

Google Discover: uses, applications and challenges in the digital journalism of Spain, Brazil, and Greece

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ABSTRACT

Purpose: This paper constitutes the first academic study to be made of Google Discover as applied to online journalism.

Design/methodology/approach: This paper constitutes the first academic study to be made of Google Discover as applied to online journalism. The study involved conducting 61 semi-structured interviews with experts that are representative of a range of different professional profiles within the fields of journalism and search engine positioning (SEO) in Brazil, Spain and Greece. Based on the data collected, we created five semantic categories and compared the experts' perceptions in order to detect common response patterns.

Findings: Our results confirm the existence of different degrees of convergence and divergence in the opinions expressed in these three countries regarding the main dimensions of Google Discover, including specific strategies using the feed, its impact on web traffic, its impact on both quality and sensationalist content and on the degree of responsibility shown by the digital media in its use. We are also able to propose a set of best practices that journalists and digital media in-house web visibility teams should take into account to increase their probability of appearing in

Google Discover. To this end, we consider strategies in the following areas of application: topics, different aspects of publication, elements of user experience, strategic analysis and diffusion and marketing.

Originality: Although research exists on the application of SEO to different areas, there have not, to date, been any studies examining Google Discover.

KEYWORDS

Digital media, Google Discover, search engine optimization, online journalism, mobile news, personalized news, web visibility, Google

1. Introduction

Search engine optimization (SEO), understood as the set of practices that helps ensure the content of a given website appears among the leading results of search engines such as Google or Bing (Veglis and Giomelakis, 2020), has become a key business strategy in digital journalism for increasing audiences (Carlson, 2007). This reflects the fact that search engines help users select the most relevant content in response to their queries (Machill et al., 2008) and, it is for this reason, as well as a result of the hypercompetition among the information industries served by the Internet, that the digital media have become so dependent on SEO (Lopezosa et al., 2020).

This growing dependence has been responsible for an increase in studies of the web visibility of the news media and the publication of highly insightful reports on the application of SEO in journalism, most notably Giomelakis & Veglis (2016) and Charlton (2016), who confirm that much has yet to be done in enhancing both SEO and journalistic routines; Dick (2011) and Smyrnaioi & Sire (2014), who highlight the need to promote an optimal convergence between the best possible journalism and the best possible SEO; and Lopezosa et al. (2021) and Pedrosa & de Moraes (2021), who describe practical SEO techniques applied in newsrooms.

This growing body of studies concerns itself with the visibility of the news media on digital platforms; however, their web visibility is subject to constant evolution. In fact, today, we find users are also consuming information via other channels, including, for example, Google Discover (Google, 2020a), a smartphone service that offers its search results based on what it considers to be a good match with user interests and profiles rather than on keywords related to a specific query.

This evolving situation highlights a clear research gap that this study seeks, at least in part, to fill. Specifically, our primary goal here is to examine the characteristics of Google Discover from the point of view of how it affects journalism and to present a diagnosis of its impact in, and optimization for, the news media of three countries: namely Brazil, Greece and Spain.

To achieve this primary goal, we set ourselves the following specific objectives:

- 1) Survey the opinions about Google Discover, as applied to digital journalism, held by SEO experts from Brazil, Spain and Greece working in the digital media and in consultancy firms.
- 2) Determine the degree of perceived agreement among the professionals from the three countries regarding the role played by different dimensions of Google Discover as applied to the cybermedia.
- 3) Identify, based on the findings to objective 2 above, the tasks that journalists and the media's in-house web visibility teams are carrying out or should be carrying out in relation to Google Discover and propose a set of best practices.

2. Theoretical framework

Web visibility and content curation are two fields that have been the object of increasing research interest in recent years and together form, as we shall see below, an essential part of how Google Discover operates. Web visibility studies focus primarily on analyses of specific business sectors in content-intensive sites. Thus, we find research related to search engine positioning in the news media (Giomelakis and Veglis, 2016; Lopezosa et al., 2020; Pedrosa and de Morais, 2021); universities (Vállez et al., 2022); tourist web portals (Fernández-Cavia et al., 2013; Pedraza-Jiménez, 2018), and libraries (Onaifo and Rasmussen, 2013; Vállez and Ventura, 2021), among others industries (Mladenović, et al. 2022). We also observe a predominance of quantitative studies of SEO audit tools, above all related to the use of such tools as SEMrush (Vállez, 2011), Ahrefs (García-Carretero et al. 2016), Sistrix (Vállez and Ventura, 2020) and Majestic (Orduña, 2021). In parallel to this, content curation studies focus, among other topics, on curation in the digital media – most notably, Dale (2014), Cui and Liu (2017) and Guallar et al., (2018, 2022) – in social platforms – see, among others, López-Meri et al. (2017), Bruns (2018), Chagas (2018), and Kümpel (2019) – and algorithmic curation – for example, Diakopoulos and Koliska (2017) and Zubiaga (2019).

As is evident, there exist studies about both search engine positioning and content curation, but these two research lines have been developed independently of each other, so that to date there are no academic studies that combine the two worlds, as would be the case of studies of Google Discover and which, as such, would represent a new line of research. It is for this reason that we have seen the need to undertake the current study.

Google Discover (known until 2017 as Google Feed) is a service that allows users to receive news items related to their interests without their having to perform a Google search (Google, 2020a). As such, it is a curation or aggregation system and not a search system. The users can configure the tool based on each news item, indicating whether it is (or not) of interest to them, and so filter the sources they want to consult (Google 2020b), thus permitting personalized content curation. This means Google Discover offers content that is based on a combination of what Google algorithms consider the user to be most interested in and what is trending at any given time (Infobae, 2019).

