



Innovation: "Geospatial technology to measure the ROI of a tourism marketing campaign".

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Context: Advertising and tourism

The campaign focused on one of Barcelona's most valued cultural and tourist attractions, which welcomes thousands of visitors every year. A tourist location of recognized international prestige and easy to make a quick visit.

In order to increase the number of visitors, the tourist location used a technology that provides geo-contextual information on local consumer behavior as a key part of its most ambitious advertising campaign in Barcelona.

To achieve this goal, the Catalan place relied on a campaign with multiple media, both Offline and Online, alternating different messages that positioned the place as the most relevant and innovative attraction of the city.

The objective of this marketing action was to reach the maximum tourist public in the summer of 2022, the months with the highest number of travelers in Barcelona.

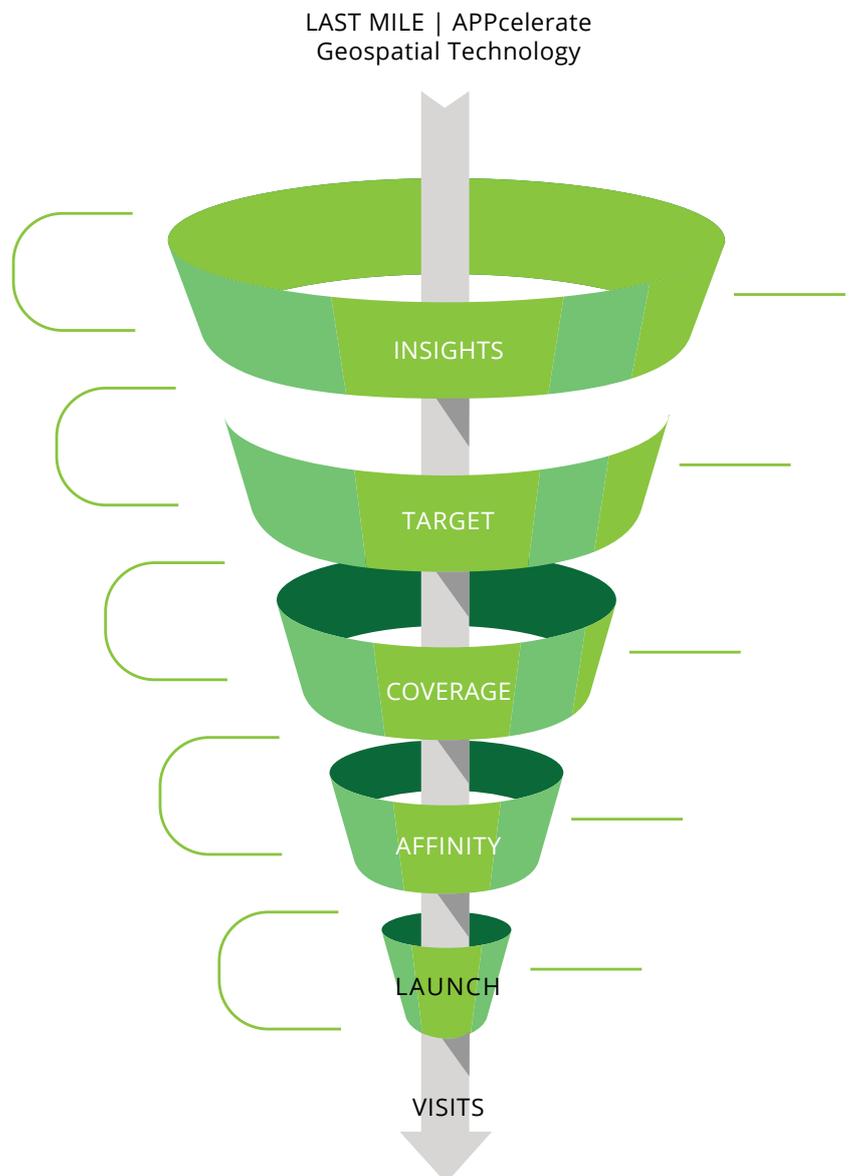
Objectives and launch of the campaign

Objective of the campaign

For the activation of this campaign, the tourism space relied on the services of APPcelerate¹, an outdoor and digital campaign activation platform that has information from more than 21 million mobile devices, more than 15,000 applications and millions of POIS (multi-sector points of interest).

