



**MELIA HOTELS INTERNATIONAL**

# How Melia used MMM automation to optimize digital advertising ROI

In collaboration with



# The emergence of NextGen MMM



Marketing Mix Modelling (MMM) has long been used by consumer brands for marketing measurement. While attribution gained popularity with the rise of digital marketing, increasing signal loss – due to privacy regulations and technology policy changes – is driving renewed interest in MMM among advertisers, especially digital natives.

Unlike traditional MMM which has limitations for advertisers seeking rapid, scalable results, today's NextGen MMM solutions simplify the entire process of modelling and reporting, providing always-on decision support and multiple advantages.

- APIs to automatically ingest data
- AI and machine learning algorithms to easily ramp up speed and scale
- Modelled attribution across all media channels with frequent updates
- Easy reporting and simulation for actionable insights
- Ability to take MMM in-house without the need for data science teams

The following case study takes a closer look at how Melia Hotels International used NextGen MMM to optimize its advertising ROI and drive optimal budget allocation across all media channels.



A low-angle photograph of a modern building with a dark, textured facade and a large glass window section on the left. The building's name, 'MELIÁ HOTELS INTERNATIONAL', is displayed in large, white, three-dimensional letters on the upper right portion of the facade. The sky is clear and blue.

MELIÁ  
HOTELS  
INTERNATIONAL

New research by Analytic Edge, commissioned by Meta, underscores the advantages of employing signal-resilient techniques such as Marketing Mix Modelling (MMM) for digital advertisers in the travel industry. Through collaboration with Meliá Hotels International, a Spanish hotel chain with a global presence, a significant 36% increase in Return on Advertising Spend (ROAS) was observed over a one-year period. This collaborative work highlights the potential of MMM to effectively optimize advertising impact in an era where user consent takes precedence.

# THE CHALLENGE

Signal loss due to App Tracking Transparency (ATT), recent privacy regulations and technology policy changes like cookie deprecation in the advertising ecosystem present clear challenges for advertisers, particularly digital native advertisers that rely heavily on device ID-based measurement techniques like attribution. The challenges include under-reporting of conversions due to blind spots caused by privacy restrictions, bias towards lower-funnel media channels due to last touch methodology, not considering advertising carry-over, and misattribution due to excluding other sales

drivers like promotions and seasonality. All this could lead to potential revenue loss or decreased ROI for advertisers due to decision making based on incomplete results interpretation.

Given these challenges, it is imperative for digital heavy advertisers to rethink their measurement strategies and pivot to privacy-first modelled techniques that are more resilient in the face of change. This case study with Meliá explores what their return was from all advertising spend and how this could be optimized by using continuous MMM daily data streams.



“Our team is always looking for the latest update when it comes to the Digital Marketing industry as every aspect of it changes rapidly. With all the news about the cookieless world coming in 2024, we want to ensure we will be able to continue analyzing the performance of our campaigns and that is the reason why we started research to know the best reporting option for this future scenario. We came to the conclusion that an aggregated data model was quite interesting for us and that is where the MMM fits in.”

**Pablo Segui, Data Science Lead, Meliá**



“Something unexpected was Analytic Edge’s ability to integrate all data streams in a short period of time. It is usually a quite long process, and we did not expect to have the data integration phase sorted out that quickly. Also, the tool’s front platform where the user does the analytics is amazingly powerful.”

**Pablo Segui**, Data Science Lead,  
**Meliá**



“The scenario planner is probably what gives this report an added value. The possibility to have a prediction based on a budget defined by the team is the most outstanding feature about this model. It is quite useful to have an idea on what a simple change can make to the marketing mix optimization.”

**José Luis Aranda**, Global Digital  
Marketing Director, **Meliá**

## THE SOLUTION

The Analytic Edge team created MMM models for Meliá with daily aggregate level data to analyze the relationship between key business drivers and sales. Daily data was used, and models refreshed weekly with the latest 7 days data points. Care was taken to ensure that the model fit as represented by R2 and MAPE was maintained at acceptable levels after each data update.

- **Setting up MMM for continuous results**

Data exchange was automated between Meliá and Analytic Edge’s Demand Drivers™ NextGen MMM platform to enable continuous data exchange at a daily level. The program ran for 12 months and Meliá and Analytic Edge were able to use these evolving results to track and optimize media spend.

