effect.

Regarding hypotheses H5a and H5b, overall, the variables that generate the most interactions do so parallel to more impulsive responses in the form of likes and more elaborate responses in the form of comments. Table 11 identifies three variables with positive impact for both types of interaction. However, certain differential impacts are also detected: there are characteristics that have a positive impact on interactions through likes (panoramic views, public ways and civil architecture) and others that exercise this positive impact on interactions through comments (alternative art, nightlife and people). The former (more likes) are more “general” in nature, while the latter – especially those with a higher level of significance in comments (alternative art and nightlife) – appear to be more specific and resemble certain possible characterisations of the “Berlin brand”. This, in addition to the asymmetric aspect that certain advertising items clearly generate fewer likes.

7. Managerial implications

The implications of this study for managing tourism in Berlin are significant, while the research also confirms the usefulness and sensitivity of Instagram as a tourism promotion tool. The asymmetries detected in the different types of content aimed at eliciting interactions suggest lines of action aimed at revising the selection of images to favour those that show a greater capacity to induce responses.

The divergences in the degrees of response to different types of post help to outline the communication strategy more precisely, highlighting those aspects that best contribute to defining the personality of the city.

Promoting explicit interactions with users is a way of generating greater user engagement that should be used more intensively. It offers the possibility of creating a community based on users’ photos – without the need for these users to be particularly important influencers – as the diffuse influence of all participants on Internet is significant. There are interesting elements of complementarity – “bridges” – between the users and managers of official accounts. Providing content that generates the most responses is important, and this suggests that combining content linked to broader, more general themes (panoramic views, most popular attractions) with more specific items featuring unique aspects of Berlin that are

already well known, such as alternative art and nightlife, would have a positive effect. The negative results generated by more direct or explicit advertising should also provide food for thought. Aspects that remain open include the question of how to enhance the attractiveness of information about museums and other cultural dimensions, increasing the popularity of what is perhaps still a minority dimension and integrating it more fully into tourist assets to which broader audiences can have access.

Recommendation of a continually adjusted, more proactive and interactive strategic plan for the use of social networks. Our paper offers more of a starting point than an end point for what could/should be an almost “real-time” communication strategy. Upgrade the role of those responsible for social networks in DMOs... especially in the current situation in which recovering visitors after the problems of 2020 becomes a central aspect of economic revitalisation.

8. Conclusions and Limitations to the Research

Taken together, the conclusions drawn from our analysis point to a potentially even more important role for Instagram as a tourism promotion tool, taking advantage of the dynamic of interactivity with its users, combining the most firmly-established general tourist attractions with certain peculiar characteristics of the city of Berlin (as an alternative art capital, as a city that is interesting by day and magical at night), and leaving open questions about the use of this social network as a more direct form of advertising, both for private and public sector activities, from restaurants to museums, taking into account the heterogeneous nature of the growing numbers of Instagram users.

We should note that that the “new realities” will have a significant impact on the aspects analysed as regards the elements with the greatest capacity to arouse interest. Aspects related to a safe city, including health and sanitary conditions, will gain in importance after the events of 2020 and will force changes to strategies.

This study could be expanded by analysing the official accounts of other European capitals or international cities that are major tourist attractions, and it would also be interesting to compare the different accounts of these. Expanding the study’s scope to cover several years would enable transversal analysis of the evolution of engagement, and this could also be most interesting. Finally, linking the

image of the city that users project through their accounts to the image that the official account seeks to transmit would expand the spectrum of the research and generate potentially interesting results.

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Compliance with Ethical Standards

The authors declare that they have no conflict of interest.