Launch

To carry out this activation, the APPcelerate research team generated a series of strategic insights prior to the launch, concluding that the main generic objective of the campaign had to be the visibility of the tourist location at a key time of the year such as summer and that the campaign should be aimed at tourists with high purchasing power, a target more likely to visit the place.



(1): <https://appcelerate.ai/>

Strategy

A media strategy was designed based on three pillars:



Coverage and notoriety

Reach as many of the target's individuals as possible, maximizing points of contact with them and doing so in the most noticeable way possible.



Core target affinity

Use media, advertising spaces and actions that allow to profile the core target very well, thus maximizing the value of the impacts.



Differentiation and innovation

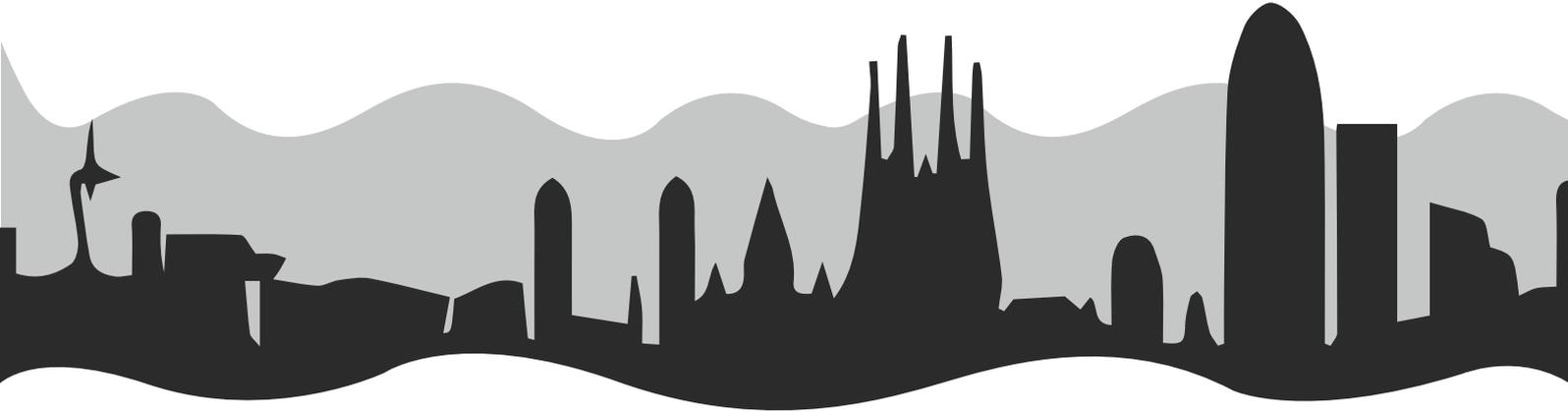
To be transgressive both in terms of media and formats. Only in this way, the tourist location would be able to remain in the target's memory.



The campaign materials appeared in different media outlets.

Geo-audience profile

To achieve these objectives, the media agency, proposed an outdoor-based action supported by digital retargeting, using APPcelerate's geospatial technology. This action was focused on potential visitors with high purchasing power and interested in culture and was segmented by country of origin.



Space circuits

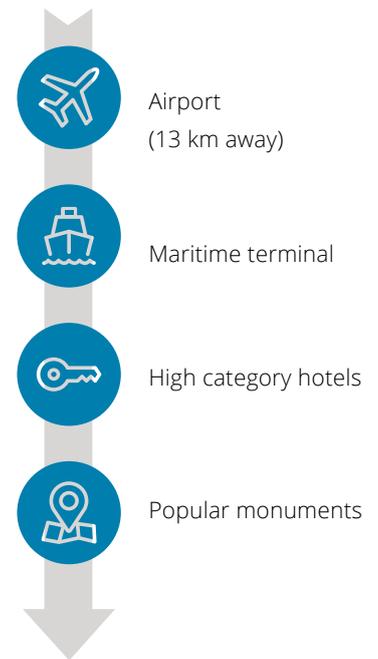
APPcelerate designed four different spatial circuits: airport, maritime terminal, high-class hotels and concentration of the most popular monuments.