The Google Discover interface stands out as operating as a feed, that is, as a news flow. At the same time, it is a system that uses the interactions of its users as one of its inputs (Linares, 2020). Among the most usual content offered by Discover is news on current affairs, especially stories that are trending. It also offers videos, news related to the world of entertainment, sports results, stock prices and information about cultural events, as well as weather information, among others (Ramos, 2019; Fernández, 2020).

This service has enormous potential for users, as it surfaces them with relevant content without their having to conduct a search. Instead, they receive what (it is imagined) satisfies their information needs without conducting a prior search (Coppola, 2020). As such, the use of Discover quickly becomes a habit, with many users using it as a matter of routine to access new content (Vicent, 2021).

In short, it is evident that Google Discover has become a relevant source of traffic for the digital news media (Coppola, 2021). As a result, among those responsible for SEO in the newsrooms, it is generally accepted that a specific SEO for Discover has to be implemented (Soteras, 2021). SEO for Discover draws, in part, on “conventional” SEO concepts and procedures since it is concerned with impacting digital platforms, but it also requires different strategies, since Discover is not based on user searches. Indeed, conventional SEO is primarily based on the idea of a search and a results page ordered according to a certain algorithm. In contrast, Discover is a system that, as we have seen, anticipates users’ information needs and provides them with an information flow in which news or stories about current affairs are one of the main components. While SEO professionals in newsrooms have been concerned with the impact of Discover for some time, what is required are studies that can shed light on the tool and which are of interest to both researchers in the field of digital journalism and professionals involved in media sustainability.

3. Materials and methods

To carry out this study, 61 semi-structured interviews were conducted during the first half of 2022 with journalists, SEO professionals from the news media industry and experts in web visibility from the fields of consulting and entrepreneurship based in three countries: Brazil (20 interviews), Spain (20 interviews) and Greece (21 interviews). The choice of these three countries obeys a criterion of opportunity, at the same time that they constitute significant and diverse cases according to the methodology of the case study (Yin, 2014).

Also, there are differences between the three countries in terms of online audience and journalism in each country that allow to enrich this research. For example, the data on online audiences in Spain is taken over by a few communication groups –mainly by the largest and most concentrated legacy media outlets (Almiron, 2009) although this domain has been compensated in recent years by a large entrepreneurial activity of numerous digital natives (Salaverría & Martínez-Costa, 2020).

In Greece, which is a country with a different population size (the smallest among the three countries) and a different media environment, the media market is characterized by digital fragmentation, lack of trust in news, high use of social media for news consumption, and high perceptions of undue influence (Newman, Fletcher, Robertson, Eddy, & Nielsen, 2022).

Finally, in Brazil, diversity of content is hindered by the very concentration of the media outlets. Although the monopoly of the media is prohibited by the 1988 Constitution, commercial communication in the country is in the hands of a few media conglomerates (Barbosa et al. 2017).

The participants were selected, in the first place, using a specific design that took into consideration the three professional profiles indicated above. Specific information about the interviewees (e.g. organization, professional profile) can be consulted in the annex (Appendix A, B & C). The experts interviewed cover a broad spectrum of news organizations and businesses, in an express way. But they all share a need to understand how Google Discover works for news. Second, we took into account the so-called inclusion criteria (Valles, 2002), whereby we ask who has the most relevant information, who is most accessible, who is most willing to inform and collaborate and who has the greatest ability to communicate information accurately.

In turn, the questions were designed taking into account the specific objectives of this study. Due to time and location restrictions, the interviews were conducted individually via email and some through a messenger service using open-ended questions the interviews were conducted individually via email and some through a messenger service or telephone using open-ended questions (52 by mail, 7 by messenger service, 2 by telephone), allowing the respondents to answer in their own words. Where it was necessary, a follow-up via telephone was carried out (2 follow-ups in total) to make clear the answers or discuss other issues of relevance. The coding was carried out, first, by themes guided by the questions, that is, deductively, and second, with a posteriori granularity by sub-themes, that is, inductively. In addition, the answers were collected according to the nationality of the interviewee to avoid misunderstandings, that is, in Spanish, Greek and Brazilian language. Finally, the results were then coded (table I) and analysed using the ATLAS.ti qualitative analysis software (Paulus and Lester, 2015).

Table I. Coding of interviews		
<i>Question</i>	<i>Category</i>	<i>References that support the questions</i>
1. Do you think Google Discover will play a significant role in the digital news media as a source of traffic in the short or medium term?	(1) Impact on traffic/audience	Fernández (2020), Google (2020b), Coppola, M. (2021)
2. Do you think Google Discover favours quality content or, on the contrary, it favours sensationalism and clickbait?	(1) Impact on content: quality content vs. sensationalism or clickbait	Google (2020 a), Google (2020b), Soteras (2021)
3. Do you think the digital news media are using Google Discover responsibly? Can you cite any specific media outlet that is using Google Discover responsibly?	(1) Use of Google Discover by the news media (2) Examples of media outlets (responsible use)	Google (2020 a), Google (2020b), Seguí, (2020)
4. Can you recommend any strategies for positioning content in Google Discover?	(1) Strategies for appearing in the Google Discover feed	Ramos (2019), Pecánek (2020), Santiago, (2021)

Table 1. Coding of interviews (created by the authors)

Below, we list the questions, together with their associated categories, that were configured using ATLAS.ti so as to code the interviews and, subsequently, identify common patterns of response (table 1). The five analysis categories come from Top down, from literature review.