- **Analysis of media channel ROI**

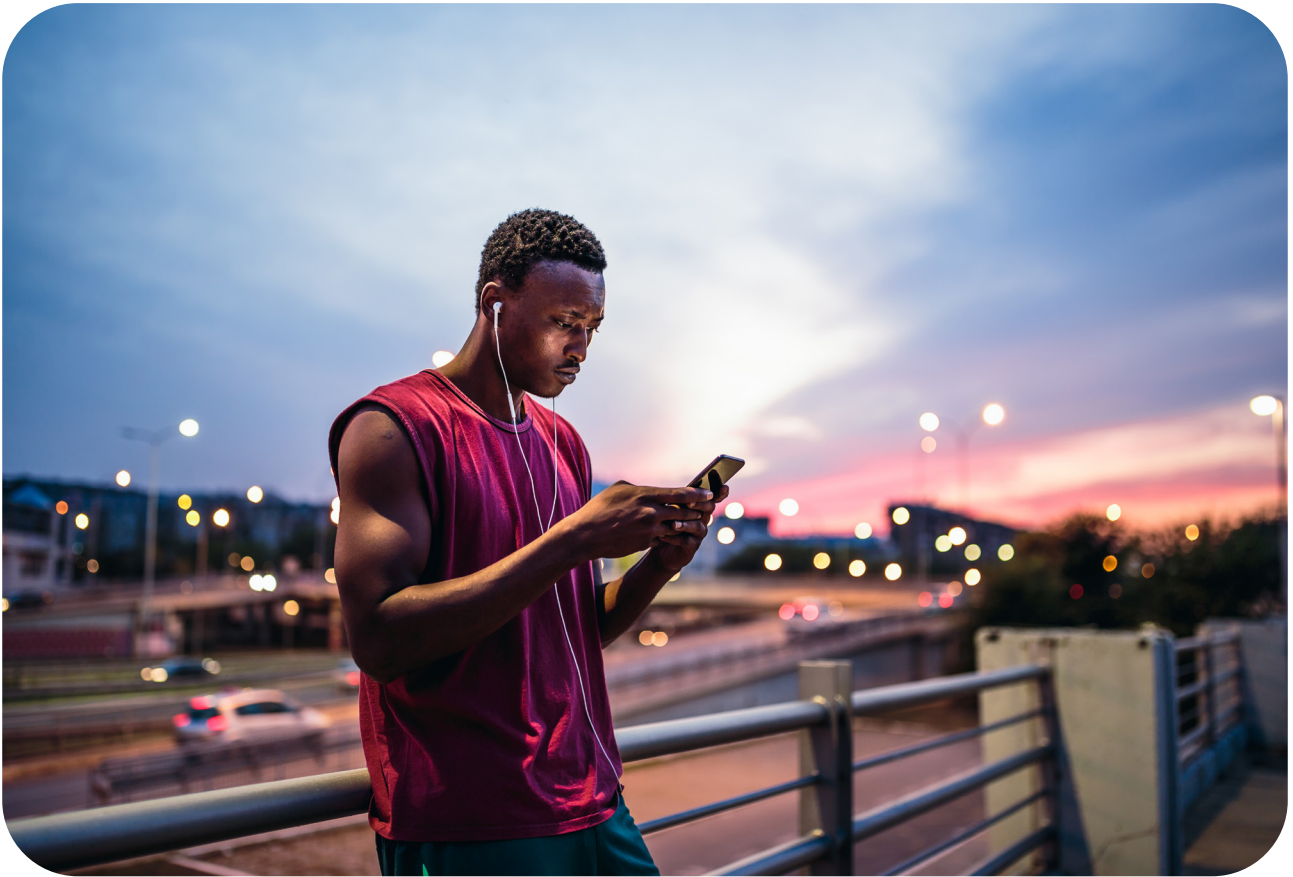
The analysis determined Meliá’s overall and media channel level ROI. It was revealed that some media channels had significantly higher ROI than the average. For example, ROI was highest for industry-specific channels like Trivago and TripAdvisor. Meta and Google also showed very strong ROI in line with travel industry expectations.

- **Optimizing the budget with learnings from MMM**

Armed with this information, Analytic Edge used their Demand Drivers™ MMM Online Platform tool to run simulations. The objective was to see what an optimum spend allocation might look like whether these smaller channels could handle additional spend without being saturated and resulting in diminishing returns, and what additional revenue and ROI lift could be achieved.

Keeping the budget constant and simulating changes by channel of up to 50% increase or decrease of the base budget, the Simulator recommended an increased spend in smaller channels such as Criteo, TripAdvisor and Trivago, and decreased spends on Display Video Channels such as Google DV360. Increased spends were also recommended for Meta Retargeting & Prospecting. The Simulator forecasted that Meliá would get a revenue lift of 21.5% and an ROI lift of 21% with these recommendations.

# THE IMPACT



As a follow-up to the recommendations, Analytic Edge conducted an evaluation of Melia's marketing strategy for Jan-May 2023 to evaluate the implementation of the recommendations and actual results. The evaluation revealed the following results

- After implementing the MMM recommendations a 36% increase in ROI was observed for Jan-May 2023 vs. the same period in 2022 while effectiveness increased by 1.2X vs. the same period last year
- Spends on smaller channels like Trivago and TripAdvisor were increased by 16% compared to the same period last year
- Spend on Meta was increased by 5% and on Meta Prospecting by 14%
- There was still room to allocate more budget to Trivago, TripAdvisor and Meta, based on the simulation recommendations
- Investment in display video ads on a major platform was reduced, but could have been reduced more for better returns

*“We are a company that has a very intense Data-Driven strategy. We always try to join together both data information and our team's knowledge, which is very valuable. The MMM is a tool that can help our team to be a little bit braver, as the scenario planner provides you information on how the future can change.”*

**José Luis Aranda, Global Digital Marketing Director, Meliá**

# CONCLUSION



With increasing privacy restrictions and technology policy changes accelerating signal loss in the digital advertising space, digital advertisers must realign their measurement strategies to privacy-first techniques. For advertisers with good data availability, the latest MMM solutions such as Analytic Edge's Demand Drivers™ NextGen MMM platform are now able to continuously measure effectiveness on a daily or weekly basis and recommend media mix reallocations to maximize ROI.

Simulation tools also allow advertisers to define a fixed budget and determine the best media allocations that will deliver maximum lift in revenue and ROI. Melia was able to achieve a ~36% increase in ROI by leveraging continuous MMM. Other digital heavy advertisers can benefit too by adopting these latest MMM techniques.

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