In these circuits, the outdoor advertising inventory was selected with three objectives: identification of users, reinforcement of APPcelerate messages and where tourists pass through Barcelona to attract the potential user, and improvement of the choice of the optimal advertising space.

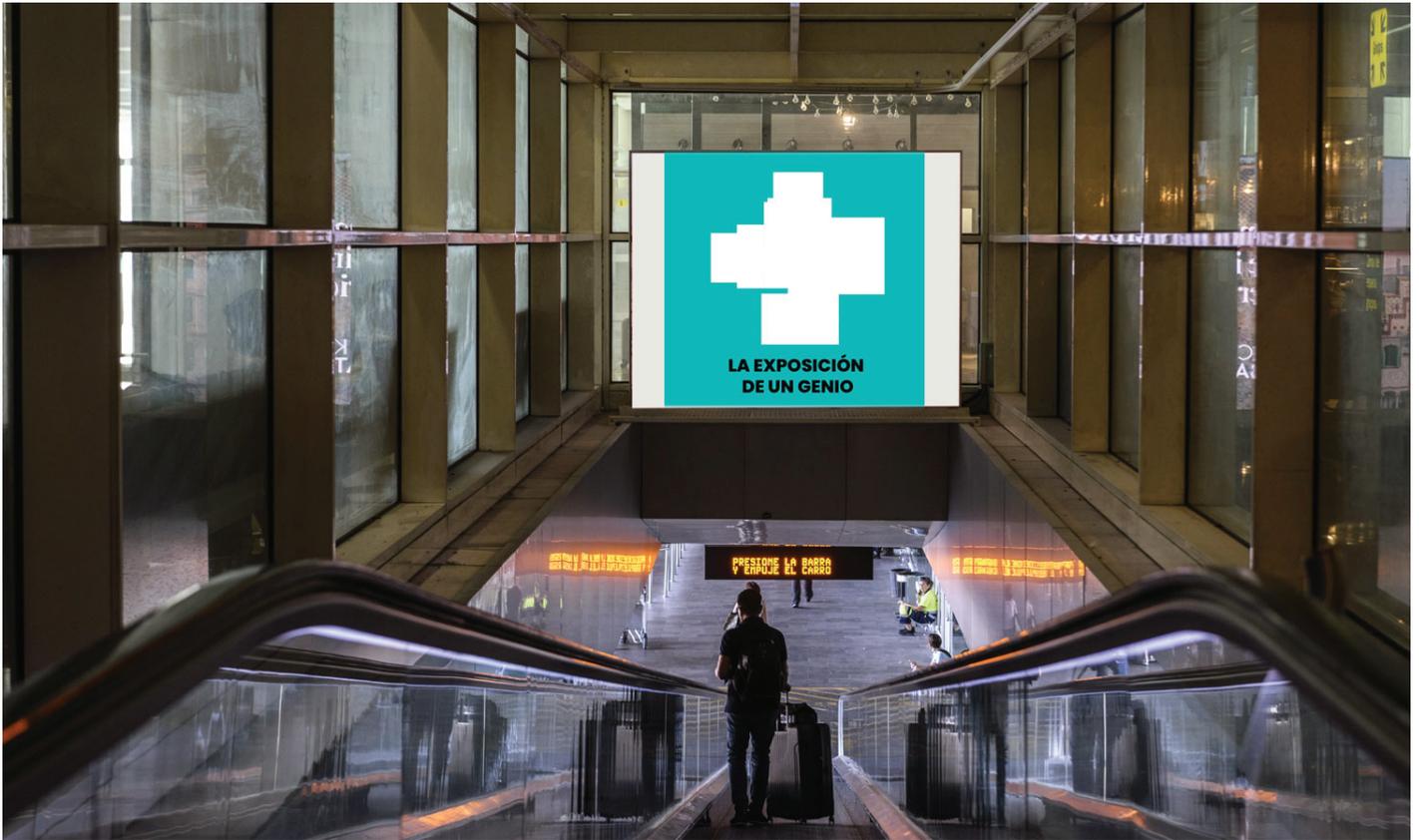
Of the more than 6,000 elements available in Barcelona to plan outdoor advertising, APPcelerate's spatial survey technology identified 68 points ("sides", in advertising jargon) related to the spatial circuits mentioned above.

Application signals

In addition, using signals received by the applications installed on the mobile devices, APPcelerate matched the mobile device IDs of users who would have passed through these 4 circuits as a trigger for retargeting impacts on mobile devices.