Finally, to determine whether there is a consensus of opinions about Google Discover among the experts from the three countries and to identify the knowledge that journalists and in-house web visibility teams in the news media have or should have about Google Discover, the following procedure was conducted:

- 1) Interviewees' responses were coded by country.
- 2) These responses were semantically compared across the three countries to observe the degree of convergence or divergence between the responses given in Brazil, Greece and Spain.
- 3) The degree of perceived agreement concerning strategies aimed at optimization for Google Discover (Question 4) was identified. A high degree of consensus was considered as occurring when the three parties (Brazilian, Greek and Spanish professionals) expressed the same ideas, a medium degree when two of the three parties were in agreement, and a low degree when the three parties expressed different ideas or were in disagreement.
- 4) Recommendations regarding best practices for the use of Google Discover in the digital news media were proposed, selecting, for this purpose, the high and medium degrees of perceived agreement. The low degree of consensus was discarded when making recommendations.

3. Analysis and results

In what follows, we first present the results, organised in the five categories outlined above, highlighting the most relevant ideas to emerge from the country-by-country interviews; second, we identify the degree of consensus shown by the experts in their responses across the three countries; and, third, we make best practice recommendations for the use of Google Discover.

3.1. Impact on traffic/audience

A marked difference emerges by country in the consideration of the strategic role being played by Google Discover as regards web traffic. In general, the Brazilian respondents consider the impact of Discover to be merely incipient and believe it to be still very much in its implementation phase; the Spanish interviewees consider that Google Discover is already playing an important role as a source of traffic, but that it faces major challenges in the medium and long term; and, the Greek experts interviewed are divided between those who believe that it is already of great importance and those who believe it will be so in the medium term.

The responses of the Brazilian experts provide a good picture of the role currently being played by Discover in this South American country. The concerns of SEO studies are subject to frequent changes, especially if we consider the constant updating being made to Google's algorithms, which means, as the Brazilian interviewees acknowledge, it is only a matter of time before SEO strategies turn their focus on Google Discover; however, as of today, there is insufficient research material to undertake this work effectively. Moreover, a number of respondents stress that many Brazilians have not yet got into the habit of using such a tool to obtain their information, which is why Discover cannot be considered a tool of any significance for the digital news media (with some claiming that it will take another three years for its use to be consolidated in Brazil). Yet, they recognise the future importance of Discover given the positive effects it is having and is likely to have on the news media, including the fact that (1) it can offer easy-to-consume content that awakens a reader's interest; (2) it can help curate the latest news flows in line with each reader's information diet; and (3) it offers, in theory, excellent possibilities for growing and obtaining more users, because it is an interface that provides content in line with a reader's preferences.

The responses obtained from the Spanish experts, differ from those provided by the Brazilians. For the former, most of Spain's digital media are considered as being highly dependent on the audiences provided by Discover. In fact, this Google service is a key player today in the online traffic data of the Spanish news media. In general, the experts stress that when content appears in Discover, traffic spikes exponentially for several days. Moreover, this content has the virtue of being shown to users with a particular interest in the given topic, which generates well-segmented audiences.

The respondents, moreover, indicate that Discover has been playing a significant role in the consumption of news in Spain since 2020. The reason for this is because legislation, a Google tax known as the "canon AEDE", forced the company to shut down its Google News service in Spain, a service that until then had been a great source of traffic for the media. Part of this role in sending traffic was assumed exclusively, in Spain, by Google Discover.

However, the interviewees recognize that the situation may well change in the medium or long term, since one of Discover's main characteristics is its volatility (no one knows "what will or will not work" in the future). This leads Spanish experts to recommend that it be treated as a source of additional traffic, its audiences always being welcome, but that conventional journalistic SEO, considered more stable, should not be neglected. The strategic question raised by the experts is just how long this source of traffic will continue to function. According to the respondents, 80 to 90% of the revenue of some media outlets originates from Discover. The fear in this regard is that an eventual change in its algorithms could have a great impact on those outlets that are most dependent on Discover traffic, hence the recommendation not to neglect the focus on conventional journalistic SEO in order to mitigate the impact of this possibility.

The Greek experts point to a possible dichotomy between what they identify as the undoubtedly relevant role being played by Discover today and the role it might assume in the medium term. Those who believe that Discover is likely to play a key role in web traffic in the medium term too (for, at least, another 1 or 2 years) stress that it provides users with personalized content quickly and directly, characteristics that are enormously attractive for users. They also point out that in the case of some Greek media outlets Google Discover is already their second most important source of traffic. This is above all the case of those outlets that were among the first to successfully complete their digital transformation.

Likewise, they argue that the contribution of Google Discover to the news media is positive and that the latter should invest in it as a source of traffic, above all because of the personalization of content for users, as it provides them not only with a new audience but also with increased brand exposure. In contrast, the Greek experts who consider Discover not to be a major player believe that organic searches, that is, those made from Google's general search engine, will always dominate as a source of traffic for the news media. Yet, they accept the eventuality that the more advanced and sophisticated Discover becomes, the more it will be used.

3.2. Impact on content: quality content vs sensationalism or clickbait

In this category, we found no consensus as to whether Discover's impact has a tendency to favour quality content or sensationalism. Different opinions were expressed by the respondents both within and across the three countries. However, there was a consensus on the fact that the consumption of sensationalist content is more dependent on the user than on the algorithm itself. In other words, it is argued that, for a reader who shows no tendency to click on sensationalist articles, the frequency with which articles of this nature appear in their Google Discover feed will be much lower or even zero. In short, the respondents stress that Google Discover is a reflection of society. They characterize it as a personalized feed that displays content of supposed interest to the user based on their profile and previous activity. The experts point out that Google's explicit content policies expressed in its official guides defend and reward quality, while the reality is that the interest of many users in sensationalist topics invites many websites to indulge in this type of content.