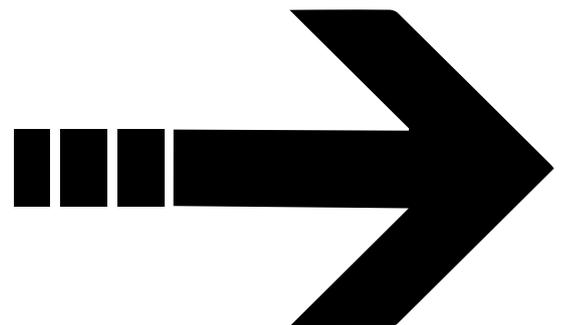
Advertising assets



The campaign was displayed on screens at the exit to cabs at Barcelona Airport.

Key findings

To design an effective analysis, APPcelerate hires Deloitte, an independent consulting firm that, based on the information provided, is responsible for measuring the effectiveness of the action, given its extensive experience in the field of Marketing Science.



Campaign performance

The analysis has allowed APPcelerate and the tourist place to obtain valuable results on the performance of the campaign:



Business results

The tourism campaign generated 16.8% extra visitors during the campaign period.



Frequency of impacts

The target audience is more responsive to advertising stimuli as the frequency of impacts increases. From 17 onwards, effectiveness decreases.

Advertising media

Advertising spaces were used tactically in different environments such as airports, subways, and public spaces in the street through street furniture and Transit.



Deadline of the response

Given the type of campaign and the client, a short-term response to advertising stimuli has been identified, with 49.4% visiting the site on the same day or the following day.



Media location

The distance from the advertising space to the tourist site affects its effectiveness. 92.7% of visitors who were impacted by media and finally visited the site are less than three kilometers away.



Digital activation

Digital retargeting impacts were used as a strategic piece in the attraction of tourists, enhancing the outdoor action.

Methodology

Approach

To carry out the study, the anonymized database of Mobile IDs used by APPcelerate was used. This allowed us to calculate the volume of Mobile IDs that visited the coordinates of the tourist place for more than 5 minutes and to identify the Mobile IDs of the visitors, eliminating random passers-by. Therefore, all data shown from this point onwards in this paper will refer to people who spent at least 5 minutes at the location during the different time periods analyzed.

In addition, given that the enclave is a tourist area with high levels of seasonality, another place of similar characteristics was used as a control point for which we will also take into account the 5-minute filter. For the selection of this space, a series of attributes were taken into account to make it as similar as possible to the place targeted by the campaign, such as location and size, average volume of visitors, average rating in social networks and characteristics of the location.

Finally, for the analysis of outdoor advertising media, it was decided to exclude those that were positioned in the immediate vicinity of the location. It was identified that most of the 'Mobile IDs' that visited the coordinates of the place had been impacted in one of the media that were located within a radius of three kilometers.

Statistical analysis

Monthly visitors



The graph shows that the percentage of visitors to the second tourist site increased steadily from February 2022 to June 2022. However, in July 2022, the percentage of visits to the location under study increased by 11 percentage points, which coincides with the specific period of the campaign.

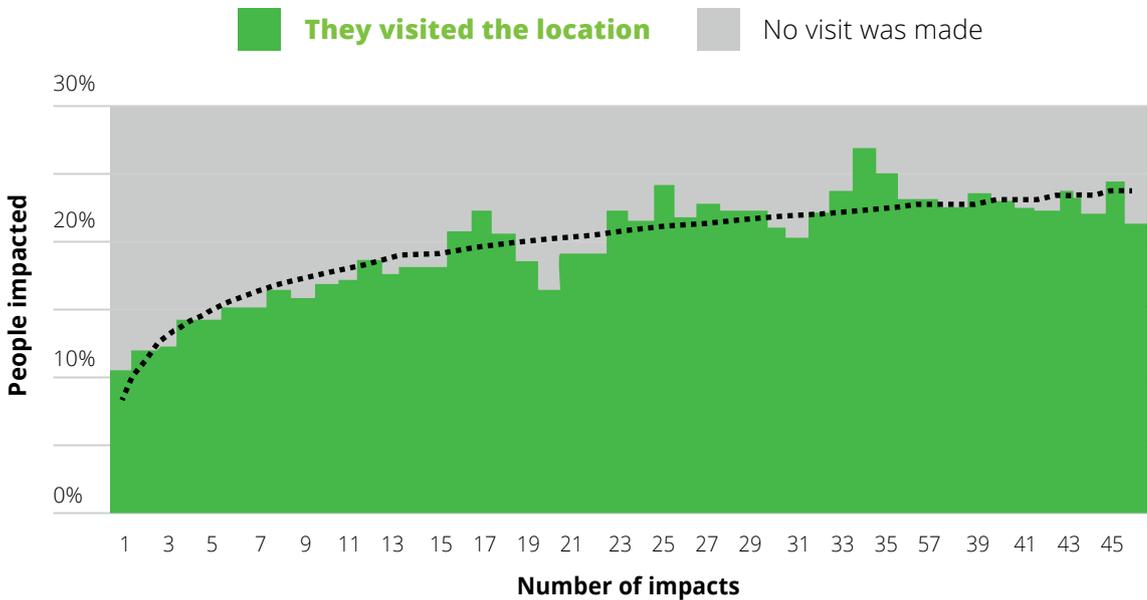
NOTE: To validate this hypothesis, a linear-log regression was applied on the ratio data for the pre-campaign period. Our model obtained a p-value <0.05, which confirms the significance of the results.

Complementary analyses

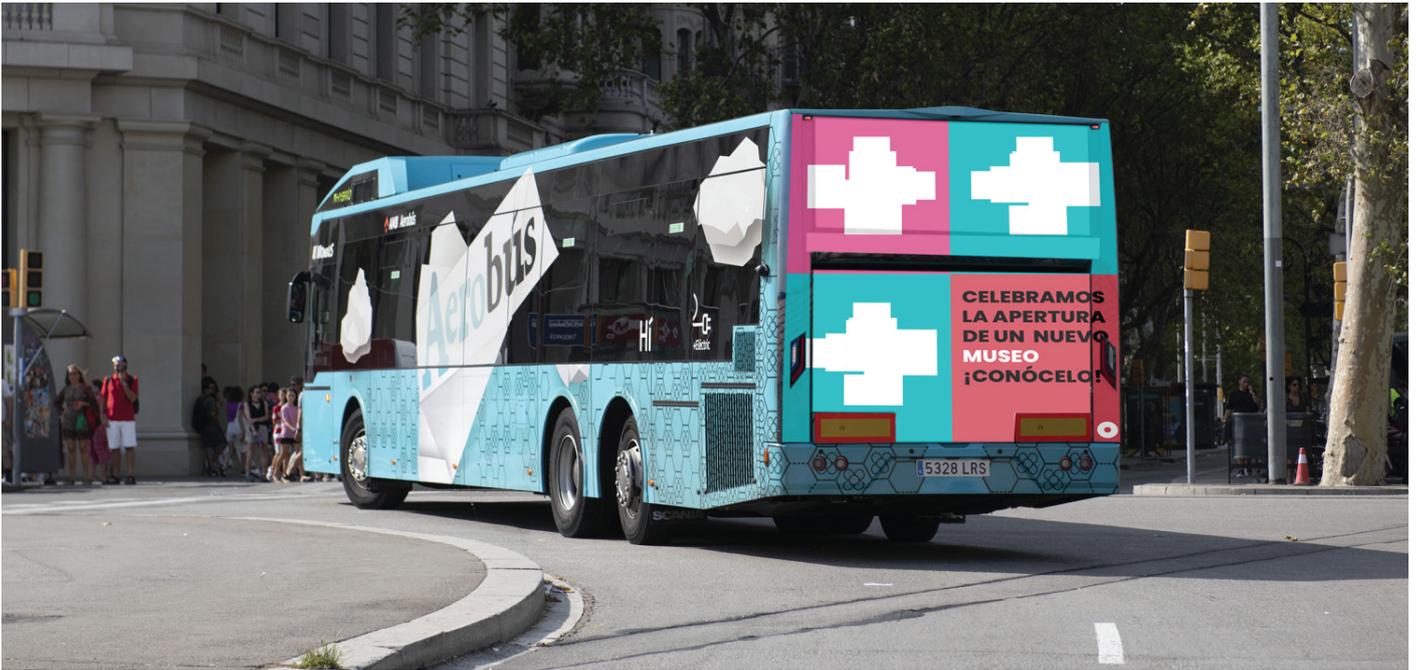
To complement our study, several additional analyses of the campaign data, provided by the APPcelerate technology, were conducted to better understand the response to the advertising stimuli. It was decided to merge information from people who have seen at least one outdoor advertising medium with information from people who have gone to the tourist space. As previously described, it was consciously chosen not to include media too close to the site since it was assumed that most of the people who have been to this tourist site will also have been impacted by a nearby media.