However, if we study the responses from the interviews conducted in Brazil, a dichotomy emerges between those who believe quality content is dominant in Google Discover and those who think it favours sensationalist content. The former claim that any media outlet that publishes quality content will be successful in Discover, since it will comply with Google's E-A-T (acronym for Expertise, Authoritativeness and Trustworthiness) principle; however, the latter believe they have detected a growth in sensationalist content and even identify articles from unreliable websites or sites with a history of disinformation. The Spanish interviewees, like the Brazilian experts, fall into the same two opposing camps. What stands out in this case, however, is the general consensus that Google seems genuinely committed to improving Discover and that it can be trusted to continue to eliminate more and more sensationalist content.

Yet, the respondents who most fear a rise in sensationalism in Discover consider that the Google feed today is full of headlines that favour clickbait. They are quick to identify the contradiction between the official Google guides that recommend attractive headlines, which capture the essence of the content, and a feed that, in practice, does not always operate in this way. However, a number of the experts acknowledge that Google does, nevertheless, seem committed to combating clickbait. Specifically, they highlight official recommendations for appearing on Discover, which warn against "tactics to artificially inflate engagement (including the use of misleading information, etc.)".

The experts who stress Google's supposed commitment to combatting sensationalism also indicate that this guideline has been accompanied by a change in the Discover feed algorithm, which seems to have been relatively effective, at least in English, at eliminating clickbait content, yet, for the time being, somewhat less effective in other languages such as Spanish. Indeed, the Spanish experts claim that while news items that might be classified as clickbait continue to be seen in the Discover feed, the proportion has fallen since the change in the algorithm introduced in July 2020. These experts conclude that Google, in general, does promote better journalism, thanks to its E-A-T principle, but that Discover is still undergoing a period of adaptation. They trust, however, that with time, Discover will continue to optimize its algorithm to favour quality content.

Finally, although conflicting opinions are evident among the Greek experts, the majority consider that Discover currently occupies a midpoint between providing quality content and clickbait. This group of experts specifically believes that Discover favours both quality news and sensationalism, depending, that is, on the respective weight attached to each user's profile. They argue that, in theory, in the future, given the general trend towards the introduction of changes in Google's algorithms, clickbait articles will disappear. We are, they claim, at a turning point.

3.3. Use of Google Discover by the digital news media

This category is concerned about the responsible use of Google Discover by the news media. The experts from the three countries can be assigned to four different groups based on their responses: (1) those who have yet to form an opinion on the matter, either due to a lack of information or because they believe Discover to be at a turning point; (2) those who believe that the media in general use Discover responsibly; (3) those who consider that the media in general do not use Discover responsibly; and (4) those who think that there is some diversity in its use, so that while some media use it well, others use it irresponsibly.

If we consider the three countries separately, we find a predominance of Brazilian experts in the first group, that is, those who have yet to form an opinion on the matter. The Brazilian experts who consider that Discover strategies are in fact being used responsibly by the media report that the traditional media and some more innovative news outlets are using Discover to distribute different content by means of highly creative approaches. They also recognize that Google Discover is important, especially for those working in the news sector, and believe that most Brazilian journalists are aware of the tool, especially those with considerable SEO experience; albeit, at the same time, while they consider journalists to be aware of its use, they believe they still have a lot to learn about SEO strategies.

The Brazilian experts who believe that Google Discover is being used irresponsibly by the news media explain that there is currently a profusion of malicious vehicles impacting Brazilian audiences, causing many media outlets to misuse Discover. Finally, they identify a number of media outlets that actually abuse the Discover function and benefit from this service by publishing superficial articles (for example, sensationalist journalism). However, on the other hand, they also acknowledge that there are examples of highly praiseworthy journalism.

Among Spanish experts, there is a general consensus in recognizing the importance for the Spanish media of Discover as a distribution channel. They report that media outlets with an SEO department take Discover into consideration as a channel for their traffic. However, they are critical of the fact that some Spanish media outlets are being seduced by short-term strategies that are not perhaps the best way for them to achieve recognition as quality brands. They point out that while a media outlet ought certainly to adapt its strategies to new distribution channels, it should never lose its identity, and that it is here where the media need to adapt strategically to Google Discover.

Having said that, the Spanish experts recognize that the media and, above all, the SEO teams that work in them, simply adapt to the prevailing circumstances. They claim that these are the current rules of the game and that competition is so fierce that they cannot afford to be left behind. Some media outlets will take a more aggressive approach, others less so, but all of them strive to appear in Discover as its potential traffic is huge and it does not, to date, stand up to comparison with any other source.

However, the experts are divided between those who consider that Discover is being used responsibly by the news media and those who feel it is being used irresponsibly, providing us with a whole spectrum of opinions of the use of Discover by the digital press. Those who hold a positive view attribute the mostly responsible use of Google Discover to the fact that the media's brand credibility is at stake. They report that cases of the tool being abused are extremely few in number. However, what they do believe they have detected is that, little by little, the media are showing a preference for content that appeals more to the emotions. Those holding a negative view speak of news media outlets that see Discover as a system for capturing web traffic regardless of the costs. In the opinion of these experts, this is a grave error. It means reducing journalism to a simple game of statistics, something that threatens to do great

harm to the newspaper business in the medium and long term. Here, the most critical voices stress that the changes to Discover have, on occasion, left those media outlets which have designed their entire strategy to impact the Google feed without any traffic.

The opinion of the Greek experts does not differ greatly from that of their Brazilian and Spanish counterparts, as here again they recognise a division between those outlets that use it responsibly and those that fail to do so. Interestingly, some Greek experts claim not to have detected any specific efforts on the part of newsrooms to promote themselves on Discover. In fact, some respondents consider that only a few media outlets employ specific strategic procedures to increase their appearance in Google Discover.