Visitors after impact

Distribution of visitors after being impacted by an external media.



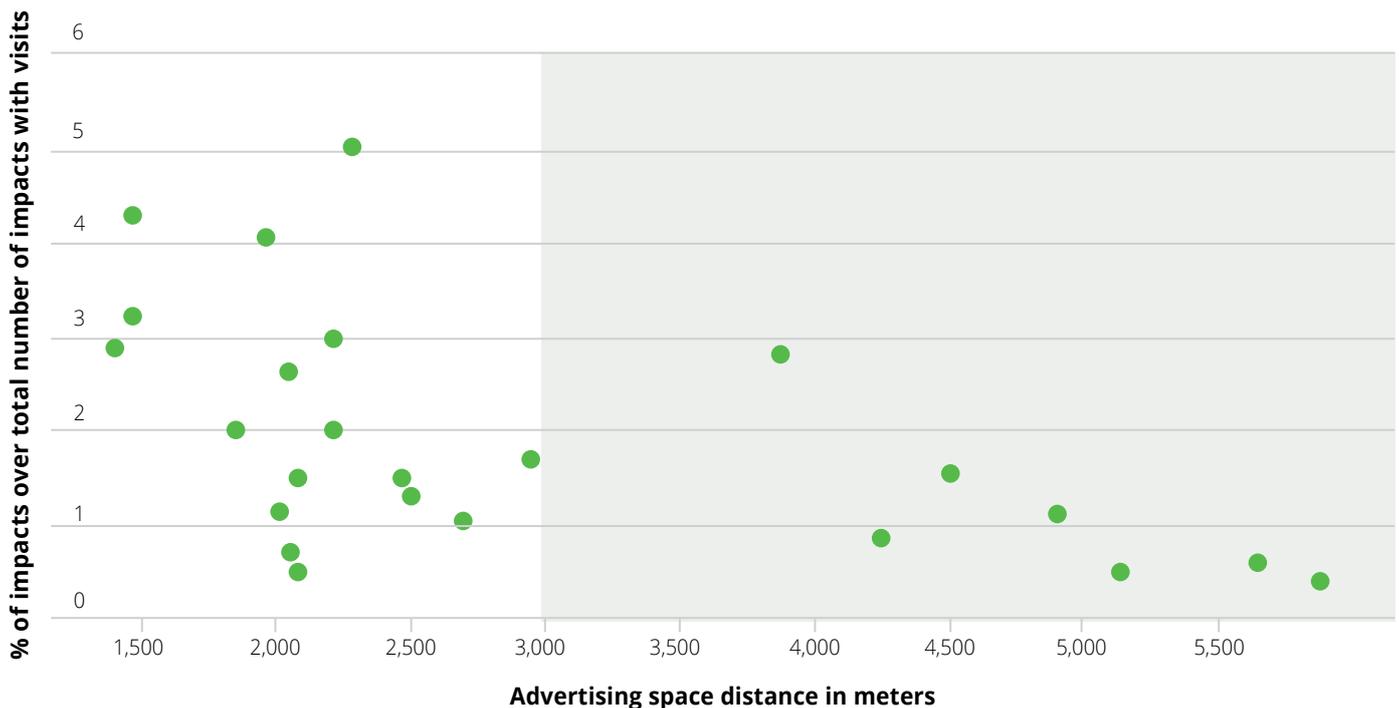
The graph above shows a generalized positive trend among visitors to the site targeted by the campaign: the greater the number of media (sides) seen, the greater the probability of visiting the tourist site. This point is especially efficient between values from 1 to 17. However, from this volume of impacts onwards, it seems that significant incremental returns are no longer achieved.



The campaign was present in the Aerobús in Barcelona.