Yet, the Greek experts clearly identify the strategies followed by those media outlets that use Discover responsibly and those that do not. For example, they confirm that the large digital newspapers in Greece use Google Discover and do so appropriately, systematically avoiding any negative linkbait practices. According to these respondents, the news media that use Discover aptly are characterized by the fact they remain faithful to journalistic values, valuing objectivity and honesty as essential standards of journalism, focusing on the essence of news reporting, keeping readers informed and being truthful in their reporting of the facts, not only via Google Discover but also through all other online or offline platforms.

In contrast, the media outlets that use Discover dishonestly are characterized by strategies that prioritise the increase in their audiences and advertising revenues. In so doing, they exploit clickbait, focusing on advertising and the promotion of disinformation and, ultimately, they pay scant regard to the indicators of quality deemed essential for good journalism.

3.4. Examples of media outlets applying best practices for Discover

Although there is a degree of agreement among the Brazilian respondents that a number of media outlets use Discover responsibly, in general they opted not to mention specific examples. However, one specifically identified BBC Brazil, while two mentioned Boatos and Infomoney. In the case of Spain, eight of the 20 interviewees provided examples of best practices, identifying specifically La Vanguardia, Betevé, El Economista, El País, El Periódico de Catalunya and 20Minutos, while mentioning, as an international example, the New York Times, and also the specialist publication Genbeta. Of the 21 Greek experts, seven identified cases of best practices in relation to CNN Greece, News 24/7, Kathimerini, Dikaiologitika and Betarades and, when casting their net further afield, they mentioned Forbes, Entrepreneur and the specialist publication Search Engine Journal.

3.5. Strategies for appearing in the Google Discover feed

In general, the respondents from each of the three countries described specific strategies for boosting the chances of appearing in the Google Discover feed. The Brazilian experts essentially recommend the practical application of Google's quality guides as a strategy to ensure news items appear in Discover. These strategies centre on three specific elements: topics, content strategy and user/reader related features. As far as topics are concerned, they recommend both information regarding current affairs as well as so-called evergreen content (i.e. timeless news). They advocate publishing content on topics that are trending with a specific focus (producing, in this regard, explanatory materials on a hot topic) and also propose creating content on topics with the capacity to go viral (such as items related to celebrities) and addressing topics that are both relevant and authoritative according to Google's algorithms.

In the case of content strategies, the Brazilian experts consider that content should be well written and high in quality, in line, that is, with Google's E-A-T principles. At the practical level, they recognize the need to (1) work with entities and semantic elements that enrich the textual content; (2) use high quality images in their publications; (3) adapt the content to the accelerated mobile page (AMP) format; (4) apply good conventional SEO practices, including the

technical optimization of headlines, the use of an SEO friendly URL, optimized use of subheaders, etc.; and (5) post bearing in mind the factors of volume and frequency.

Finally, as far as users are concerned, the Brazilian interviewees recommend that readers be offered content that falls within their spheres of interest. To do this, they stress the need to produce quality content that counters disinformation, encourages reading and engagement and, at the same time, provides a good user experience.

The responses of the Spanish experts are similar to those of their Brazilian counterparts, although they tend to be more specific in their identification of strategies. In general, however, they stress the importance of following the guidelines laid down by Google and of seeking to detect the trends that have greatest visibility on the Internet.

The Spanish respondents emphasize the differences between conventional SEO and optimization strategies for Google Discover. However, at the same time they recognise the strong correlation between a web portal in the eyes of Google and the regular appearance of its content in the Discover feed. In other words, the E-A-T principles, the technical situation of the website, the optimization and selection of content, etc. all have an impact and are, in turn, closely related. Moreover, as well as centring their strategies on topic, content and the user/reader, the Spanish experts also concern themselves with strategic analysis and diffusion.

The Spanish interviewees recognize that one of the main requirements guaranteeing an appearance in Discover is the choice of topic. They also consider it important to detect patterns as regards the type of content that has proved successful in the past in terms of the structure of the headline and the body of the news item, the entities that appear in it and specific topics/niches, etc. Additionally, they recommend publishing content on trending topics, since it is important to have an impact on Google News; yet, at the same time, they recommend bolstering local content, that is, taking into account where an audience uses Discover and producing articles focused on that location, since it is another of the main variables used by the Discover algorithm.

In the case of content, the Spanish respondents confirm that the key is not necessarily publishing the content most optimized for search engines, but rather publishing that which best responds to the reader's search intention and which in a very short space of time is capable of producing spikes in the number of visits. As well as optimizing the content by identifying its key entities, publishing frequently, using AMP technology and employing quality images (specifically with a width of more than 1,200 px), the Spanish experts recommend: (1) publishing the article they expect to see in Discover on the front page of their publication; (2) clearly indicating when the content was published and who its author is; (3) writing the headlines so that they capture the essence of the content – that is, the content must be attractive given that the Discover user sees the headline, the image and the media brand, so they must be persuaded to click on the item – and, finally, (4) taking into account the interests and motivations of the reader when writing the article.

The Spanish respondents stress that generating trust among users is essential and that authorship is a relevant variable when seeking to achieve a better, more frequent impact on Discover. Therefore, in addition to building an authoritative website (one that receives many inbound links), a news media outlet needs to focus on obtaining a good percentage of clicks (click-through rate or CTR), since articles that have a CTR of more than 10% usually appear in Discover.

As far as strategic analyses are concerned, the interviewees consider it essential to prepare a monthly content plan focused specifically on Discover. To do so, it is necessary to have a mobile device trained with a browsing history of general topics and complementary entities, combined with an ongoing analysis of trends – using Google Trends – and the identification and interpretation of statistics about entities that have already been featured in Discover, in order that they might be further bolstered.

Finally, diffusion on social networks is essential since it allows the so-called “buzz factor” to be generated and amplified, that is, concentrating a high volume of traffic in a short period of time for a specific piece of news (or URL). To do this, the respondents report that social sharing is one of the triggers that leads Google to publish a news item in its feed, since Discover mainly detects trends, and searches for the most authoritative and most viral media at any specific time for a specific entity, and social networks contribute much in this regard: the more social traffic, the more relevant this news item is likely to be. Therefore, disseminating the content via social networks is an important trait for making content viral and getting it to appear on Google Discover.

Among the Greek experts, no one specific strategy is recognised, but, in contrast, a combination of different practices including different on-site and off-site elements is mentioned. Above all, they consider it to be fundamental that any website that wants to appear in Discover should be well organized and publish quality content. In common with the Brazilian and Spanish experts, their responses can be classed in relation to topic, content and users, but here we also include a fourth related to marketing.

The Greeks interviewed consider it essential to publish content related to popular topics with the potential to become viral, but which at the same time is coherent with the content that each digital outlet specializes in, or that bears a close relation with its industry or business. Additionally, they recommend offering a continuous information flow that is both high quality in content and unique. They also recommend publishing evergreen content, adapted to their most loyal audiences, ensuring they pre-empt their competitors in the publication of this content. Finally, they propose the creation of content and articles that aim to (1) provide knowledge and value to their potential audience and (2) create and/or increase the authority of their news outlet.

In the case of content, in line with the experts in the other two countries, they recommend taking into consideration official Google guidelines. They also stress the importance of adopting the content optimization techniques of journalistic SEO, as used for Google News, to boost a site’s chances of appearing in Discover. Like their Brazilian and Spanish counterparts, they consider quality content to be essential, which means taking into account the E-A-T principles, optimization for mobiles (including AMP), the use of high-quality visuals, attractive headlines that make people click and the SEO of specific elements (headlines, headers, URL, text, etc.). They also stressed two further aspects related to content, the headline and the main text. Thus, for these experts, a good strategy is to create headlines that answer questions such as who, where, when, why and how and make users believe that the content is unique or useful. As for the text, the Greek experts consider that it should be well optimized for SEO and also that longer content (preferably more than a thousand words long) probably performs better.

As regards strategies related to users, the Greek experts believe that the content most likely to reach the Google feed is that which responds closest to the user’s queries when using Google as a search engine. They also attach considerable importance to user experience as a central element for appearing in Google Discover; hence, they recommend providing readers with an optimal experience, which requires having a high-quality site, with a responsive design, that is both easy to use and easy to navigate.

In common with the responses received from the Spanish experts, the Greeks recognised the same two additional strategies – namely, strategic analysis and diffusion in the social networks – plus an additional element, which we class as marketing. The latter strategy – frequent among the responses of a number of the Greek experts – focuses primarily on content marketing, which they consider key as a fully integral strategy for ensuring a site’s appearance on Google Discover. In this regard, the experts recognise the need for the appropriate management of the website’s resources, and taking these resources into account, they place the focus on the following aspects: (1) public relations, creating a network of contacts in the digital media so as to publish content related to the website’s specific business and (2) the creation of dynamic advertising campaigns to show the target audience (according to the specific interests) the content that has been developed and so promote its going viral.

3.6. Levels of perceived agreement regarding optimization strategies for Google Discover

We identified levels of perceived agreement regarding strategies for optimizing for Google Discover (question 1). A high level of perceived agreement was said to have occurred when all three parties (Brazilian, Greek and Spanish experts) expressed the same idea, a medium level when two of the three parties agreed, and a low level when the three parties expressed different ideas or disagreed.

Table 2 shows the levels of perceived agreement among the professionals from the three countries in relation to their ideas concerning what we identify as being the most representative strategies. Then, in Table 3, we develop a set of best practices for each scenario and professional profile (i.e. journalist or SEO expert according to the task to be undertaken), taking as our element in each case the strategies presenting high and medium levels of perceived agreement.

Table II. Level of perceived agreement between the different professionals in the countries studied			
<i>Strategies for appearing in Google Discover</i>	<i>High level of perceived agreement</i>	<i>Medium level of perceived agreement</i>	<i>Low level of perceived agreement</i>
Comply with Google’s guidelines on quality	●		
Produce quality content that adheres to E-A-T principles	●		
Include entities and semantic elements		●	
Use high-quality visuals (more than 1,200 px wide)	●		
Optimize for AMP format	●		
Apply SEO content practices		●	
Maintain frequency and volume of publications	●		
Apply general SEO practices	●	●	
Detect content that has worked previously in terms of headline structure and the body of the news item		●	
Strengthen local content			●
Publish the article on the front page			●
Combine new and evergreen content and publish as early as possible	●		
Identify trends using Google Trends, Google Discover’s history and Google Analytics		●	
Disseminate content via social networks and marketing campaigns		●	
Create content that responds to users’ queries		●	
Provide good user experience, with a high-quality site, usable design and good navigation design	●		

Table 2. Level of perceived agreement between the different professionals in the countries studied (created by the authors)

Based on our analysis of the interviews and the responses given, we drew up a series of best practice recommendations for the optimization of Google Discover in the digital media (table 3). These guidelines are centred around the specific strategic elements identified previously in the interviews and target two specific professional profiles: (1) that of the journalist/editor and (2) that of the SEO manager of the digital media company (Lopezosa et al. 2020). These two distinct professional profiles have complementary but different responsibilities, which is why we have opted to present separate recommendations. In defining their respective profiles and associated strategies, we took in to consideration the skills and productive routines of the two profiles as identified in Lopezosa et al. (2020; 2021). These recommendations of good practices arise from the elements most agreed upon (repeated) by the interviewees from the three countries.