Distance from the media and visit

A direct relationship was also found between the distance from the media to the tourist site and the effectiveness of the campaign. A total of 92.7% of the visitors who were impacted by the media were less than three kilometers from the site. The graph shows the relationship between the distance of the advertising spaces and the number of IDs impacted who visited the tourist site.

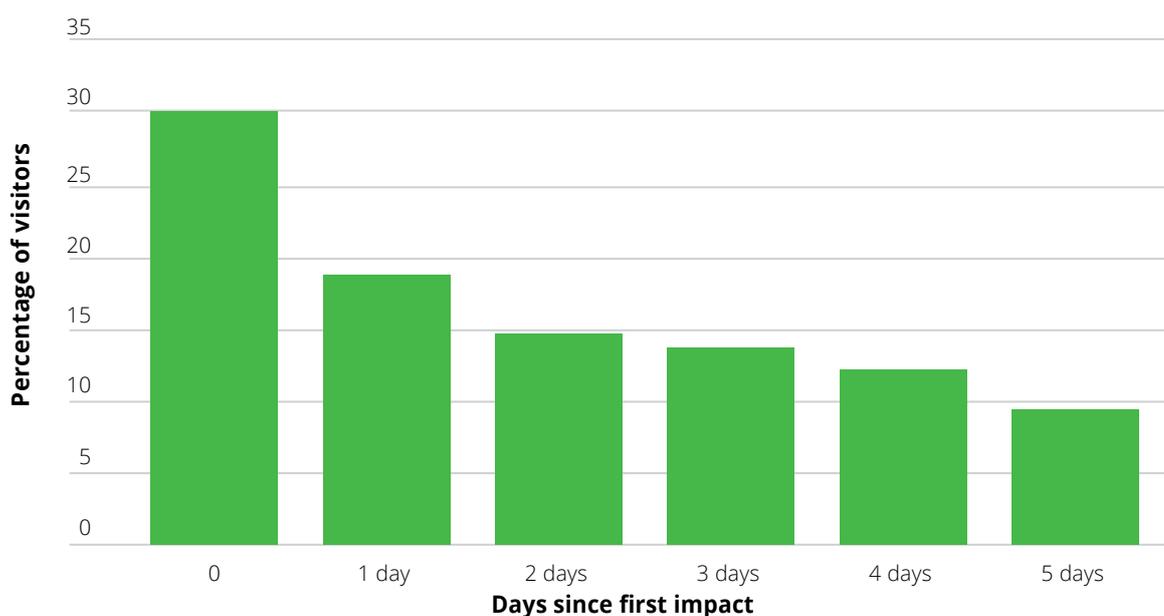




The campaign was present in the circuit of outdoor banners in the streets of Barcelona.

First impact and day of the visit

This graph analyzes the time that elapses from the moment visitors are impacted by the media until they visit the tourist site and concludes that there is a short-term response to the stimulus. Almost 49.4% of the sample taken made the visit on the same day or the day after, while the rest visited the site on later days.



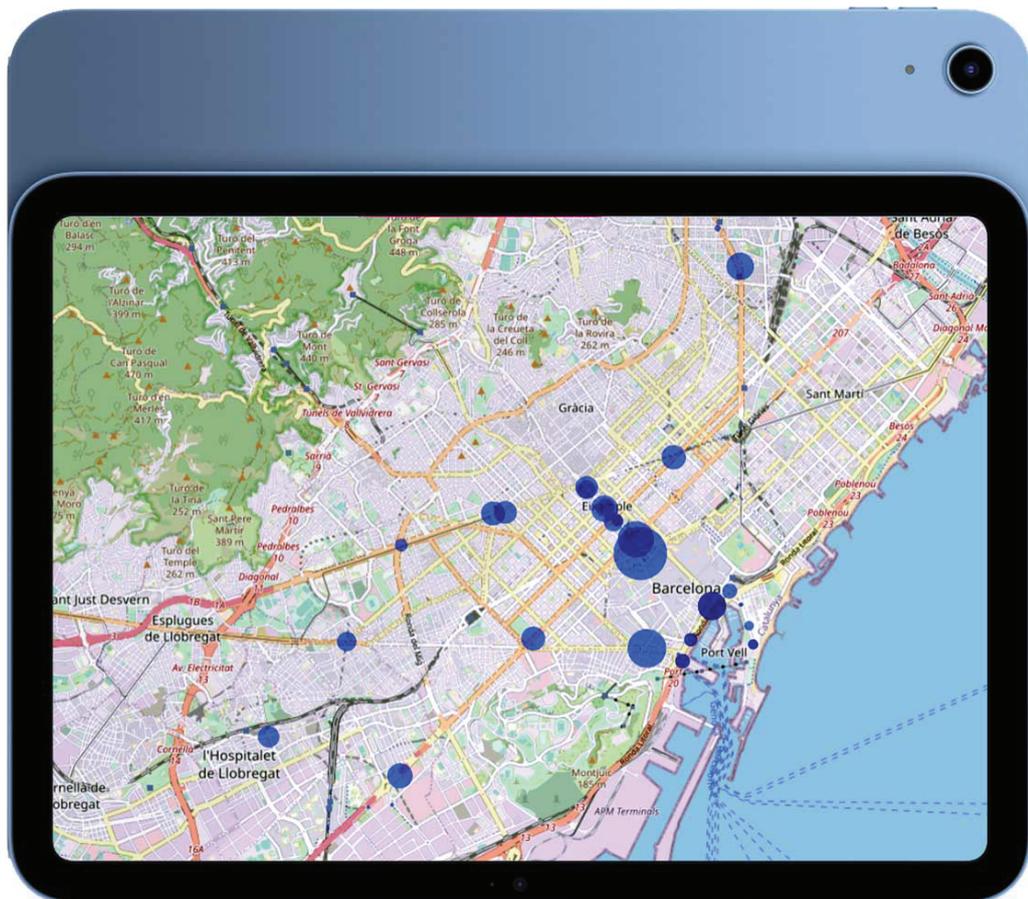
NOTE: In the graph, the number of days 0 means that the visit occurred on the same day of impact.



Retargeting is a technology to be taken into account by all those tourism companies that bet on online marketing.

Digital retargeting

As previously described, accompanying the outdoor campaign, there was a digital retargeting campaign that relied on APPcelerate's geospatial technology. In terms of volume of impressions, this campaign was particularly concentrated in the vicinity of the tourist space, triggering recall impacts on visitors' devices.



This map shows the volume of mobile impressions geolocated by APPcelerate.

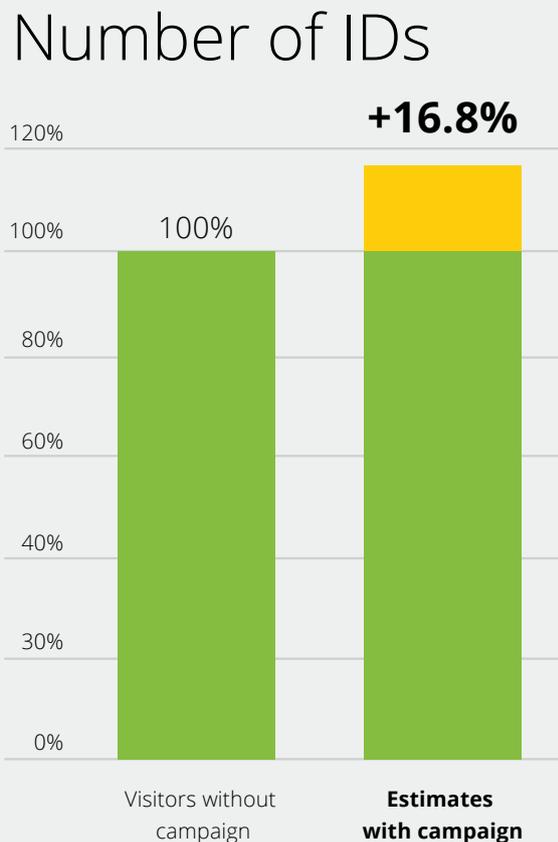


The campaign used large format screens in the Barcelona subway.

Conclusion

After studying more than 180,000 mobile geolocation data, Deloitte has prepared a comparison that allows us to measure the incrementality obtained with the campaign. The relationship between visitor growth and the campaign has been validated by a statistical analysis that confirms the positive impact of the campaign.

Using the insights obtained during the analysis, we came to the conclusion that, thanks to the execution of the campaign, **16.8% more visitors** would have visited the site during the period studied (graph).



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