Table III. Google Discover SEO in digital journalism. Best practices		
<i>Profile</i>	<i>Element</i>	<i>Recommendation</i>
Journalist	Topic	Train journalists in the basic functions of Google Discover
		Create creative content that responds to trends
	Content	Create quality content that complies with good journalistic standards
		Create content that identifies entities relevant to the news item and include semantic components that enrich the texts
		Apply general elements of SEO content
		Write attractive informative headlines that reflect the essence of the content and make people click
	User/reader	Produce content that avoids misinformation and provides a good user experience
Produce content that aims to add value to readers based on their profile and needs		
SEO manager	Topic	Identify both new and evergreen content that is of interest to the audience
		Identify the best daily topics based on a monitoring of trends
	Content	Provide writers with guidelines and ensure the content written by journalists complies with Google's recommendations on quality while still adhering to journalistic standards
		Ensure that the content identifies specific entities relevant to the news item and include semantic components that help enrich the texts
		Ensure that the publications have high-quality visuals and elements of multimedia
		Supervise adaptation to the AMP format if the digital media has opted to use this format
		Ensure all content complies with general SEO practices and provide appropriate guidelines for editors (dual – SEO and journalistic – headlines, SEO friendly URL, subheaders, etc.)
	User/reader	Ensure that the digital medium provides the best possible user experience, i.e., high-quality site, usable design, good navigation structures, etc.
		Identify the main interests and concerns of the different audiences of the media outlet
		Promote the creation of content that responds to the audiences' queries
	Strategic analysis	Draw up content plans based on trends, using tools such as Google Trends, Google Analytics and Google Discover itself
	Diffusion and marketing	Disseminate the content via the social networks and use advertising campaigns to promote maximum visibility of the content that best defines the media outlet

Table 3. Google Discover SEO in digital journalism and best practices (created by the authors)

These emerging best practices are not unique to the effective use of Google Discover, at least some of these best practices are general SEO practices. Therefore, applying all these practices will not only help you appear in Discover but also in the general search engine, that is, we can consider the plausibility of generalizing these proposals.

4. Discussion and conclusions

Based on the research undertaken here, we are in a position to propose a general diagnosis of the current role being played by Google Discover in the digital journalism of three countries (Brazil, Spain and Greece). The study sheds light not only on its degree of application in the digital media but also on the challenges faced by its implementation. As a result, we are able to offer a set of best practices. In short, Google Discover opens up a new line of research for studies of search engine positioning in the journalistic sector, a literature that has been subject to intensive growth

since 2007 (Carlson, 2007; Smyrniotis & Rebillard, 2009; Giomelakis & Veglis, 2016; Charlton, 2016; García-Carretero et al., 2016; Pedrosa & de Morais, 2021).

If we return to the objectives we set ourselves at the outset of this study and examine the extent to which we have been able to fulfil them, the following conclusions can be drawn:

O1. The opinion of the experts interviewed in Brazil, Spain and Greece provide a rich and varied set of results in relation to Google Discover and the news media in terms of web visibility strategies, impact on web traffic, promotion of quality and sensationalist content, the responsible use of strategies and examples of best practices. Additionally, the survey shows that the three countries find themselves at (relatively) different stages in the implementation of Discover in their newsrooms, further enriching the insights gained into this key source of traffic in these three countries.

O2. The professionals from the three countries demonstrate a degree of perceived agreement (and also disagreement) as regards the different elements of Google Discover applied to digital journalism. On the one hand, they recognise the existence of a series of requirements that can be applied to a website's content to boost its chances of appearing in the Google feed. These requirements are related to general journalistic SEO, but also contain specific elements, since they are unrelated to conducting a previous direct search. On the other hand, there is quite a marked difference in opinion regarding the strategic role played by Google Discover for web traffic today, depending on the country of origin of the respondents. Thus, in Brazil, it is considered as having only an incipient role, while in Spain it is considered already to be fundamental, and in the case of Greece it is expected to take on a more important role in the medium term. There is no consensus on whether the impact of Discover favours quality content or sensationalism, but in all three countries the experts agree that sensationalist content has more to do with user habits and that it is an inevitable or inherent characteristic of Discover. Likewise, the experts agree that for every media outlet that uses Discover responsibly there is another whose behaviour is irresponsible (based, that is, on journalistic values). Finally, the respondents are able to provide examples of news media outlets in all three countries that are responsible in their use of Discover.

O3. Based on the respondents' ideas, it has been possible to devise a set of best practices for application among journalists/editors as well for SEO managers working in the media. These tie in well with the grey literature and ensure, on the one hand, the consolidation of what experts in this field have previously written on the subject (Ramos, 2019; Linares, 2020; Google, 2020a; 2020b; Natale, 2020; Pecánek, 2020; Vicent, 2021; Soteras, 2021, among others), and on the other hand, the identification of techniques or advice that have not always been presented before, not even in the grey literature.

In summary, the research reported here complements previous studies of SEO as applied to journalism, at the same time as it fills a gap in that line of investigation by focusing specifically on Google Discover. Our study, however, is not without its limitations, not least the fact that we have opted to focus on experiences in three specific countries. Clearly, other studies surveying experts in other countries may obtain different outcomes in relation to the issues we have addressed here. In addition, this research follows a qualitative logic and, consequently, such methods do not allow measuring or calculating to what extent perceptions or opinions are shared in the population as a whole, but in this case, our work can be a good starting point for studies quantitative in the search for this dimension of the question.

Likewise, the results are tied to the Google Discover product but in future works similar services and platforms such as Apple News or Microsoft News can be studied in an attempt to broaden the knowledge and gain an overall understanding of different commercial products. Yet there are a number of other issues, mainly of an economic or sociopolitical nature (regarding these complex relations between online media and technology firms) or the effect of different organisation backgrounds that should be addressed in future studies. There are also limitations regarding the questions proposed to the interviewees. However, the express choice of functional questions for this research

they are the ones that interest us in this case and the ones that have the greatest possibility of producing answers. Likewise, more specific aspects are usually considered confidential by those interviewed.

For this reason, in future works other research can be done asking about specific practices. SEO is characterised by a series of rapidly changing components, and one thing on which most scholars agree is that Google Discover is especially volatile. In that regard, perhaps the most positive point to emerge from this study is that it is widely agreed that the aspects that have the greatest impact on content SEO are among those that present the greatest stability over time. This does not, however, eliminate the need to keep developing this line of research.

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Annex

Table, then show the design of the professional profiles for the selection of the experts interviewed based on the criteria indicated in the paper (Valles, 2002).

Appendix A. Interviewees Brazil		
<i>Interviewed</i>	<i>Company/website</i>	<i>Professional profile</i>
Edward Matsuki	pageantry.org	Owner and editor
Raphael Targino	dwhi-saopaulo.org	content producer
Yeska Dias Coelho	infomoney.com.br	SEO analyst
Lana Silva	grancursosonline.com.br	SEO, content producer
Jessica Martins	enbypost.it	seo manager
Diego Iraheta	alice.com.br	Health Content Strategy, teacher
bianca lopez	cyberlabs.ai	SEO expert editor
Suzamara Bastos de Araujo	smbcomunicacao.com.br	Owner
Nathalie Ayres de Franco	cetrus.com.br	Journalist, content producer
Eleanor Diniz	eleonoradiniz.com.br	Consultant
Daniel Goncalves Oliveira	fsb.com.br	communication manager
Julius Salles	bit.ly/juliosalles	Editor, journalist, freelancer
Michele Correa-Lopes	Grupoboticario.com.br (until February 22: estadao.com.br)	Senior SEO Content Analyst
Larissa Solis	inmetrics.com.br	Social media
Mariane Abreu	press.li	content editor
isadora	onthemap.com	Technical SEO Analyst
Erin Mizuta	greenparkcontent.com	Latam content head
Paul Victor Chagas	gov.br/agu/pt-br/comunicacao/noticias	journalist
Luiz Claudio Ferreira	newsagency.uniceub.br	editor-in-chief, journalist, professor
Giselle White	metacareers.com	Vertical Marketing Manager

Appendix B. Interviewees Spain		
<i>Interviewed</i>	<i>company/website</i>	<i>Professional profile</i>
Ignatius Albero	okdiario.com	Head of Digital Marketing and SEO
Ruben Alonso	miposicionamientoweb.es	webmaster, seo and speaker
Anonymous	Industry leading sports newspaper	SEO
David Ayala	davidayala.com	SEO, Entrepreneur, Trainer and Streamer
German Barrientos	https://seobarrientos.com	SEO Consultant
Jose Luis Cases	rankia.com	Interim Head of Product, Engineering and SEO

Miguel Cidre	enlazator.com	CEO & SEOManager
Silvia Fernandez-Medina	publisuites.com	CMO of Publisuites
Jorge Franganillo	https://ub.edu	SEO teacher
Alonso Gallego Abad	as.com	SEO
Rocio Garcia Algora	rgalgora.com	SEO and personal brand consultant
John Gonzalez Villa	useo.es/	SEO consultat
Katy Lema	elpais.com	Editorial SEO
Alvaro Mazariegos	lavanguardia.com	Audience Development and Head of SEO
Alvaro Pena	socialweb.com	Head SEO and co-CEO
Bruno Ramos	agenciaseo.eu	SEOManager
Alvaro Rondon	alvarorondon.com	SEO Consultant
Alvaro Saez	teamplatino.com	Entrepreneur, promoter and SEO trainer
Clara Soteras	beteve.cat (now in El Nacional.cat)	SEO
Oscar Toral	https://elperiodico.com/es/	SEO and digital analysis

<i>Appendix C. Interviewees Greece</i>		
Interviewed	company/website	Professional profile
Lia Gasouka	Liberal.gr	SEO expert
Anonymous	Leading news site & newspaper	SEO Expert/Executive
George Koiliaris	Protothema.gr	Web Technology Officer & SEO Manager
Anonymous	Leading digital media/publishing group	SEOManager
Tilemachos Papangelou	Better Collective Greece	Senior Editor & SEO Content Manager
Alexandros Georgakakis	Sleed e-business & digital marketing agency	Director of Operations
Konstantinos Zaliaris	Liquid Media/Gazzetta.gr	Sports journalist
Anonymous	Leading daily broadsheet newspaper	Strategy & Content Consultant
Dimitris Andreadakis	digital challenge web agency	Head of Growth
Angelos sinadakis	Social Mind digital marketing agency	Gerente general
Kyriakos Zenios	Greek Internet Marketing (GIM) agency	Head of SEO
Anonymous	Philip Morris International	SEO Manager
Lazaros Papadopoulos	Holder Greece	SEO Manager & Head of Strategic Planning
Anonymous	Hellas Direct	SEO Specialist
Anonymous	Web agency	Content Manager (SEO)
Thanos bertes	PlanetMarketing	Head of SEO
Vicky tiakoudi	Greek Internet Marketing (GIM) agency	Senior PPC/Digital Marketing Manager

Augustinos Paschalidis	BestPrice.gr	Head of SEO
Georgios Ferentinos	Novibet	Head of SEO
Orestis Piskioulis	Unibox - Advanced Digital Marketing Agency	PPC manager
Chrysopigi Vardikou	Self-employed/No Mobbing at Work organization	Marketing Strategist